Volume XX *1957*

THE HIMALAYAN JOURNAL

RECORDS OF THE HIMALAYAN CLUB

Edited by T. H. BRAHAM
Assisted by G. C. BAND

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Photo C. G. Wylie

MACHHAPUCHHARE, 22,958 FT., THE NORTH SUMMIT BLOCK, SEEN FROM NEAR CAMP I.

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EDITED BY
T. H. BRAHAM

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

VOLUME XX
1957

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EDITORIAL

A PRECEDING editorial expressed the hope that Volume XX would be less tardy in appearing than Volume XIX had been. Although it can be fairly claimed that this hope has been realized, the claim is at best a relative one. We have exceeded our target-date—and for this we apologize.

Following the sad death of Lt.-Col. H. W. Tobin in January 1957, several problems arose. Volume XX, which had assumed fair shape with every reasonable prospect of early publication, now seemed to hang in the balance. Finding a successor was the first problem; the next was for him to fit himself cautiously into the task. These and many other problems were sorted out by many willing hands.

Volume XX is partly Tobin's child. But it would have been unfair to present it as it stood. We have therefore dressed it and brought it up to date, thus making as much use as possible of the extra time that has been consumed. We believe that as it stands the continuity of our record has been retained. So it is styled Volume XX—1957, because it covers all the main expeditions in 1956 and one notable 1957 expedition.

The job has been handled at two separate ends, and had it not been for the efficient co-ordination of Mr. G. C. Band at the U.K. end it would have been impossible to encompass such a wide field.

We gratefully acknowledge our thanks to the Editor of the *Alpine Journal* for permitting us to reproduce two maps, one obituary notice and five book reviews.

Once again we have received the utmost assistance from Mr. Norman A. Ellis, of the Baptist Mission Press, Calcutta.

To all those who have helped in producing this volume and to any others to whom we have not elsewhere expressed our appreciation, we offer our warmest thanks; their co-operation has greatly eased our task.

THE SWISS EXPEDITION TO EVEREST AND LHOTSE, 1956

By ALBERT EGGLER

TRANSLATED BY E. NOEL BOWMAN

THE Swiss Foundation for Alpine Research, which sent out two expeditions to Everest in 1952, was determined to continue its research programme, in spite of the fact that Everest had been climbed by Hillary and Tenzing in May 1953. It therefore obtained the permission of the Nepal Government to send out a fresh expedition, and got into immediate contact with climbers whom it knew were keenly interested in Himalayan problems. Before very long a plan was formulated and after intensive preparation the expedition was able to set out.

The members of the expedition who had travelled out by a variety of routes and the 22 Sherpas from Darjeeling, with their Sirdar, Pasang Dawa Lama, all met in the Indian frontier town of Jaynagar at the beginning of March. Here the long march-in began, and the 10 tons of baggage were transported on 22 ox-drawn carts through the Ganges valley and the terai to Chisapani, where the Kamla river forces an exit from the mountains into the plains. At this town, we were met on March 7th by the 350 porters from Sola Khumbu, whom we had been able to engage thanks to the friendly co-operation of the Himalayan Club. Before long the loads were fairly distributed and our imposing caravan set off. The Sun Kosi river was crossed by means of two dug-out canoes and then for several days we struck due north along a mountain ridge, eventually reaching Okhaldunga, the principal town of the district, where we made camp.

At the monastery of Taksindhu we crossed over into the valley of the Dudh Kosi; the route provided plenty of variety and was very enjoyable. The vegetation was entirely new to us, tropical forests alternating with barren hillsides. Sometimes we passed through woods full of red rhododendron blossom and then traversed the rice, maize, barley and potato fields built by the natives in terraces across the mountain slopes. The further we penetrated into the mountains the more friendly contact we had with the native population, who almost invariably greeted us with gifts of *chang*, the local beer. Our liaison officer, Prachand Man Singh Pradhan, a young student from Katmandu, acted as interpreter

the widest crevasses were crossed by twelve firm bridges. The intense radiation caused rapid melting of the snow and ice, although Everest lies a thousand miles south of the Alps! This necessitated constant replacing of the pitons securing the fixed ropes. Tents had frequently to be re-sited and were fastened down nearly every day, otherwise they were liable to be blown away by the storms which usually occurred in the afternoons. Particularly dangerous séracs in the icefall were got rid of by blasting. There seemed no end to our labours. One rope would stamp out a track upwards, followed by another to consolidate it, while the rest of the party were fully occupied in the camps or engaged in supervising the ferrying of loads. Great care was taken to provide relief, and nobody was allowed to lead for too long and so use up valuable strength.

While all this was going on, von Gunten and Diehl made an attempt on Island Peak and the party was joined by Grimm and Marmet, who had brought up the oxygen apparatus, also by Luchsinger, now fully recovered from his illness. Unfortunately Diehl developed pneumonia, from which he did not recover for some weeks.

Our fine Sherpas continued to carry their 50-lb. loads ever upwards; their work was adjusted according to their capacity to undertake any particular section of the route, and they all had regular rest-days. At this moment our Sirdar, Pasang Dawa Lama, became ill with an abscess on the liver. I appointed Dawa Tenzing from Khumjung in his place, and we were very well pleased with his services. He had joined us as an ordinary porter and was 54 years old, but nevertheless he was extremely active and stood the height well. Apart from his physical qualities, he had the knack of organization and was well suited to be the head man of a large number of porters.

Camp III at 21,000 ft., half-way up the Western Cwm, and somewhat higher than the corresponding camp of the British Expedition, was built up into an Advanced Base. As soon as we had got enough stores there, we advanced once more, and at the beginning of May established Camp IV at about 23,000 ft., on the first terrace at the foot of the Lhotse glacier. We now had to tackle the steep face, and many days of hard work ensued before we pitched Camp V at 24,500 ft. A very large number of steps had to be cut in the hard ice and over 1,000 ft. of fixed ropes placed in position before the route was finally made safe. From this point, the yellow limestone band was reached and crossed by means of a narrow ledge of snow, after careful reconnaissance. Fixed ropes were also placed

in position at this point. The route now led up the top part of the steep Lhotse flank and parties were able without much difficulty to reach the rocks of the Lhotse north arête through snow, close to the Geneva Spur.

We had now been more than a month on the job and were all pretty well accustomed to the height. We were able to work for hours at a time and climb up or down without getting too exhausted. We all ate well and the cook, who was established at Advanced Base Camp, saw to it that there were always enough hot drinks. We drank about seven pints a day of tea, coffee, soup, fruit-juices and lemonade. Before long we preferred porridge made from roasted *tsampa*, the Sherpas' principal food, to any other food, as nobody wanted to eat anything hard and even our jam, honey and butter were usually frozen. Thus we gradually acquired a taste for native food and were able to maintain our strength with it.

In course of time we became accustomed to the great variations in temperature. During the day the thermometer rose to over 100°F. in the sun, and at night sank to −30°F. We had little protection against the heat; in fact the best way of dealing with it was to absorb as much liquid as possible. The intense cold was quite another matter, but we were very well equipped for it. Our warm underclothing, pullovers, down trousers and jackets and completely windproof outer garments kept us entirely insulated from the bitter air. Our feet were encased in reindeer boots. Our small nylon tents, with double silk linings, offered the fullest protection at night and in times of storm. The worst thing we had to deal with was the freezing-up of our boots during the night and the only way to get over this difficulty in the high camps was to go to bed in them.

We generally used oxygen above Camp IV (23,000 ft.), and for sleeping. When one is exhausted or very cold, a whiff of oxygen works wonders. In spite of the additional weight of 13 lbs., we felt the advantage of its use when climbing at greater heights. When using oxygen on easy ground it is possible to ascend at about 800 ft. per hour and at about half this without.

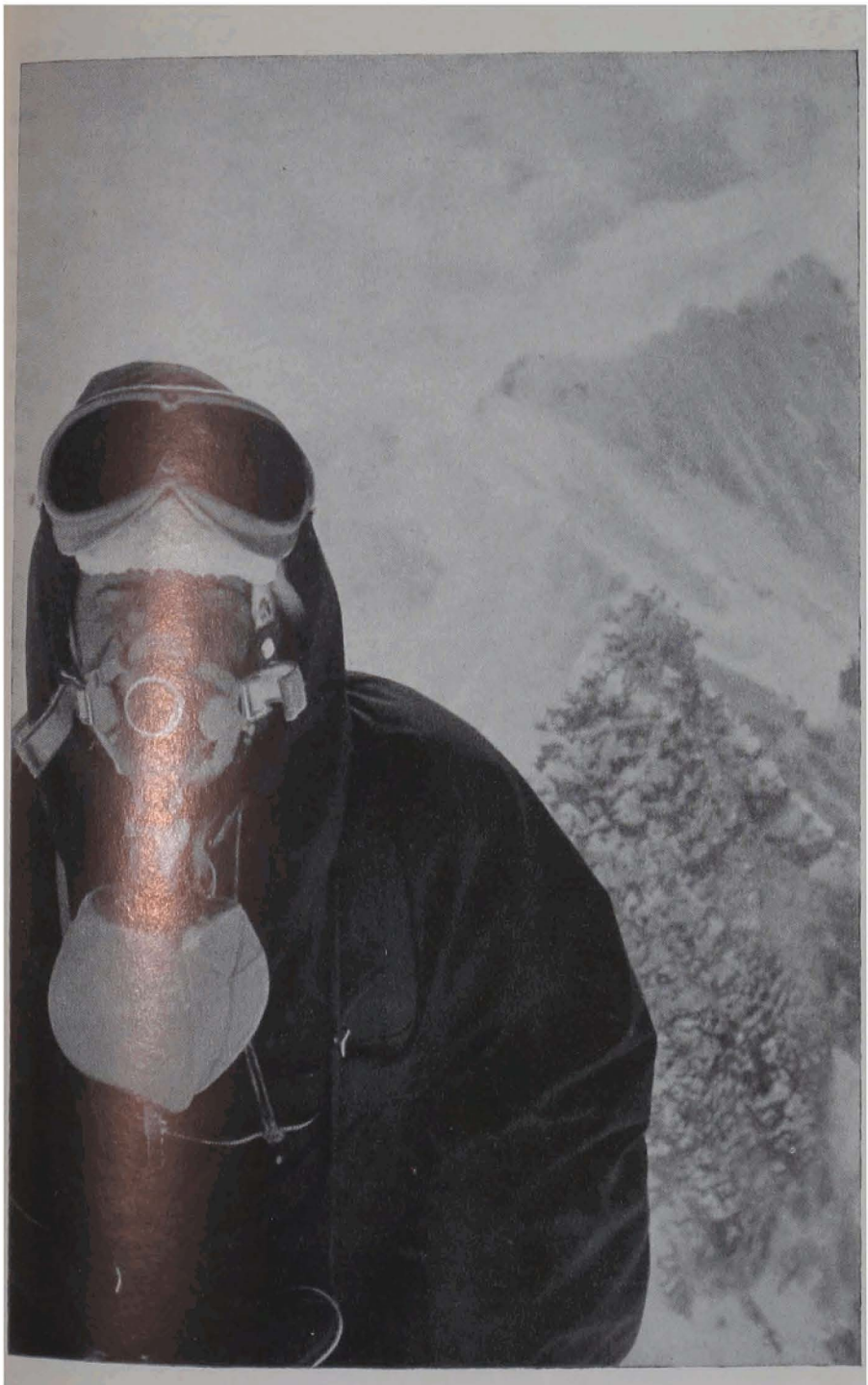
On May 9th we set up Camp VI at nearly 26,000 ft., and hoped soon to be able to make our final assault. Pre-monsoon storms took place, however, bringing much fresh snow, and forced us temporarily to evacuate the upper three camps. Our mood of quiet confidence gave way to one of grave anxiety and we could not refrain from wondering whether all our exertions had been in vain and if we should be forced to abandon the quest like so many other

expeditions in the past. However, the constant powder-snow avalanches gradually ceased and, after a rest at Camp III and even at Base Camp, we felt better about things in general. According to the broadcasts from the Indian Meteorological Office, we were likely to have a spell of fine weather before the monsoon arrived in earnest.

As soon as the wind had dropped a little and the sun came out once more, we started off again and on May 17th Camp VI was re-occupied by Reiss and Luchsinger after some exhausting route-finding by von Gunten and Reist in deep wind-driven snow. Next day, the former pair traversed the face to the foot of the Lhotse rocks. Before long, Luchsinger's oxygen apparatus froze up and it required an hour of tricky work with stiff fingers before it was set right. As soon as it was working properly they climbed on in a bitter wind and reached the foot of the steep snow couloir which ascends directly to the summit of Lhotse.

Taking turns at leading, they gained height slowly. Half-way up, the couloir narrowed and steepened and there was only room for one foot in the bed of snow; this forced them into some difficult climbing up the rocks on the left-hand side. In order to overcome this pitch they had to hammer in some pitons. Above this step, the snow was slabby and extra caution was necessary. After scaling a steep ice and snow ridge of at least 50° they reached the top of the northern and highest tower of the double summit, 27,890 ft. The summit cone was so sharp that it was not possible to stand on it in the gusty wind, so they had to be content with driving their axes into it. Taking a stand some three feet lower down, they enjoyed the view and congratulated each other. It was unfortunate that mist prevented many photos being taken. Reiss and Luchsinger, both very experienced mountaineers, were obviously impressed by the difficulty of the climb and discussed the best method of descending the 1,500-ft. long couloir. However, they got down without any untoward incidents, but took almost exactly the same time as they did for the ascent. They were back in their tent by six in the evening, where we saw them from Camp V. They came down to us on May 19th, and after they had recuperated somewhat, they continued their descent to Camp III.

Schmied and some porters made a carry up to Camp VI on May 20th, where he set up the 2,000-ft. rope windlass and stayed overnight. Next day Marmet and I ascended the steep Lhotse face. The site of Camp VI was not suitable for our future movements so we shifted it to the South Col, where we slept that night. The Sherpas Annullu, Da Norbu, Pa Norbu and Pasang Phutar II stayed with us while Dawa Tenzing went down with the others.



FRITZ LUCHSINGER ON THE SUMMIT OF LHOTSE, 27,890 FT. IN THE BACKGROUND, THE RIDGE THAT LEADS TO NUPTSE, 25,700 FT.

FROM THE SUMMIT OF EVEREST, LOOKING SOUTH TO LHOTSE AND CHAMLANG.

Snow fell during the night and next morning the weather did not look very promising. However, this did not prevent Marmet and Schmied from getting ready to go on. Eventually, at about noon, they left the South Col with four Sherpas and made for the south-east arête of Everest. Toiling up the steep ice slope, they reached the right-hand east couloir and, ascending this, attained the ridge. This was followed to the site of the remnants of Lambert and Tenzing's tent and beyond, until they came across a small terrace on the arête at 27,500 ft., suitable for pitching a tent. The Sherpas returned to the Col, while Schmied and Marmet settled down for the night.

They left their tent, (Camp VII), at about 9 o'clock on the morning of May 23rd and were much troubled by a strong wind, which almost forced them back. However, neither seriously considered this possibility and they continued on their way. Before long they arrived at the remains of Hillary and Tenzing's tent and two hours later stood on the South Peak, with a clear view of the summit ahead. They took off their down clothing and each dumped an empty oxygen flask. Much lightened thereby, and full of confidence, they tackled the last section of the route. They were able to climb Hillary's chimney without undue difficulty and a few minutes later stood on the summit of Everest, 29,028 ft.[1]

The panorama was wonderful. To the east, Kangchenjunga was visible behind Makalu and Lhotse, and to the north the silver ribbon of the Brahmaputra could be seen meandering through the Tibetan plateau. Westwards the view extended to Gosainthan and the Dhaulagiri-Annapurna massif, while to the south a thick bank of mist showed where the valley of the Ganges lay. There was hardly a cloud in the sky and the wind had dropped a little, but before an hour had passed threatening monsoon clouds warned them it was time to leave. Schmied and Marmet got back to their camp on the ridge without difficulty and there met Reist and von Gunten with the Sherpa Da Norbu. Neither party wasted much time talking, and Schmied, Marmet and Da Norbu soon left for the South Col where Grimm, who had dislocated his shoulder, and I were awaiting them.

Reist and von Gunten tried to make themselves comfortable in the storm-tossed tent, but they did not have a good night. When their oxygen gave out at about 4 a.m. they got up, prepared for

[1] This is the height now officially adopted by The Survey of India. It has been determined on the basis of observations and calculations carried out between 1952–55; a probable error of ±0·8 feet is claimed. See *H.J.*, Vol. XIX, p. 174.—EDITOR.

departure and left at about 7 a.m. They followed the tracks of their predecessors, which were still visible almost everywhere and were impressed by the steep angle of the ascent to the South Peak. They too left their empty oxygen flasks, but retained their down clothing. The summit was reached at about 11 o'clock. The view was not quite so clear as on the previous day, with mist and clouds everywhere, but a complete absence of wind. Reist and von Gunten were well pleased with their success and remained on the summit for about two hours. For about half the time they did not use oxygen and after having taken some photos they made a quick descent to the South Col arriving in two hours. Here they met Reiss, Luchsinger, Leuthold, Müller and six Sherpas.

They had brought with them a most unfavourable weather report; the wind was rising again and the clouds were increasing. It was obvious that we had shot our bolt, and we beat a retreat.

Great care was necessary during the descent of the Lhotse face, and especially through the icefall. The latter had changed greatly; many of our bridges had fallen into the crevasses which they had spanned and in some places were completely covered up by fallen séracs and ice-blocks. We cleared out the camps as much as possible and on May 29th the whole party, Sherpas and all, was back safe and sound in Base Camp. On that day we received, via the B.B.C., the congratulations of Sir John Hunt, Hillary and Tenzing, which cheered us enormously. It was a proud moment for us, for we had profited by the experience of these men who were first on Everest three years earlier.

We reached Katmandu in 20 days, passing through Thyangboche and Namche Bazar, where we were plied with large quantities of *chang* and *arak* by our many friends and acquaintances among the local population. The great reception accorded us by our fellow countrymen, Werner Schulthess, Paul Siegenthaler, Eng. Mächler and Boris as well as the U.S.O.M. and the Nepal Mountaineering Club did much to blot out the memories of the leeches and the daily monsoon downpours. They were soon forgotten; but we shall always remember the beauty of the journeys, the crossings of the rivers, our stay at the monastery, the surmounting of the icefall and of the Lhotse face, and above all, the days when three of our ropes gained the victory for which we had striven so long.

THE ASCENT OF MANASLU

By YUKO MAKI AND T. IMANISHI

In the following narrative, the original style and phraseology of the authors have been retained as far as possible. If the account has been abridged or edited in any way, the sole consideration has been economy of space. It is hoped that the authors will forgive any liberties that might have been taken thus with their interesting story.—EDITOR.

AFTER the monsoon in 1952, the Japanese Alpine Club sponsored by the Mainichi Press, the leading press in Japan, sent a reconnaissance party to Manaslu, 26,658 ft. We knew nothing of Manaslu beyond one photograph taken by Mr. Tilman in 1950. The party consisted of five members, including two scientists and one doctor, under the leadership of Dr. K. Imanishi. Gyalzen Mikchen was the Sherpa Sirdar. They took a route from the Marsyandi valley to the west face of Manaslu with four Sherpas and seventy porters. However, they could not find a suitable route on the western side of Manaslu, because the western approach was surrounded by a tremendously steep wall of about 15,000 ft. On the way, they made a trial ascent of Annapurna IV, 24,600 ft., to acclimatize themselves, following Mr. Tilman's route. They then went round to the north side via the Dudh Khola, and found the glacier which drops to the east side of Manaslu on the way to Larkya Bhanjyang. Arriving at the eastern end of the Manaslu glacier, they proceeded round the eastern foot of the mountain. This glacier route may probably be the one discovered by Major Roberts, which was later described by Mr. Tilman in his book.[1] The glacier, which starts at the summit of Manaslu, makes its way along the plateau forming an upper icefall of about 3,000 ft., and a lower icefall situated between 12,000–16,000 ft., and ends in several glacier lakes in the moraines at a height of 12,200 ft. The reconnaissance party made their way along this glacier valley up to a height of 17,400 ft., and discovered that this would be the best route to the summit. They came back to Katmandu, taking the route along the Buri Gandaki River at the beginning of December.

Next year in 1953, before the monsoon, we sent 15 climbers and 2 scientists under the leadership of Y. Mita, who had previous Himalayan experience in Sikkim and Kulu. They made a caravan consisting of 16 Sherpas and 270 porters besides Sahibs, and left Katmandu for Manaslu on March 27th taking the route along

[1] H. W. Tilman, *Nepal Himalaya*, Camb. Univ. Press, 1952.

the Buri Gandaki. They set up their Base Camp on April 12th, near the terminal point of the Manaslu glacier at 12,600 ft. They took the route over the moraine to the left side of the Manaslu glacier and reached the upper part of it via the lower ice-falls; they pitched the Advanced Base Camp for the assault on the Naike Col *c.* 18,370 ft., between the North peak and Naike peak. From there they entered the upper icefall and pitched the intermediate Camps V, VI, VII; Camp VIII was pitched on the North Col at 23,300 ft. On May 31st, an assault party of three, Kato, Yamada, Ishizaka, supported by five Sherpas under the leadership of Yamazaki, established Camp IX on the plateau at 24,600 ft. The following day, on June 1st, the three climbers made their way to the summit although the temperature was −35°C. As they had no oxygen apparatus, they were obliged to turn back at noon, at a point about 25,425 ft. up. About 1,230 ft. remained to the summit, but they had reached the final limit of their powers. There was nothing to do but to turn back.

The Japanese Alpine Club made adequate preparations, based on the experience gained during the past two expeditions, and in 1954 before the monsoon, a second expedition (14 members) was sent under the leadership of Y. Hotta, who was leader of the Nanda Kot expedition in Garhwal in 1936. They travelled to Sama village arriving there on April 8th. But they were unexpectedly prevented from proceeding further by the villagers, who said that the Japanese party the year before had profaned the mountain. They negotiated in every way, but things went badly. So they were obliged to give up trying Manaslu and instead attempted Ganesh Himal, but were unsuccessful. The route on the Toro Gompa glacier side, the west side of Ganesh Himal, was not suitable for climbing. They made every effort to find a suitable route, but it was hopeless. On their way back to Katmandu, they reconnoitred the east side of Himal Chuli.

The Japanese Alpine Club and their sponsors, the Mainichi Press, made preparations to send a third expedition. However, it was important to settle the Sama affair with the Nepal Government first. In April 1955, we sent Dr. Nishibori and I. Naruse, members of the Himalayan Committee of our Club, as a negotiating party to Katmandu. They succeeded in obtaining permission to try Manaslu again in the post-monsoon period of 1955 and the pre-monsoon period of 1956.

In the post-monsoon period of 1955, three members, Ohara, Hashimoto and Murayama, were sent as an advance party of the

third Manaslu expedition. They travelled to the Base Camp through Sama village and reconnoitred the route to the plateau again. The villagers promised to welcome the coming party in the pre-monsoon period of 1956.

Before proceeding to the events which took place between 1954 and 1956, we must not forget to mention the kindness which was shown to us by the Nepal Government.

The third Manaslu expedition left Katmandu on March 11th, 1956. The composition of the party was as follows:

Yuko Maki (Leader)	62	Former President of the Japanese Alpine Club. First ascent of the East (Mittellegi) ridge of Eiger in 1921. First ascent of Alberta in the Canadian Rockies in 1924.
Katsuro Ohara	44	Leader of 1955 post-monsoon expedition.
Toshio Imanishi	41	Leader of the 1953 Annapurna expedition of the Academic Alpine Club, Kyoto.
Dr. Hirokichi Tatsunuma	40	Member of the past two Manaslu expeditions.
Sonosuke Chitani	39	Climbing experience in the Japanese Alps.
Kiichiro Kato	35	Member of the past two Manaslu expeditions.
Junjiro Muraki	32	Member of the past two Manaslu expeditions.
Hiroyoshi Otsuka	31	Member of the 1954 expedition.
Dr. Atsushi Tokunaga	28	Climbing experience in the Japanese Alps.
Yuichi Matsuda	25	Member of the 1954 expedition.
Minoru Higeta	25	Member of the Aconcagua expedition to the Andes in 1953 and Manaslu expedition in 1954.
Takayoshi Yoda	38	Cameraman. Member of the past two Manaslu expeditions.

The following twenty Sherpas were engaged, with Gyalzen Norbu (H.C. 145) as Sirdar:

Pasang Phutar I (H.C. 79), local porter Sirdar, Lhakpa Tenzing (H.C. 218), 1st cook, Lhakpa Tsering (H.C. 167), 2nd cook, Nym

Phutar, Dawa Thondup (H.C. 49), Ang Babu (H.C. 43), Ang Dawa IV (H.C. 152), Aila Namgyal (H.C. 159), Pasang Dawa (H.C. 160), Gundin, Nima Tensing IV (H.C. 177), Pemba Sundar II (H.C. 182), Ang Namgyal (H.C. 190), Choung (H.C. 198), Tashi (Chota), Chotare, Wangdi, Sarke II, and Ang Temba V.

In arranging for the Sherpa team, we received the utmost assistance from the Himalayan Club. In particular, we must not forget the kindness which was shown to us by Mrs. Jill Henderson, the Club's Honorary Local Secretary in Darjeeling.

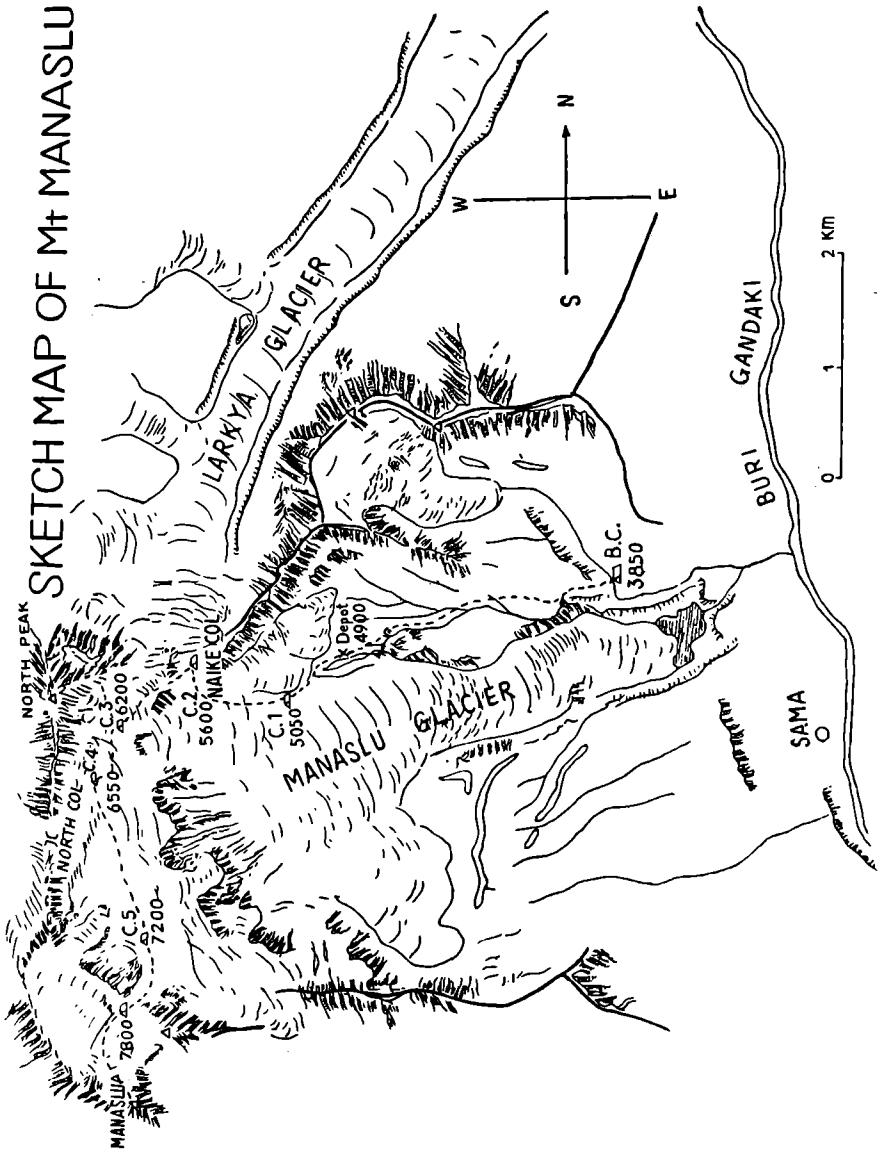
The caravan made its way to Sama village along the Buri Gandaki, taking the same route as that taken by the first two expeditions, and arrived there on March 26th. We were prevented from climbing by the Sama villagers again, but this time the affair was settled smoothly with the help of Subba who was ordered to go with us by courtesy of the Nepal Government. The snow on Manaslu was no deeper than the year before and conditions on the glacier were good, so we were able to pitch our Base Camp at about 12,600 ft., and our hopes were high.

We had intended to follow the same route as in 1953, but it was our aim to diminish the number of intermediate camps and to simplify and speed up the transport. We paid more attention to acclimatization, and devoted time to testing out our oxygen equipment.

On April 13th, we established Camp II on the Naike Col at 18,350 ft.; and on April 25th, Advanced Base Camp for the assault on the summit was established above the icefall at 21,500 ft. Fine weather was continuous from the end of April to the beginning of May, a thing which is considered very rare above 26,000 ft. Transport to Camp IV was running smoothly; climbers and Sherpas were in good spirits, and snow conditions were good. I made up, therefore, the following climbing teams with the object of attempting to reach the summit twice without losing the chance of the fine weather.

First summit party: Imanishi and Sirdar Gyalzen; 2nd summit party: Kato and Higeta; 1st assault supporting party: Muraki and 5 Sherpas; 2nd assault supporting party: Otsuka and 3 Sherpas.

Luckily, we were blessed with fine weather, so we proceeded as arranged and were able to climb to the summit twice on May 9th and 11th. The following is an account written by Toshio Imanishi who, with Gyalzen, was the first to reach the summit.


SKETCH MAP OF Mt MANASLU
NORTH PEAK
NORTH COL
C.4
C.3
6550
C.5
7200
MANASLU
7800
C.2
5600
NAIKE COL
C.1
5050
MANASLU GLACIER
Depot
4900
B.C.
3850
LARKYA GLACIER
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The First Summit Party: By Toshio Imanishi

On our Emperor's Birthday, April 29th, a council was held by Mr. Maki at Camp II to work out details of the final assault. At that time, Camp IV had already been set up at 21,500 ft. just below the North Col.

We were in two minds about the route. One alternative was to take the route followed in 1953, going from Camp IV over the North Col and arriving at the right-hand end of the plateau. The other was to avoid the North Col, and to scale the steep wall of snow and ice in the middle of the slope running down from the plateau, directly above Camp IV, and so arrive in the middle of the plateau.

This year the snow was not deep, and when we climbed the Naike Col to reconnoitre, Kato, Muraki and I decided that the bare black-stratum rock, at the place where they reached the plateau in 1953, looked quite impossible. So the day after Camp IV was set up, I headed for the North Col together with Kato, Muraki and Pasang Dawa. We climbed a slope covered with snow hardened by the wind which was blowing over the North Col from the north side of Annapurna. As it was the first time we had reached 23,000 ft., we were not quite acclimatized to the height and were in danger of losing our foothold in the strong wind. However, on arriving at the snow-covered pass we were able to reconnoitre the ground closely.

The wall leading up to the plateau was hopeless. If we took this route, we should have to scale the glacier which curved down like a sickle from the plateau to the left of the wall. We tried to decide which way we should go, but could not come to any conclusion. We went round the séracs but ran into steep blue ice and came to a dead-end. A small party of two or three climbers might have succeeded, but when loads of several hundred pounds have to be carried up, it is quite a different matter. Dogged by an ever-increasing wind we made our way down to Camp IV rather gloomily, as we were all keyed up for victory this year. This was on April 26th.

The operational planning meeting at Camp II lasted till May 1st. Could a good camp-site be found to the middle of the plateau by the other route? This route involved greater danger of avalanches than the route over the North Col. Our leader was specially concerned about this. There were some gigantic séracs, over 300 ft. high, standing between Camps III and IV and as the season advanced the danger increased to such an extent that a strict order was issued never to pass that way in the afternoon.

On April 30th, the following order was issued to Camp IV by Mr. Maki in Camp II on the evening wireless: 'I want three people, Otsuka, Higeta and Gyalzen—being head of the Sherpas he was treated as one of the climbing party—to climb the whale-back shelf tomorrow, and reconnoitre a camp-site.' The three men plodded up the deep snow and made for the whale-back. They wound their way in from the left up a slope and found a good camp-site. It was considered safe enough from avalanches. It is no exaggeration to say that our good fortune began from this day. But maybe it was not luck. While the watchers in Camp II were wondering whether the climbers would turn back half-way, they scrambled up the last steep slope and reached their goal by sheer hard work. It seemed to be possible to climb up the snowy slope, called the Snow Apron, from the whale-back to the plateau, and Ohara's party had found out the year before that there was a way up from the entrance to the plateau. In this way, we decided on our route to the summit.

I immediately left Camp II with Kato and Muraki. After that the two of them set up Camp V and went in search of a route to the plateau, but as the wind was extremely strong this was no easy matter. Otsuka also took part. The fine weather which had continued for the past few days was not likely to last much longer, so we must take advantage of it to make our assault on the summit. We could not afford to miss this opportunity. Strong words were exchanged by radio between Camp IV and Camp V. One would never use such language normally, but a one-way call on the telephone has to be brief and, try as they may, the talk somehow became heated. There was no doubt about the violence of the wind at Camp V. But one can never hope for unbroken fine weather, and one must be prepared to face strong winds higher up. With this in mind, I urged them to attempt to open the route to Camp VI quickly. The answer from Camp V was, 'We cannot go out in this wind'. However, in Camp V, Kato and Muraki made their way up the rock face to about the middle of the plateau.

Finally, the message came to Camp V, 'The first summit party will leave Camp IV on the 7th. If reconnaissance proves impossible, the assault party will make their own way'. Dr. Tatsunuma at the telephone heard the message breathlessly. At this important final stage, might it not be rash? However, one never could tell when this long spell of fine weather would break. One could not waste even a day. The people in Camp IV were getting somewhat impatient.

It snowed from the evening of the 6th to the morning of the 7th. The tents in Camp IV were flapping in the wind. But by the morning, the sky cleared and the wind dropped. Tatsunuma, in charge of the oxygen apparatus, Yoda in charge of the photography, and Gyalzen with seven Sherpas set off for Camp V. The Sherpas, with their heavy loads, plodded steadily on. Breathing oxygen, Otsuka and Pemba Sundar, who were opening the route to the plateau, made remarkable speed up the steep snow-packed slope leading to the now windless plateau. We called this snow slope, wedged between the snow-free rock faces on either side, the Snow Apron. Before noon, they were already out of sight over the plateau, making their way to the summit. They reached a point about 26,000 ft. high and returned to Camp V. The oxygen apparatus worked wonderfully, and our prospects looked bright. As long as it kept fine, the summit was ours.

After reaching Camp V, Dr. Tatsunuma had his hands full. Five tents had been put up on the steep side of the mountain by digging away the snow; packing cases and empty duralumin oxygen cylinders scattered everywhere made a desolate picture. Camp V being at 23,500 ft., every movement was slow and even going to another tent was a laborious business. Dr. Tatsunuma had set up eight oxygen carrying-frames, attached three oxygen cylinders to each, and tested whether there was enough oxygen in them. The job was not an easy one, and had it not been for his determination it would never have been completed. I gathered together the climbing gear I would take with me to Camp VI the next day—tent, food, pitons, and the like—then stretched myself wearily in the tent and lay there without a thought in my head. In the evening, Dr. Tatsunuma came round with oxygen masks made of polyethylene, for each of us to breathe oxygen that night. Words could not express our thanks. To distribute these he had to go outside, and to do this was impossible without strong will-power. At a height of over 23,000 ft., it was not a question of physical strength but of one's strength of will.

The oxygen was coming through a rubber tube from a generator in the next tent. But suddenly I woke up. Moisture was flowing from the mask, running down over my chin. Unconsciously taking out a handkerchief I forced myself to wipe it off, and repeated this several times. These oxygen generators are different from oxygen containers and do not contain oxygen, but generate it chemically by electrical combustion. One oxygen candle only lasted for an hour and a half at the most, so when the oxygen ran out

Photo by S. Hashimoto

NORTH FACE OF MANASLU SHOWING UPPER PORTION OF ROUTE; PHOTOGRAPHED BY THE 1955 POST-MONSOON EXPEDITION FROM CHO DANA PEAK, C. 23,000 FT.

Photo Y

MANASLU, 26,658 FT., NORTH-EAST FACE; NORTH PEAK, 23,460 FT., ON RIGHT.

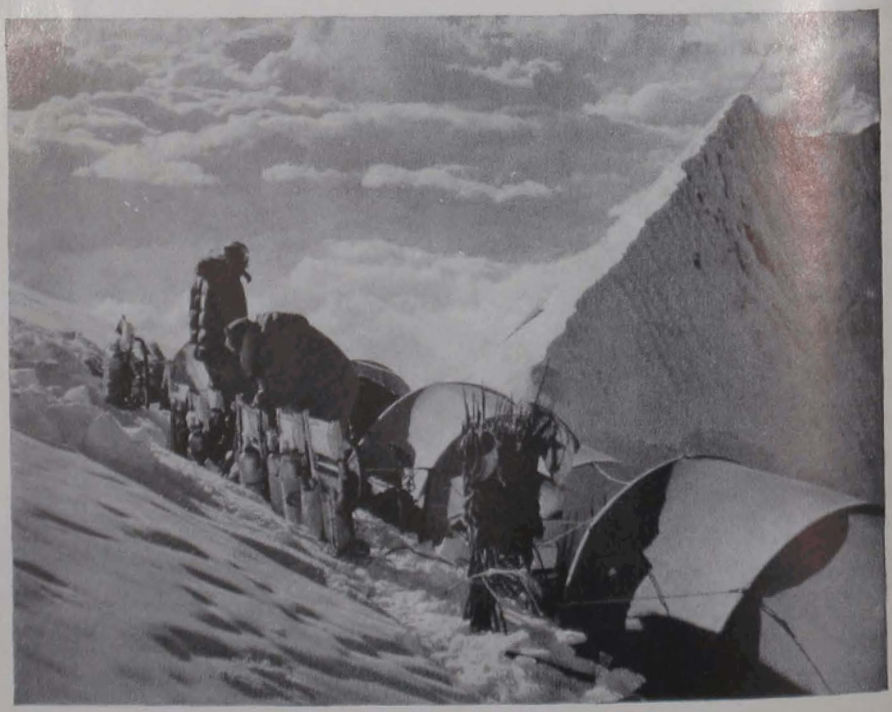


Photo Yoda

VIEW OF THE NORTH PEAK OF MANASLU
FROM CAMP V, 23,610 FT.

Dr. Tatsunuma changed oxygen candles. We were extremely grateful, but he hardly had any sleep.

The next day, the 8th, was fine again. A supporting party consisting of Muraki and five Sherpas left Camp V at 8-30, taking with them tents, sleeping-bags, food and oxygen, sufficient to spend one night pitching Camp VI above the plateau. Chotare, whom they had planned to take with them that day, said he was sick and could not go on. Aila Namgyal had a headache and kept to his tent. Two substitutes were found. Yoda was standing near his tent, waiting to photograph our departure. First Gundin, Choung and Tashi, roped together in one party, set off in the direction of the Snow Apron; they were followed by Muraki, Ang Dawa and Nima Tensing in another party. Gyalzen and I followed later, saving our strength for the next day's climb. Below the rock face which Kato and Muraki had climbed on the 6th, the blue ice glittered. As the snow hereabouts had been hardened by the wind blowing over the North Col, walking should have been easy, but actually it was painful and tore at one's vitals. I was breathing two litres of oxygen per minute, but perhaps that was because I was not used to the mask. When we reached the Snow Apron, we found dangerous conditions created by about 6″ of powder-snow overlying hard snow. In the middle of the Apron, there appeared a cluster of rocks which we called Middle Island. After this, the slope of the Apron became steeper and at times the powder-snow gave way under our steps. Some of the Sherpas were breathing oxygen, others preferred to climb without it. As we approached the plateau, the angle was so steep that our chests brushed the slope. Nima Tensing in Muraki's party was changing his cylinder; we were held up every time someone's oxygen ran out. The amount of time wasted was in proportion to the number of people in the party. We changed cylinders this side of the plateau, and moving up diagonally to the right we scrambled over the ridge and finally came out on to the plateau. It was 12 o'clock.

Muraki's party opened a tin of peaches and waited for us. We could hardly swallow any solid food, but we gladly ate fruit. With the driven snow, bare rock and jagged boulders this place can be compared to the South Col of Everest. Above the cliff to our left, a covered glacier could be seen in section, glistening in the sun. The snow above this point had turned to blue ice on the surface and was impossible stuff to deal with. While we were feverishly climbing the Apron we had no time to enjoy the scenery, but having reached the plateau we were able to relax and gaze around

us. Ganesh Himal and Kutang Himal on the Tibetan border lay far below, and we felt as if we were in a world apart. Avoiding the blue ice and stumbling over the rocks, we arrived at the centre of the plateau. A rock ridge came into view at the right-hand end of a great bulge of snow which perhaps continued as far as the peak on the left, and we climbed it via a steep couloir covered with snow drifts. We crawled out to the right gasping for breath, as we were only breathing two litres of oxygen in order to economize. The way suddenly opened up before us, and at 1-30 p.m. we found quite a good camp-site on a rock shelf where snow had accumulated.

Muraki and party, who had arrived earlier, were levelling the snow before pitching the tents; it was our sixth and last camp. As we had forgotten to bring an altimeter, we asked Kato during the second assault to measure the height and he made it 25,600 ft. When we took off our oxygen masks and collected the cylinders for the next day, we were very shaky on our feet. Our movements were slow, as if we were in a stupor. If a fully conscious person breathing sufficient oxygen had seen us, he would surely have lost all patience. However, we managed to put up our tents, blow up the air-mattresses and spread out our sleeping-bags. The equipment for Camp VI had all been made in red to distinguish it from the equipment for the lower camps. The red tents stood out against the blue sky, the snow and the magnificent sea of cloud stretching to distant India. I got Muraki and the others, who had done such vital work, to line up against the tents for a photograph. Muraki and the Sherpa support party left all their remaining oxygen for the two of us. We were extremely grateful; we shook Muraki by the hand and thanked him; then he and the Sherpas made their way back to Camp V. It was not easy to climb down the Snow Apron, and they got back to Camp V after performing their duties in support of the assault, and slumped down dead tired.

Camp VI had become a world of two, one Japanese and one Sherpa. I examined every oxygen cylinder; our requirements had been calculated as three cylinders each for the assault, and one each for sleeping, making a total of 8 cylinders; but about 14 or 15 cylinders had been transported here.

The inside of the tent was all red except for the yellow rucksack, and all the equipment used here was new; I found that the colour tone calmed my spirits. I half-dozed as I lay in the sleeping-bag. Gyalzen prepared coffee and gave me some. At this camp, we used Meta fuel, but it took a long time to cook our supper. We ate rice and soup, and munched some dried fruit. After that, it

was a difficult job for us to get to sleep. Setting an oxygen cylinder beside our pillow, we ran off two rubber tubes from it and attached the masks for sleeping, set at a flow-rate of one litre per minute. Each could breathe only 0·5 litre. I wanted to write my diary, but could not bring myself to do it. I only entered in my note-book the times and the amount of oxygen used. The tent we used was designed by necessity to be as small as possible and was cramped. If one sat up on the air-mattress, one's head touched the roof. When we were at Base Camp, we had often complained that one could not get inside such a small tent. Fortunately, as there was no wind or snowfall, the tent was comparatively comfortable. Apparently I soon fell asleep. Suddenly I woke up in the middle of the night; turning on the electric torch, I found that the oxygen meter pointed to nought. I was quite astonished to find how effective the oxygen was. I looked at Gyalzen and found that he had taken off his mask. I threw the used cylinder out of the tent, replaced it with a new one, and told Gyalzen to put on his mask. I must have fallen asleep again in a few minutes. When I woke again, the inside of the tent was full of light. It was half-past five. This time also, the oxygen meter had fallen to nought. Quite by chance, it served the purpose of an alarm clock.

I opened the tent and took the temperature; it was —22°C. The weather was absolutely clear. Gyalzen went out of the tent and prepared to cook. Soon the sun began to rise. We had brought a wireless in order to radio to the other camps whether the summit party was leaving Camp VI or had been able to reach the summit. I signalled 'pip' 'pip' three times 6-10, 6-15, 6-30 to show that we were leaving. Gyalzen asked me how I liked my tea. When I told him to make anything he liked, he made Ovaltine. I drank my fill of this, ate half a bowl of porridge and munched two or three biscuits. I could not get anything else inside me, so I forced down four or five pieces of Hittobe, a scientific food which was specially manufactured.

There was only a light wind, and we congratulated ourselves on our good luck. We wore cotton vest and pants, cashmere woollen vest and pants, flannel cutter-shirt, sweater, serge trousers and eiderdown trousers; and above this a windproof jacket and trousers. We used wool stockings of two kinds, thin ones and thicker ones. Above our high-altitude boots we wore eiderdown over-shoes, and fixed crampons to them. Woollen gloves and mittens of thin leather were used to cover the hands. We carried three oxygen cylinders each, fixed vertically into their frames. In our rucksacks we put our eiderdown jackets, some food, pitons, a Filmo

Automat 16 mm. camera (with 150 feet of film), a Cannon camera with 25 mm. wide-angle lens for taking monochrome pictures, and a Nikon camera with 35 mm. wide-angle lens for colour. The total weight exceeded 45 lbs.

Cooking took so much time that it was 8 o'clock when we left our camp. The oxygen apparatus was regulated so as to supply two litres a minute. The face of snow extending from the pinnacle turned out to be ice. However, we found a break in the face and moved towards it. To our relief, the ice soon ended and a snow face followed. If this ice had continued to the summit, the ascent would have been quite impossible. If we slipped, we would plunge into a valley a thousand feet deep on the west side. After we passed this, a wide snowfield appeared. Such a snowfield close to a summit is unusual. The plateau widened above Camp VI and narrowed below the summit. We had placed marker-flags at intervals of 150 ft. all the way to Camp V, but above that we had no energy to do so, and quite a number of them were unused though we carried them with us. We slowly climbed the snow face, which was marked here and there by crevasses. On the right we saw two white tops. 'There they are! It is not far from here.'

Our spirits rose. Suddenly Gyalzen called out, raising his finger to the left. A triangular rock-pinnacle covered with snow rose sharply from the wide snowfield. Otsuka was right when he advised us to take a few rock and ice pitons. It seemed to us that we took a roundabout way. We pitched two flags here. Gyalzen took the lead, and I photographed him with the movie-camera. I began to breathe with difficulty, but after a while I took the lead myself. There were a number of hidden crevasses but there seemed to be little danger. We reached a point where a big slope commenced extending to the summit from the end of the snowfield. From this point, the slope formed a sharp snow ridge. We moved to the left of the slope and climbed a slope directly under the rock ridge, which we thought was the summit. We were at a point higher than the South Col of Everest, which is said to have the 'smell of death', but we felt so good that it made us think how much fine weather can alter the appearance of things. If the wind blew in such a place, we would be in great danger. What good luck we had! The summit was now at a finger's stretch. Slowly we approached the rock-pinnacle. I called to Gyalzen 'Very lucky', he looked at me smiling. Somehow the peak disappeared and another one which must be the summit appeared behind. One moment we were on a shelf of snow, the next it turned into a steep slope. Here we changed our oxygen cylinders and planted a flag.

It was just 11 o'clock. The slope was narrow, and on the left side towards the Manaslu glacier was a cornice. We proceeded on the left side cutting steps. When I asked if the steps were all right, Gyalzen asked me to make them bigger. After that I began cutting them as big as buckets. Whilst I belayed Gyalzen, I watched him making them even bigger as he came along. He was prudence itself. I remembered myself on Annapurna in the autumn of 1953, battling with the cold and cutting steps in a 70-ft. ice-wall. I had to have a rest after every two or three strokes. What a difference now! I was using the same ice-axe 6,500 ft. higher up. The altitude here was over 26,000 ft. and yet the ice-axe did not feel so heavy. From the cylinder on my back the oxygen, which was more precious than any food, poured into my lungs with a hiss. I could have wept with gratitude for the benefits of science.

The snow ridge continued. We took the utmost care to avoid the cornice and belayed each other carefully. Gyalzen came up and drove a piton into the rock. Leaning my weight on this, and clutching an overhanging boulder covered with loose rock, I passed over the dangerous rocky ground. I thought we had reached the top, but then up bobbed a sharp triangular pinnacle. This really was the summit. At this point a shiver went down my spine. A deep gap appeared between us and the summit. I instinctively looked around. On the side leading down to the Marsyandi, I saw a snow slope that looked as if it might lead to the summit. At last my mind was put at rest, and when I looked at the summit once more a way of approach opened up. I found that we could climb down a deep gully.

Manaslu, which had long inspired Japanese climbers, is revered by the villagers of Sama as Kambung. Their existence is controlled by the god of Kambung and they pray to the holy mountain for the prosperity of their crops. They had hindered the expedition on the pretext that their *gompa* had been destroyed by an avalanche, because a former Japanese expedition had violated its sanctity. The summit of this Kambung now stood some 35 ft. above us. Belayed by Gyalzen, I descended into the gap, and then slowly climbed up driving a piton into the rock.

At 12-30 p.m., we stood on the summit. It is a knife-edge. The south side falls away in a steep cliff. Gyalzen photographed me standing on the summit and then joined me. On the narrow ridge, we held hands in exultation. Our steps seemed likely to crumble, so we straddled the ridge.

All around was a sea of cloud, with Himal Chuli and Ganesh Himal, which our second expedition attempted, looming up above.

To the west, the Annapurna range and the strange outline of Dhaulagiri appeared through the mist. To the south of Annapurna, Machhapuchhare could be seen. To the north, a wave of black mountains, stretching from Larkya Himal, Thringi Himal and Kutang Himal on the Tibetan border into the far distance, made a magnificent sight. Directly north, the gigantic ridges of the massif stood out in relief. One hour passed, I went down and took a picture of Gyalzen with the movie-camera. I meant to keep quite steady, but as I had switched off my oxygen after reaching the top, my movements were rather clumsy.

When Gyalzen changed to his third oxygen cylinder, he found that it was empty. I had tested all the cylinders the day before and they had been full, so the cap must have been faulty. Luckily, the going was all downhill from now on, so we would manage without oxygen. Letting Gyalzen go ahead, I followed him cautiously. He bounded down in high spirits. At the point where we had cut steps, we took it in turns to lead. On the snow shelf, I changed to my third oxygen cylinder. We made our way carefully along the steep snow slope which runs down from the shelf. We were so elated that we felt like singing. Keeping to the left of the red flag which we had planted on the way up, we took a direct line towards Camp VI. We felt that we were floating on air, and scarcely realized that we had been to the summit.

At 3-5 p.m. we returned to Camp VI with its red tent standing alone and desolate. My oxygen cylinder was two-thirds empty. I opened a bottle of orange-juice and a tin of peaches, and we had a quick lunch. I checked the oxygen for Kato and Higeta who were coming up the next day. There were six full cylinders left. I cleared the tent and radioed the news of our success. I then changed my oxygen cylinders. About this time, cirrus clouds were hanging high over the summit of Dhaulagiri, and I was anxious lest the weather should break. I wished the Argentine team good luck, and prayed for the safe arrival of our second summit party next day. Grateful for today's clear windless weather, within forty minutes we took our leave of Camp VI.

We left the plateau and at 4 p.m. reached the Snow Apron. A fixed rope had now been left by Muraki and the others when they went down. As we approached Camp V, Camp II where our leader was waiting was hidden by cloud. As he traversed from the right-hand end of the Apron towards the camp, Gyalzen's steps seemed to grow slightly unsteady. I took a firm hold on the rope in case he should slip. The two in Camp V came up to meet us. I raised both arms and signalled to them. Several times it

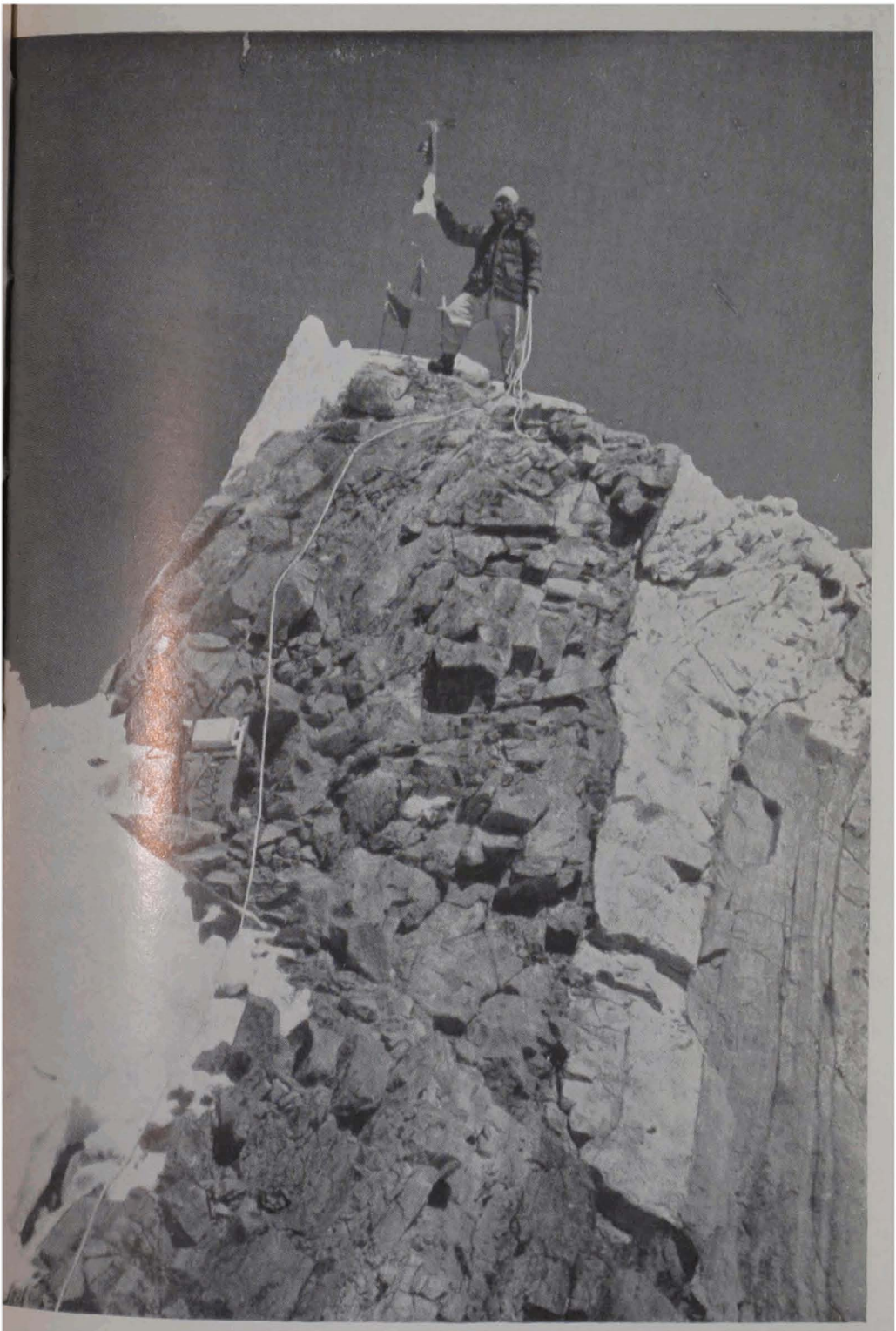


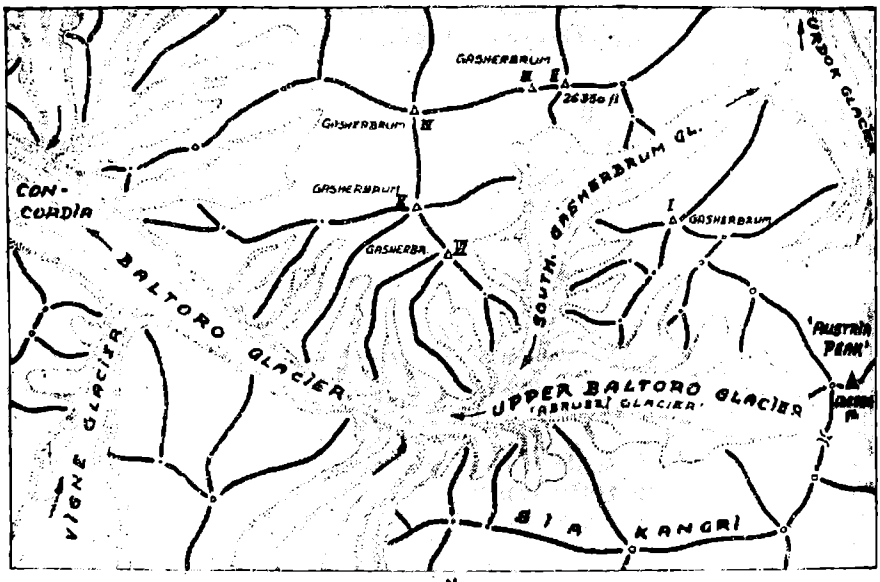
Photo Imanishi

GYALZEN NORBU ON THE SUMMIT OF MANASLU

seemed as if we would lose our balance, as a covering of powder-snow overlay the hard snow. Just after we passed the steep slope, Muraki and Pemba Sundar came to meet us, cutting steps large enough for two to sit alongside. They were both overjoyed, and shook us by the hand. We plumped down into the snow and quenched our thirst with hot tea. After establishing Camp V, Muraki had supported us for six days at an altitude of 23,600 ft. He had transported our equipment to Camp VI and now here he was today coming out to give us a warm welcome. I could only bow my head in thanks. He had carried out a vital task.

In Camp V, we were met with a hail of handshakes by Tatsunuma, Yoda, Kato, Otsuka, Higeta and the Sherpas. The very first thing I did was to thank Dr. Tatsunuma for his years of work, and tell him what a blessing the oxygen was. After explaining to Kato and Higeta what we had left in Camp VI and what the summit climb was like, we radioed a summary of the day's events to our leader. He was highly delighted. After 30 minutes' rest we went down to Camp IV.

The day before, Camp IV had been threatened by great avalanches falling from the ice-wall of the plateau; our old route had been completely buried by séracs, which made it easier to go down. At Camp IV, Ohara met us with a smiling face and ten Sherpas lined up in single file to shake hands one by one. The Sirdar Gyalzen was beaming from ear to ear, and seemed to have an endless fund of climbing stories.



▲: 'Austria Peak', 25 350 ft.

Scale:

AUSTRIAN KARAKORAM EXPEDITION, 1956

By FRITZ MORAVEC

TRANSLATED BY HUGH MERRICK

IN the summer of 1955, when I was in the Ruwenzori, I had the opportunity to study Prof. G. O. Dyhrenfurth's book *To the Third Pole*.[1] His remarks about Gasherbrum II, 26,360 ft., 'though not easy, it is probably climbable and relatively safe', impressed my mind deeply. Hence was the idea of the expedition formed. The Austrian Himalayan Foundation, before whom I laid the project, agreed to sponsor the expedition. I had been a member of the 1954 Austrian Expedition to reconnoitre Saipal, which was also sponsored by the Foundation.

With five months in which to make all our preparations, select the team, and buy the equipment and food, we all had to work furiously. Many firms generously supported us and we were happily given a guarantee for the full cost of the expedition.

The team comprised the following:—

Sepp Larch, 26, miner; Hans Ratay, 25, photographer; Richard Reinagl, 46, mechanic; Heinrich Roiss, 29, Federal Railways officer; Hans Willenpart, 29, engine driver; Dr. G. Weiler, 36, expedition doctor; Dr. E. Gattinger, 26, geologist; and myself, aged 34, school-teacher.

We left Vienna on March 28th, 1956, and sailed to Pakistan on the m.v. *Asia* reaching Karachi on April 11th. Thanks to the advance arrangements made by our Embassy in Pakistan, our baggage weighing about 4½ tons was cleared through the Customs within half an hour. Two days later, in a separate carriage attached to the Punjab Express, we travelled to Rawalpindi together with all our baggage. Arriving on the 15th, we chartered an aircraft to fly us to Skardu on April 17th.

At 5 a.m. on the morning of the 17th, we were driven to the airfield; there our baggage was weighed and partly loaded into the plane. At noon, we were told, 'The mountains are all covered in cloud and the weather is unsuitable for flying. Come again tomorrow'. This performance was repeated ten times. It was necessary to suffer this ordeal, because absolutely clear weather is

[1] G. O. Dyhrenfurth, *To the Third Pole*, 1955, London, T. Werner Laurie, Ltd.

essential for the flight. It must be one of the trickiest air routes in the world; but it covers in one hour and a half a stretch of country which pre-war expeditions took three long weeks to cross, thereby saving valuable time, expense and effort.

Finally on April 27th we found ourselves aboard the aircraft bound for Skardu. We were accompanied by our liaison officer Capt. Quasim Ali Shah, and by a student Capt. Hayat Ali Shah, both of whom provided valuable assistance to the expedition. The flight was of immense interest. The Indus appeared as a tiny ribbon winding in and out of the foothills; whilst Nanga Parbat, 26,620 ft., and Rakaposhi, 25,550 ft., bathed in sunlight, looked very impressive.

At Skardu, where the senior military and political officer—the Political Agent—put his guest-house at our disposal, we picked our valley and high-mountain porters. We wanted 168; 400 Baltis, however, had turned up. Any expedition is an opportunity to earn good money, which no one is anxious to miss. Everything to do with the porters is wrapped up in regulations; but it was quite clear that their demands had risen since the previous year. It may be useful to quote some of the new regulations.

A porter now gets Rs.3 per day while working in populated areas, but he has to find his own food. Immediately on leaving Askole the rate goes up to Rs.4, and the expedition has to provide his keep. A day's ration for a porter is 30 oz. atta; 2 oz. ghee; 2 oz. sugar; $\frac{1}{4}$ oz. salt; $\frac{1}{6}$ oz. tea; 2 oz. dal; and 3 cigarettes. On the return journey he gets half his ration while in the mountain areas, and 'return' pay fixed at Rs.2-8-0 per day. Every detail about rest-days, the length of stages, glacier equipment (snow-goggles, boots and protective clothing) is laid down. The scale for the high-altitude porters was much stiffer. At Base Camp they got Rs.5 per day—Rs.6 if they went above 20,000 ft., Rs.7 above 23,000 ft. Every expedition had to take out an accident and life insurance for Rs.2,000 in case of death, and yielding proportionate benefits for injuries or frost-bite. I have one very disagreeable memory of Skardu. Our loads weighed on an average 66 lb.; our liaison officer ordered them all to be repacked in 56 lb. loads, which was an irritating imposition of extra work.

We started off for the mountains on May 3rd, crossing the Indus in a hand-propelled ferry-boat, after which the caravan proceeded through a sandy landscape; to complete the impression of moving through a desert, a sandstorm fell upon us. The spot where we spent the first night was called Shigar. It had rained directly after the sandstorm and all the streams were bringing down clay and

soil, so that there was no clear drinking-water to be found in the place. The end of our second stage was Koshumal. Just before Dusso we left the Shigar Valley, crossing the almost empty Braldu by a log-bridge and then moving up the Braldu Valley past staging-points called Chokpiong and Chongo.

In the Braldu Valley the foot of the mountains was so close to the river that there was hardly room for the track, and we had continually to cross from one bank to the other. We met with a pleasant surprise half-way between Chongo and Askole in the form of hot sulphur-springs, inviting us to a necessary and cleansing bath. Askole (11,500 ft.) is the last and highest inhabited place in the Braldu district and indeed in Baltistan. These valleys are very hot in summer but thanks to artificial irrigation it is possible to grow barley, the basic grain used by the inhabitants for baking bread, even at this great altitude. We reached Askole on the sixth day of our march (May 9th) and had to spend the whole of a rest-day there obtaining the essential provisions and fresh meat for our porters—5,280 lb. of atta, 187 lb. of ghee, 10 goats, 10 chickens, 20 dozen eggs. In order to cope with the additional loads which resulted, we had to take on 84 men of Askole, which brought our porter-roster up to 238.

On May 11th we crossed the tongue of the Biafo glacier and a relatively short stage brought us to Korophon (the big rock) early in the afternoon. Next day we waded through the icy waters of one of the glacier's outflows and our porters spent the night in the rock-caves of Bardumal. On the third day from Askole, as planned, we reached the little hamlet of Paiju, where the Baltoro glacier begins. This is the last place where wood can be obtained; so I had chapattis baked for two days and loaded up the 14 porters thus released with wood. Here the porters demanded the boots to which the contract entitled them. We had brought 150 pairs of new boots along for this purpose, but they proved far too narrow for the feet of the Balti porters. A serious crisis developed, which was solved by our slitting open the uppers of every pair, after which they fitted.

We now moved up the left-hand moraine, as seen from our viewpoint, finally crossing the glacier, whose lower reaches are a colossal expanse of rubble, to reach the camping-site at Liligo, lying on the opposite lateral moraine. On arrival, our doctor found his hands full. The Baltis are accustomed all their lives to going about barefoot and they have a skin on the soles of their feet more than an inch thick and hard as bone; but they are very susceptible to injury above their heels. As a result, every single porter turned up

to exhibit blood- or water-blisters or raw places caused by the unaccustomed wearing of boots. Next day they went barefooted on the ice of the glacier and slung their boots decoratively about their persons.

On May 15th we reached Urdokas (13,311 ft.), where the last grass grows. Every expedition has found this overnight camping-place a veritable flash-point for nervous explosions. We were no exception and here our porters also struck for the first time, demanding the following items not specified in the contract:—

(*a*) A day's rest with pay at Urdokas; (*b*) *Baksheesh*; (*c*) Special porters to carry the chapattis; and (*d*) A boot-allowance of Rs.8 per pair for the Askole porters, who were wearing their own goatskin footwear.

It may be of interest to record our conclusion that previous Karakoram expeditions have made things far worse for their successors by giving in too easily to the unjustified demands of the porters. This is of course a problem of general importance to all Himalayan undertakings.

With the full agreement of our Pakistani liaison officer we withheld both pay and victuals from our porters for a whole day, a step which resulted in putting an end to the strike, 110 porters declaring their readiness to resume the march. Some, who were very poorly equipped to stand the cold, and others who complained of foot-trouble, 68 men in all, had to be sent back. We, therefore, had to leave 68 loads at Urdokas in the care of our Pakistani student friend Hayat Ali Shah and one of the climbers, Hans Willenpart.

We took three days for the journey from Urdokas to Concordia, with splendid views of the Trango Group, the Mustagh Tower, 23,860 ft., and Masherbrum, 25,660 ft. There was still a good deal of winter snow and fresh snow fell daily, slowing the porters down, and on one occasion they covered only half a day's stage. Unfortunately, the further we moved up the glacier, the worse became the weather. By the time we reached Concordia a proper Karakoram blizzard was raging about us, with a gale of great force and biting cold. The porters huddled together like a herd of sheep, raising their hands skywards and, one after another, praying to Allah. But their prayers never lasted more than half a minute before they turned to a whispered '*Inshallah*'—Allah's will be done!—as the men abandoned the very will to live. We drove them forcibly into the tents and under the coverings. The next night was so bitterly cold that on the following morning every single one of them had only one wish—to go down to the comfort and safety of the villages below. Negotiations lasted half a day and we had to be satisfied

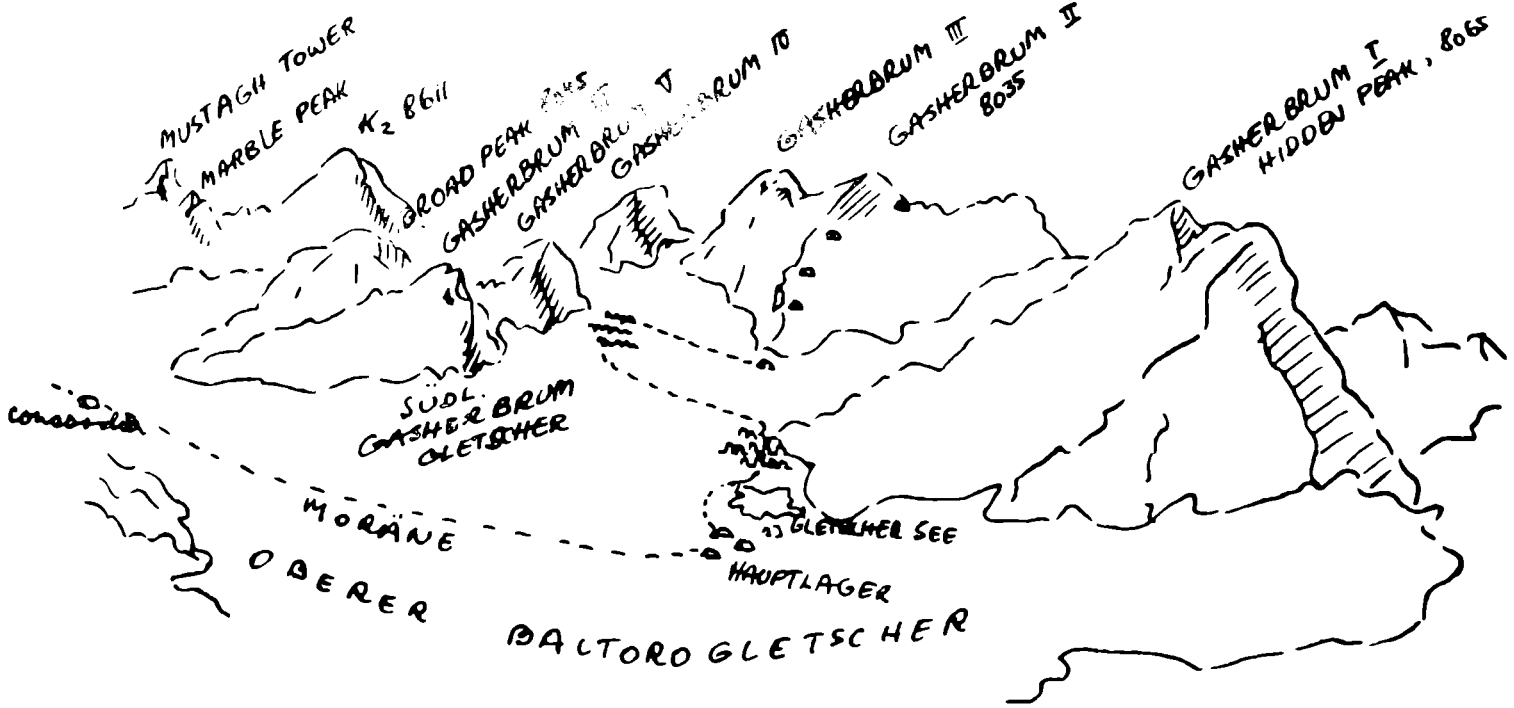
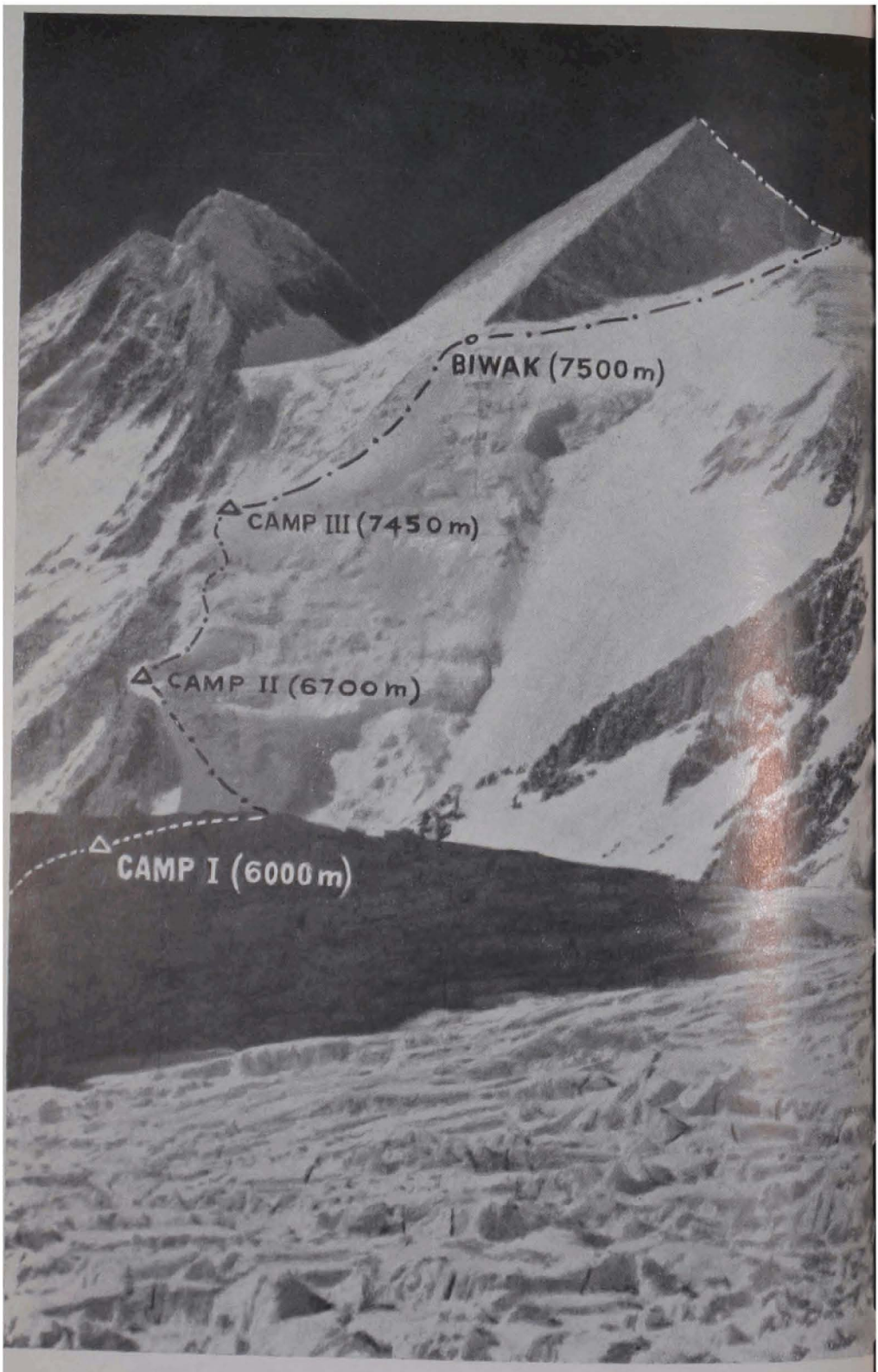


DIAGRAM OF UPPER BALTORO GLACIER SHOWING THE GASHERBRUM GROUP OF PEAKS.



GASHERBRUM II, 26,360 FT., FROM THE SOUTH GASHERBRUM GLACIER, SHOWING ROUTE. ON THE LEFT, GASHERBRUM III, 26,090 FT.

with a settlement by which 68 porters agreed to bring up the loads we had left down at Urdokas.

On May 20th Ratay and Roiss reconnoitred the way forward and brought back confirmation of our forecast that we should need two more days' marches to reach the point on the South Gasherbrum Glacier, where we planned to set up our Base Camp. We set up an intermediate camp half-way up at the foot of Sia Kangri, 24,350 ft., below the spur falling from Gasherbrum VI, about a mile and a half above the mouth of the South Gasherbrum Glacier. The climbers and 11 high-altitude porters spent the next days ferrying loads up to this camp. When at last on May 23rd the porters came up to Concordia with the loads which had been left behind at Urdokas, we provided them with tents and cookers as well as an extra ration of cigarettes. These little attentions paid handsomely, for on the next day these 68 porters carried loads as far as the Intermediate Camp, and our advance party, moving up the left-hand lateral moraine of the South Gasherbrum Glacier, was thus enabled to reach a height of 17,400 ft., where we sited our Base Camp, as early as May 25th.

From the crest of the moraine we enjoyed a magnificent panorama of the South Gasherbrum Glacier and the glorious peaks that contain it. We were faced by the enormous precipices of the Gasherbrum peaks from II to IV, the southern slopes of Gasherbrum I, 26,470 ft. (Conway's 'Hidden Peak'), an unnamed peak of 25,358 ft. which we later christened Austria Peak, Sia Kangri, 24,350 ft., and the Golden Throne, 24,000 ft.[2]

We spent ten days acclimatizing. During this time we completed the establishment and provisioning of our Base Camp, overhauled the cookers, parcelled the equipment out into loads and got them ready for the high-altitude porters. Every other day our doctor tested our blood-pressure and our pulse, examining every member of the expedition and all the porters, at rest and during periods of activity. When the climbers had nothing to do they examined the route to our mountain, Gasherbrum II, through field-glasses from

[2] It would appear unlikely that the early triangulators, the Duke of Abruzzi's surveyors in 1909, Collins in 1911, Grant Peterkin in 1912, and the Duke of Spoleto's photogrammetric survey in 1929, missed a peak here of over 25,000 ft. It is believed that 'Austria Peak' is, in fact, the westernmost of the four peaks which comprise the Sia Kangri group. All four peaks, formerly referred to as the 'Queen Mary' group, were climbed by an International Expedition led by Prof. G. O. Dyhrenfurth in 1934. The height accepted for the western peak, which is about 350 ft. lower than the highest of the group, is 24,000 ft. See *Himalayan Journal*, Vol. VII (1935), p. 142, *et seq.* Also Prof. G. O. Dyhrenfurth's 'Himalayan Chronicle, 1956' in *Les Alpes*, first quarterly number for 1957, p. 24, *et seq.*—EDITOR.

the top of the moraine. Conversation centred entirely on the approach to the foot of our mountain, still five miles distant as the crow flies and involving a rise of more than 2,000 ft., with two icefalls to be mastered *en route*. This long approach was our great problem. Our geologist helped the reconnaissance work by estimating the angle of the individual slopes, cliffs and ridges; this technical basis was of great assistance in the choice and planning of our eventual line of approach.

On June 4th Larch and Willenpart broke a trail through the icefall, and on the following day they reconnoitred a line of ascent to the foot of Gasherbrum II which would be perfectly safe for the high-altitude porters. Next day, moving on by the route they had prepared, they traversed below the south-west face of Gasherbrum I, crossing a rocky spur on the way, and reached a point within 200 yards of the ice-wall. There their progress was halted by a labyrinth of crevasses, through which Ratay and Roiss attempted to find a way on June 6th. At the lower levels they followed the same route as Larch and Willenpart; but at about 18,400 ft., where the glacier comes down from Gasherbrum I, they took to a little glacier-trough leading towards Gasherbrum V, 24,016 ft., climbed the second icefall and then swung in a wide curve towards the foot of Gasherbrum II. They had found a perfectly satisfactory route to our objective.

It was our intention that Larch, Reinagl and I, with the high-camp porters, should get the loads up the very next day (June 7th) as far as the rocky spur below Gasherbrum II and establish our main Camp I on the glacier falling from it, at a height of about 20,000 ft. Snowfalls upset our plan; climbing was not even to be thought of.

It was not till the 11th, that it proved possible to carry loads to Camp I. Deep, newly-fallen snow had covered the marker-flags along the route and we had only our companions' description to rely on. We gained height very slowly, often sinking in to our thighs. Our Balti porters, with their 44 lb. loads, followed uncomplaining in our tracks, but we could see plainly what bodily exertions the route was exacting from them. We had only covered half the distance by noon and the porters clamoured for an intermediate camp; two of them lay flat on the ground with their loads, utterly exhausted. We shared our rations and our fruit-juice with the Baltis and promised them a day off tomorrow if they would carry to the foot of the mountain. This promise had a miraculous effect; they summoned their last reserves of strength and tramped doggedly on. We reached our chosen camp-site at

about half past two and they were at last able to dump our baggage. It was not only the mass of fresh snow which had made things so tough for them, and for us, but the intensive radiation of the sun. The temperature was frequently above 120° Fahrenheit, we were utterly dehydrated by the sun, and it was thirst which racked us far more severely than hunger. The old rule holds good in the Karakoram too; climbing is only half as exhausting in the early morning, when the snow is frozen hard and the sun has not yet over-topped the summits, as it is later in the day.

On the 13th, Ratay and Roiss came up to Camp I and Dr. Weiler took the porters back to Base Camp. Two days later Larch and Willenpart followed suit and Dr. Gattinger led the porters down again. On the 17th, our two Pakistani friends took over the supply-line to Camp I and the loads came up daily as planned.

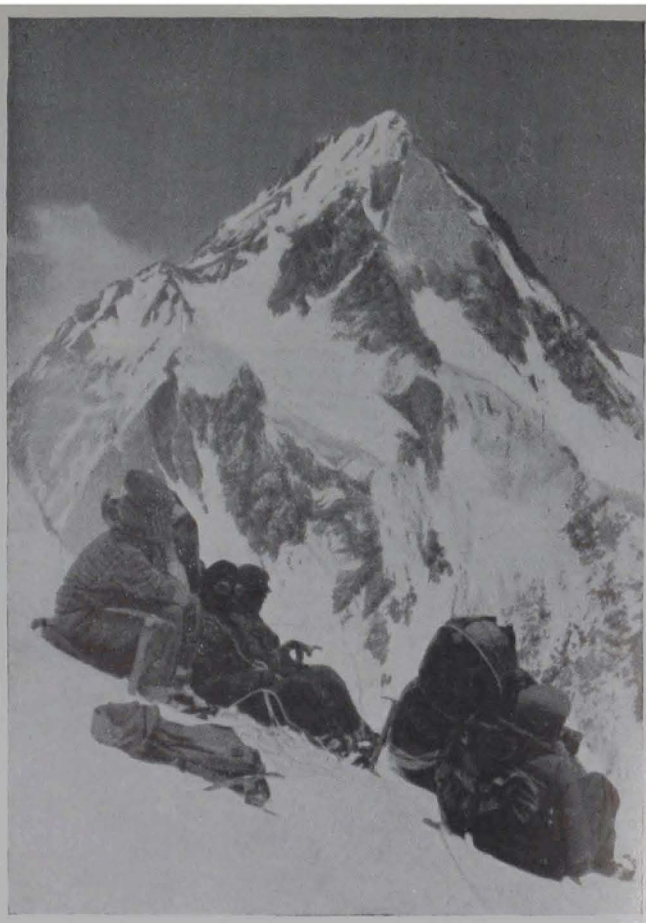
At this stage, a ten-day period of bad weather set in with snow falling incessantly. The only ray of light to cheer us was the arrival of a courier with our mail. We all buried ourselves in our letters, cards and newspapers, and suddenly somebody read out the news that the Japanese had climbed Manaslu, 26,658 ft., while the Swiss had not only succeeded in scaling 27,890-ft. Lhotse but had achieved a second and a third ascent of Everest. And we were still held up at Camp I, at 20,000 ft.! Our spirits reached the nadir when our liaison officer quoted a passage from the *Pakistan Times* to the effect that the monsoon was fully three weeks earlier than usual this year. We, of course, promptly decided that we were already caught by its full impact. The whole assault-team were meanwhile back in Base Camp.

On June 30th it cleared up unexpectedly and Ratay and Roiss immediately went up to Camp I again. Two days later, when Larch, Reinagl and I brought the porters up, our two friends met us with the discouraging news that the camp had been almost wiped out by an avalanche. Almost all the loads, tents, ropes, pitons, karabiners, winches, cables and our precious food lay buried under the debris. We could hardly grasp what we were being told, for everything had been dumped on a level glacier at a point apparently safe from any avalanche menace. Besides, the lower part of the mountain consisted of terrace-formations. It was only the immense weight of newly-fallen snow which had produced this enormous avalanche. Great masses of snow had moved down from about 24,600 ft., covering the terraces as they went and building up an evenly-graded slope; it was this alone which enabled the snow to advance so far across the level glacier.

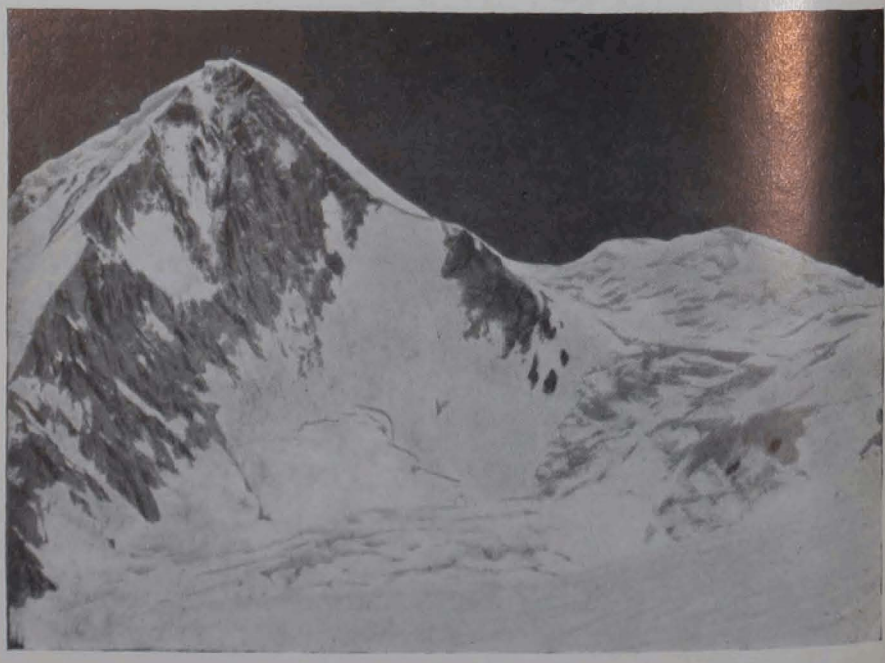
We dug for two whole days to retrieve our buried loads, but to no purpose, for all our trenching and tunnelling; our equipment and supplies were engulfed under a blanket of snow, fifteen to thirty feet deep. This calamitous loss meant a complete change in our plans for the assault. We would have to establish our high camps much more rapidly now, and they could not be nearly so well equipped as we had intended; the preparation of the route, too, would have to be speeded up considerably.

It was July 2nd. Ratay and Roiss immediately set to work making the route over the ice-spur between Camp I, 19,680 ft., and Camp II, 22,000 ft., passable, cutting an ice-staircase and fixing ropes. Camp II, above the ice-spur, was ready for occupation on the 3rd. Next day Larch and Reinagl went up to it, and on the following day they prepared the route over the ice-bulges to a level ridge of névé where, at 23,450 ft., we intended to site Camp III. The programme for July 6th was as follows: Larch, Reinagl, Willenpart and I, with four porters, were to establish Camp III and, on the following day, Camp IV at the base of the summit pyramid. Between Camps II and III there were no more aids for the porters, such as prepared steps, fixed ropes and the like; they were hard put to it on the steep slopes with their 44 lb. loads and they had to be safeguarded with the rope every yard of the way up. When they reached the site we had picked for Camp III they fell headlong in the snow with their loads. We promised them a whole day's rest as a reward for their amazing and self-sacrificing effort. But the slope overhead was considerably steeper than the passage of the ice-spur below and this veritable wall of ice had a foot of powder-snow lying on it. It was clear beyond argument that the porters could not be used above the point we had reached. A proper preparation of the mountain with ropes and all the necessary safeguards would have taken up at least a fortnight of precious time, during which bad weather—perhaps the monsoon itself—could easily overtake us. I had to take two possible courses into consideration in reaching a decision. I could have the slope made safe for porters, in which case there was the possibility that a break in the weather might rob us altogether of the chance of going for the summit; or, I could take the serious responsibility on myself of letting the climbers carry their own loads and make a dash for the top from a high bivouac below the summit pyramid. We talked it over thoroughly and I chose the second alternative. Well aware of the risks involved in that decision, I decided to join the assault party myself. Reinagl, displaying great strength of character, elected to give up his own chance of climbing the

BETWEEN CAMPS II AND III ON GASHERBRUM II.
IN THE BACKGROUND, THE SIA KANGRI GROUP.



GASHERBRUM I, 26,470 FT., SEEN FROM CAMP III ON GASHERBRUM II.



'AUSTRIA' PEAK, FROM S. GASHERBRUM GLACIER.

mountain when he simply remarked: 'I'll see the porters down—good luck with the summit!'

Late in the afternoon of July 6th, as the sun was disappearing behind Gasherbrum IV, Reinagl started down with the porters, while Larch, Willenpart and I climbed laboriously on with the bivouac loads. It was not the safest kind of climbing. The newly-fallen snow went sliding away at every step. We were going unroped because belaying was simply impossible and we did not want to prejudice one another's safety. Larch and Willenpart, who know the North Face of the Matterhorn well, confirm that the angle is about the same. We reached the foot of the summit pyramid at about 8-30 p.m., and made ourselves snug under a rock there at 24,600 ft. Each of us crept into his Dralon sleeping-bag; we also had with us a bivouac-bag which could take all three of us. The night was bitterly cold and none of us slept much. Larch's toes and one of his thumbs froze during the night in spite of the shelter of the bivouac-bag.

It was a great relief to get up when morning came at last. It took ages to get the spirit-stove going with our numbed fingers. We drank hot milk and ate some cereal—our whole sustenance for the day. The continuation of the route—a gently-rising traverse below the south-east wall of Gasherbrum's summit—remains in my memory as a particularly horrid bit of the climb. We literally had to force ourselves forward step by step. We were feeling the full effects of our exertions of the previous day, when we had come up some 2,700 ft. from Camp II. The weight of the heavy rucksacks we had carried up, the cold, sleepless night and, not by any means least, oxygen-starvation were all affecting us seriously. It took us till 9 o'clock to reach a little notch in the East Ridge at about 25,250 ft., which we had all looked upon as the crucial point. We would have liked to sit there for a long time, but the steep névé-slope leading to the summit still lay above us and our eyes continually came back to it; for there were still more than a thousand feet between us and the top. The sun had softened the snow and plodding in the wet, difficult, cloying stuff was even more exhausting than climbing on the hard-frozen névé below. At every other step we had to lean against the slope in exhaustion, then rest, fighting for breath, quite a while before taking the next two strides forward. Then the battle with oneself began all over again, and after another couple of steps we were exhausted again. It needed a tremendous effort of will to make the next movement forward.

The mountain confronted us with a final obstacle in the form of

a rock-buttress. At 1-30 p.m. on July 7th we reached the summit of Gasherbrum II, a plateau of névé crowned by rock-teeth 10 ft. high. We measured our length in the snow with a last gasp of relief. At first nobody said a word; it was some time later that Willenpart declared—'It has been an incredible grind, but this is the best moment in my life.' We could only agree with him. After about ten minutes, during which we recovered somewhat, we shook hands to celebrate our success. I planted my ice-axe, with the Austrian and Pakistani pennants, upright in the snow. This was the third eight-thousander to be successfully climbed by Austrian mountaineers.

We spent an hour on the top in fine weather. Other Himalayan expeditions, with the exception of the French on Makalu, had only had one thought—to get down as quickly as possible, out of the wind and the cold. It was so fine on the summit of Gasherbrum II, that we were able to take off our anoraks and enjoy an unforgettable summit-hour. To the north-west K2 soared above our heads with the mountains of Afghanistan beyond; to the south, towards Kashmir, stood the countless summits of the Karakoram; eastwards lay the innumerable snow-covered mountains of Tibet, with the ranges of Chinese Sinkiang to the north of them. The mountains out there are much lower and the blanket of snow is less heavy. At last we had to say a regretful good-bye to the summit. We left behind us a German and English record of the climb in an empty film-case, added a medallion of the Holy Virgin, wrapped the tin in a large Austrian flag and built a cairn on top of it.

The descent was very much less exhausting, but the weather deteriorated rapidly. A snow-storm caught us on the last part and we did not reach Camp III, 23,450 ft., until half past seven. There we spent the night, before continuing down to Camp II on July 8th. On arrival there, we were greeted by our Balti porters with victory dances to demonstrate their joy at our success in climbing Gasherbrum II. They could not have been more delighted if they had done it themselves. They raised a *crescendo* of 'Zindabad Austrian Expedition! Zindabad Austria! Zindabad Pakistan!—in fact, long live all of us!'

On the 11th I was back at Base Camp. My first action was to send two of our high-camp porters down to Skardu with the news of our success, to be cabled home from that point. I worded the message as follows: 'At 1-30 p.m. on July 7th 1956, three members of the expedition reached the summit of Gasherbrum II, 26,360 ft.' I had intentionally omitted individual names in order to underline

the fact that any successful climb in the Himalaya is achieved only by team-work. It is quite irrelevant whether one climber or another reached the top, or what feats any individual performed on the way; what matters is that everyone had done his best to contribute to the expedition's success, and so earned an equal share in its achievement.

All the high camps were evacuated according to schedule, and by July 14th all climbers and porters were safely back at Base Camp.

Soon after our return to Base, Ratay and Roiss told me of their plan to climb the unnamed 25,358-ft. peak which shuts off the Upper Baltoro glacier and looks very much like our Gross Glockner at home.[3] I liked the idea very much, but I had to remind them that we had very limited provisions and in particular no more high-altitude rations. 'We'd like to have a shot just the same', was their reply.

Ratay and Roiss had not had the luck to be in the Gasherbrum summit party; both felt extremely fit and were very keen to see their project through. The 15th was spent on preparations for the venture, assembling equipment and provisions, weighing out the loads and distributing them. At 4-30 on the morning of the 16th they set out with Dr. Weiler and eight porters. They made swift progress towards their mountain across the dry and level Baltoro, covering the five miles to its foot in about $3\frac{1}{2}$ hrs. Thence, they found a route through icefalls and crevasse-systems to the prominent saddle which separates the Upper Baltoro glacier from the Siachen, and also joins Sia Kangri to Hidden Peak.[4] It was a marvellous day and we were able to watch every stage of the climb through our glasses. Our friends established their Camp I about 150 ft. above the saddle in the shelter of a rock-crest, at about 21,300 ft. Four of the porters remained with them in the camp, the other four came down to Base Camp unaccompanied. July 17th was a day of bad weather, confining the climbers to their tents, and we were fully aware of how depressed they must be feeling; for if the break in the weather lasted two days their rations would run out and they would have to come back empty-handed. Moreover, soon after setting up camp, the climbers had pushed on some way, cutting steps up to the feature they called the White Backbone; all that work would then have been in vain.

[3] See footnote 2 above.

[4] The prominent saddle referred to is probably the well-known 'Conway' saddle, c. 20,000 ft., first visited by Conway in 1892, and by later expeditions, particularly those of 1929 and 1934. This saddle actually lies between the Upper Baltoro and the Kondus glaciers. See *H.J.*, Vol. VII, p. 144.—EDITOR.

Luckily July 18th turned out fine. At about 6-30 a.m. the climbers left camp; two and a half hours later they had gained the corniced ridge and were traversing the mountain's south face. The summit ice-slope soared fully 3,000 ft. high overhead. Tired as they were, the heavily-laden porters managed to climb another 1,000 ft. up the slope, and there, under an icy protuberance at about 23,300 ft., Camp II was established. During the night the weather deteriorated again and a driving blizzard set in. On the morning of the 19th, the storm abated a little and the climbers went on alone. The weather grew worse again, but the three men ignored the appalling conditions and battled their way up the ice-slope through a gale and driving snow. The last three hundred feet proved to be ice-coated rock sticking out of the snow. A final ice-gully brought them to the top, and at 5-30 p.m. the climbers were shaking hands on the summit, in a bitterly cold gale. They stayed long enough to hoist the Austrian and Pakistani pennants and to leave a record of the ascent of what was later to receive the name of Austria Peak; then they started down again. Darkness overtook them all too soon, and at about 9 o'clock they contemplated digging a hole in the snow for shelter overnight. As they were wet through and there was a change of clothes at Camp II, they decided to push on down through the darkness. Two hours later they reached the tent, utterly worn out, but they had been spared a night in the open.

On July 20th, the weather being fine again, the porters went all the way up to Camp II, as arranged, except the last 300 ft., which they could not manage without a safeguarding rope; so the climbers sent the loads sliding down to them over the snow slopes. Early in the afternoon they were all back at Camp I, where they spent the night before returning to Base Camp at about noon next day. There we at once began our final packing operations, for it could only be a day or two before the 60 Balti porters we had ordered for the transport of our baggage on the return journey put in an appearance.

The expedition brought back scientific as well as mountaineering prizes. Dr. T. E. Gattinger's work has resulted in the full geological coverage of the Upper Baltoro and South Gasherbrum glaciers. He was also able to relate these geological data with those of adjacent areas, and so broaden the existing knowledge of the structure of the Karakoram Range. A separate report on his activities will be published in due course.

The glaciological-geological research work embraces a study of

the stages and measurements of earlier and more recent periods of glaciation.

Our doctor, Dr. George Weiler, carried out physiological research relating to high altitudes, among other studies. He also made observations of the blood in order to determine variations of the calcium content at high altitudes. Physiological tests showed that even at great heights, as for example Camp III at 23,450 ft., where he conducted his experiments shortly after the ascent to the summit of Gasherbrum II, the power of mental co-ordination and concentration was not impaired, but that the power of self-expression seemed to diminish.

THE MUZTAGH TOWER

By GUIDO MAGNONE

We acknowledge our thanks to the Editors of 'LA MONTAGNE ET ALPINISME' *for permitting us to use this article. The translation is by A. K. Rawlinson.*
—EDITOR.

AT the north-west end of the Himalayan chain lie the Karakoram mountains; with the Hindu Kush and the Pamirs they form the geological heart of Asia. It is a savage, outcast region which has always stood as a formidable rampart between men. In the very heart of the Karakoram, the basin of the Baltoro glacier, some forty miles long, has no rival. Nowhere else is there such an assembly of giant peaks. Around K2, 28,250 ft., the highest, are eight peaks over 25,000 ft. Yet it is not the highest mountains that are destined to make this region a Mecca for mountaineers of the whole world, but rather the formidable bristle of spikes and towers which stand at the entrance of the glacier.

To anyone who has had the opportunity to admire the wonderful photograph taken in 1909 by Vittorio Sella, the Muztagh Tower must have appeared the symbol of inaccessibility. Its 23,800 ft. of vertical walls presented climbing problems of a different order of severity from the 'eight-thousanders'. Yet while the conquest of the fourteen highest summits of the earth is still not completed, the Muztagh Tower has been conquered. In the month of July 1956, a British expedition and a French expedition saw their efforts crowned with success and eight men reached from two totally different sides of the mountain the summit of this peak which appeared impregnable.

21 May, 1956. Rawalpindi. 4 a.m. The night has been stifling, a May night in North Pakistan, where the thermometer stays between 110° F. and 120° F. With the first glimmerings of the dawn a thin orange glow outlines the mountains of Kashmir and is the harbinger of a new day of torrid heat. Damp with sweat, four mountaineers, a doctor and a Pakistani officer are waiting patiently on Rawalpindi airfield for the combination of good weather, airline company orders and the goodwill of the gods to open the gates of the Himalaya, or rather to allow the aircraft to take off for Skardu with the French Karakoram Expedition and its three tons of equipment.

We are a small but solid party: André Contamine, instructor at the Ecole Nationale de Ski et d'Alpinisme, Pastor Paul Keller, Robert

Paragot and myself—we form the assault parties. Dr. François Florence will in principle be watching over our health, but I fully count on him to play an active part at decisive moments. The Pakistani Government have attached to us Captain Ali Usman, an officer of the 18th Punjab Regiment, who is to act as our interpreter with the local authorities and smooth our way through the formalities, of which there is no lack.

In the fortnight since we arrived at Karachi we have had to make a bewildering number of applications: transport, customs, authorizations, such a lot of problems the solution of which requires rubber stamps and dozens of signatures going on until the last square centimetre of paper is completely black.

At last even in Asia all is settled, our patience is rewarded, and the Dakota takes off uneventfully, rapidly gaining height in the direction of the mountains. Soon the machine is zigzagging in a labyrinth of valleys between peaks that shut in the horizon on all sides. The Indus winds its way like a snake at the bottom of an abyss, while above are unfolding the formidable ridges of Nanga Parbat. The aircraft hops over the cols, grazes gigantic precipices, and dives abruptly between two walls. In an enormous cloud of dust we touch down on the airfield at Skardu, less than an hour and forty minutes after our departure.

24 May. Skardu. We are installed in the guest-house put at our disposal by the Political Agent. We have been so absorbed in the organization of our caravan that we have scarcely seen Skardu. Anyway, there is nothing of interest in this little township, capital of Baltistan, at the junction of the Shigar and the Indus. Save for the freshness of its orchards, it has nothing to offer the visitor; a rudimentary hospital, the bazaar, a few bungalows scattered over the fields, are all there is to it.

In four days we have chosen and engaged 120 porters, divided the loads, bought provisions, arranged postal relays. Each man has a specific job. Keller's is the most laborious; he is responsible for porterage. The local people are impressed by his height (6 ft. 2 in.) and his strength; and his way of dealing out loads with one hand is so persuasive that it silences all objection on the part of the coolies. I have entrusted the commissariat to Contamine, a thankless labour that often makes the man in charge the focus of general discontent, the tastes of the sahib and the enormous appetite of the Hunza being very difficult to satisfy. The bizarre disposition of the rations further complicates his task: it is a lucky dip which causes him much perplexity. On some days 20 lb. of sugar and liver salts are all he has to feed us on; on the next day

nothing but milk powder and canned fish. His frequent contacts with the cooks have at least one interesting result: each day they are improving his knowledge of Urdu, though not, unfortunately, the cooking of the macaroni.

Paragot was at first a little overwhelmed by the amount of gear and equipment to be distributed, but he quickly got organized and now everything is in perfect order. His one black spot is Yousef, his Hunza, who is strong as an ox but of a disarmingly rustic simplicity of mind; to open and close boxes requires the full mobilization of his intellectual faculties; at moments he is so clumsy that Robert is exasperated and snatching the pincers and hammer does the work himself.

Ever since our arrival Florence has been pestered by numerous visitors more or less official. They come to ask for his advice and medicaments for illnesses past, present and future, for themselves and their relations, not excluding second cousins twice removed.

For my own part I am content to supervise, being completely absorbed by unending calculations. I must decide how much food to buy at Askole, how many supplementary porters to engage to carry the food for the expedition porters, and how many other porters to carry food for the men carrying food for the supplementary porters, and so on. What bad luck that there is no one from the Polytechnic on this expedition!

27 May. Dasso. We have crossed the Indus and left Skardu. Our boat slid easily across water like a metal mirror. The current was strong, but so uniform that the surface seemed solid. Then up the whole valley of the Shigar in three days. Forty-five miles of desert, pebbles and gravel, happily broken by villages. Their oasis freshness soothes our sunstroke and rests eyes blinking all day in the scorched air. Each evening we arrive at the staging point more tired by the heat than by the length of the way.

We arrived at Dasso by zak. Zaks are rafts, eight feet by twelve feet, made of a network of branches mounted on about forty goatskin bladders. These contraptions are difficult to manoeuvre, and fragile, but they are practically unsinkable and well suited to torrential streams. The crossing, directed by boatmen who had great difficulty in co-ordinating their efforts, was agitated throughout, and we disembarked completely soaked.

31 May. Askole. In theory we are taking a rest-day here, but in practice it is a heavy day of work and re-organization. The porters have left us; we have to replace them; fifty-seven new ones have had to be engaged to carry the two tons of flour we are buying in the village. The hiring took place amid shouting, dust

and a surging crowd. The policeman on duty had plenty to do, generously distributing insults and truncheon blows to maintain a semblance of order during the operation.

For hours Florence has been applying dressings, giving injections, opening abcesses, distributing poultices and pills to a population wretched both in physique and in circumstances to a degree that I have never seen: goitres, tuberculosis and degeneracy are to be seen in almost all the inhabitants not only of Askole but of all the valley of Braldo. The village of Chakpo, two days' march up the valley, seemed to be inhabited only by idiots. Inbreeding, iodine deficiency, lack of sunlight in winter in these deeply-enclosed valleys cut off by snow from the rest of the world, these are the chief reasons for this appalling wretchedness.

2 June. Bagdomal. An eventful day, which was nearly disastrous for the expedition. In the morning the crossing of the Dumordo torrent was difficult for our porters. The first arrived on the bank at nine o'clock, when the water was still low, allowing an easy passage, but soon, with the heat of the day, the current became so violent that it was necessary to stretch a cable from one bank to the other to secure our coolies. In spite of this precaution several were carried away and rescued *in extremis*. Their loads drifted away, but fortunately it was possible to fish them out again several hundred yards away. In the end we only lost one food box and the surgical equipment was soaked.

But this evening we came near to catastrophe. The whole camp narrowly escaped being carried away by a torrent of mud. The tents had scarcely been set up when an avalanche broke away in a deep canyon, 5,000 ft. above our heads. In a few moments a wave of semi-liquid muddy substance, advancing twenty yards a second, spread throughout the camp, creating panic. Seizing everything we could lay hands on, we rushed pell-mell to safety on a nearby bank. By a miracle we were spared. In the future we shall be on our guard against this phenomenon, which is frequent at the end of the day in this part of the Himalaya where erosion is on a gigantic scale, for we must often cross stretches of ground very exposed to it. On our return we were unable to find our camp-site, which had been buried under several yards of earth.

5 June. Urdukas. For two days we have been making our way up the Baltoro. From morning to night to go up and down moraines like slag-heaps in the Black Country is enough to sicken you of big Himalayan glaciers for the rest of your life. But what a wonderful sight all around us! A veritable forest of peaks and towers encircles the Baltoro. I do not think that anywhere else is there in

so small an area such an assembly of mountains so high and so fine.

But we have a great anxiety: there is no longer any doubt that the British expedition led by John Hartog is aiming for the Muztagh Tower. Including McNaught-Davis, Joe Brown and Dr. Patey, it is one of the best parties of climbers that could be put in the field. The British have been established on the Muztagh Glacier for a fortnight and are attacking by the Chagaran Glacier and the north-west ridge. They are already high on the mountain.

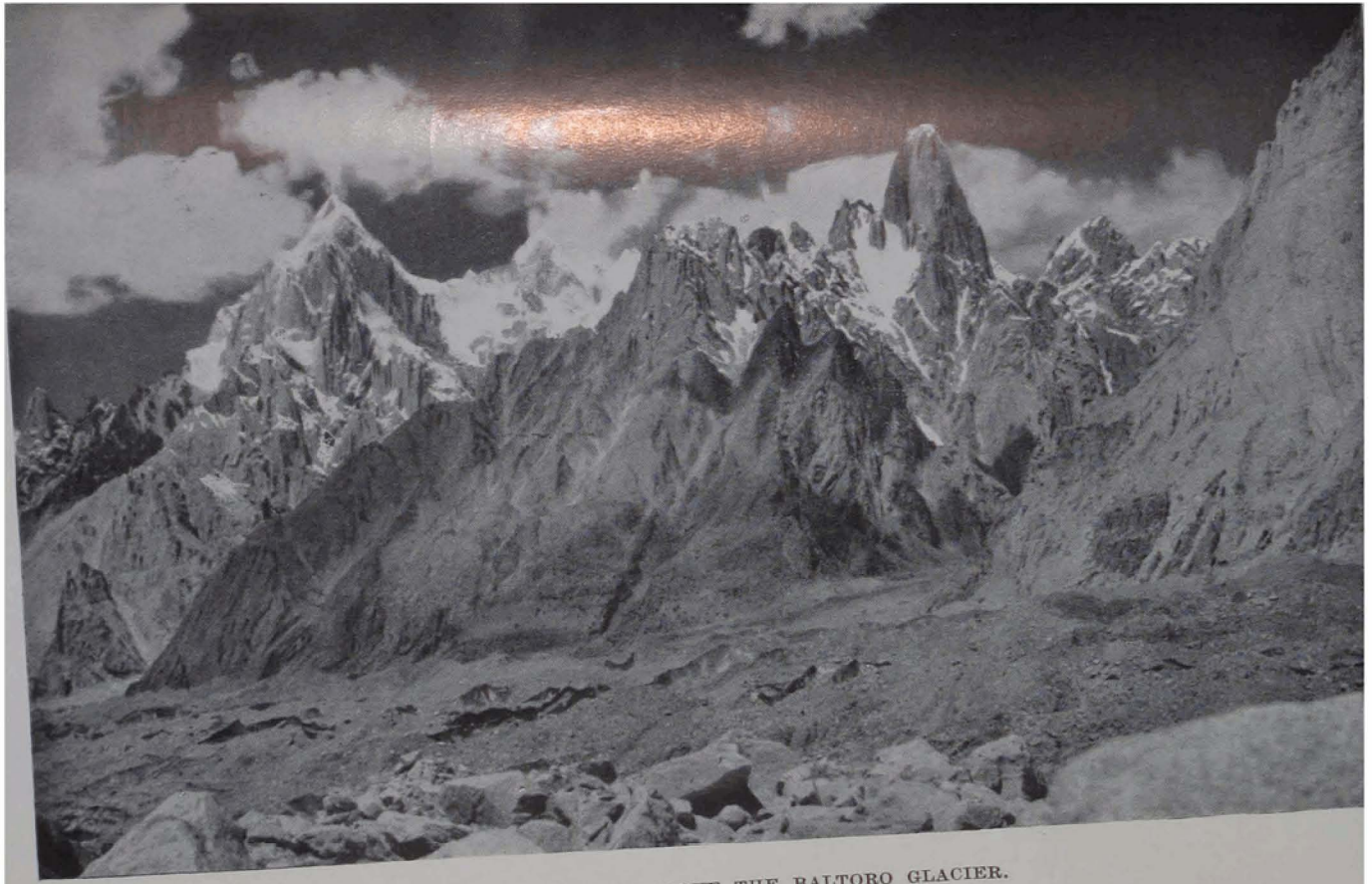
I review the delicate points of the situation. In the first place, there can be no question of taking the British route, still less of impeding them. Secondly, the start that they have, suggests that they will anyhow reach the summit first. Thirdly, our porters have no longer enough food to go to the far end of the Baltoro. Can we change our objective?

The decision is taken. Since we are here to examine difficult problems, let us go and have a look at the other faces of the Tower, and then settle our goal. Some information received at Skardu and Professor Desio's map suggest a possible route up the north ridge and another, more risky, on the south-east side.

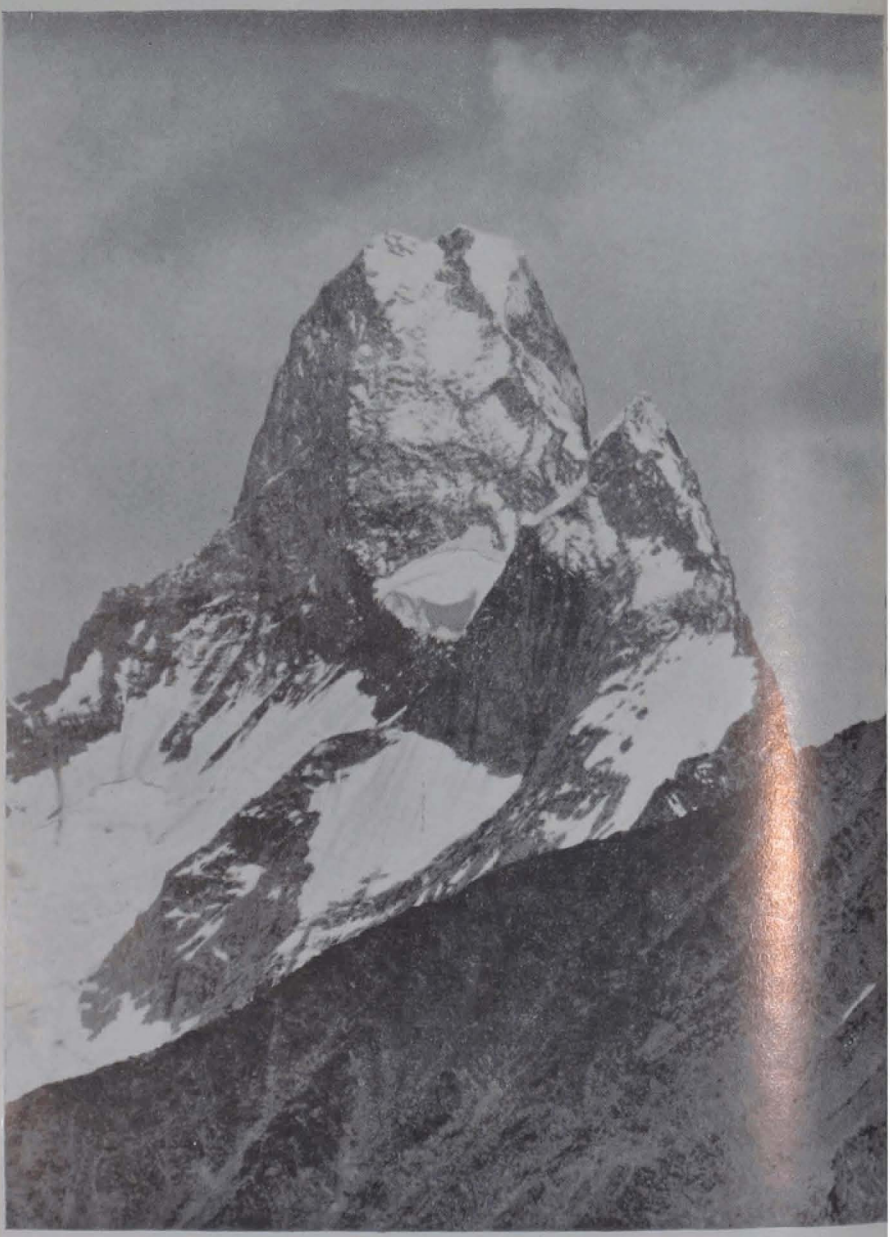
12 June. Base Camp. Six days for two normal stages. I should never have believed that we should have such trouble to get here. The bad weather started it all. Misled by the mist we did not find the Younghusband Glacier immediately. To aggravate things, icy rain, soon turning to snow, provoked most of our coolies to desert us. At least two hours from our future Base Camp we only had about twenty porters left. We had to pay them an impossible wage. How can we blame them? Their poor physique is sorely tried by the cold and the snow.

We have pitched our camp a few hundred yards from the foot of the south-east ridge of the Tower, at the confluence of the east and west branches of the glacier, in a strategic position which enables us to encircle the mountain. But we had to do a considerable amount of levelling work in order to set up the tents on the central moraine. Tomorrow the reconnaissances will begin.

14 June. Base Camp. A very bad day, at the end of three days of effort. Tonight the party's morale has rather lost its dash, not so much because of lost time as of vanished hopes. To reach the summit by the north ridge is suicide, if not impossible. This afternoon Paul and I reached the ridge at 18,500 ft., at its lowest point between the Tower and Monte Seste. We could not have found anything more terrifying. In practice the ridge does not exist; there is just a vague shoulder that soon emerges into an appalling



GRANITE SPIRES ABOVE THE BALTORO GLACIER.



THE MUZTAGH TOWER, 23,860 FT. THE SOUTH-EAST RIDGE RUNS DOWN DIAGONALLY FROM THE SUMMIT TOWARDS THE CENTRE OF THE PICTURE.

face, very steep, bombarded by ice avalanches throughout its 4,500 ft. of height. We have only the south side left, and it is not encouraging.

17 June. Base Camp. Yesterday, Conta, Robert and Amin Ullah, our best Hunza, left at dawn to try to find a way through the three-thousand-foot icefall which forms the west branch of the glacier. They returned at three o'clock in the afternoon, scorched by the sun and fagged out, but with information that allows us some new hope. From the upper plateau of the glacier they could clearly trace a route through the enormous wall of ice that cuts across the whole of the south face of the Tower. This is the most important point, but we still have to get our convoys through the icefall, and going to and fro for days amongst these tottering edifices involves great risks. But if we go through before the main heat of the day, it is possible to make a way by the avalanche-gullies on the left bank. Only the bottom part cannot be avoided.

Today Paul and I have succeeded in rigging a thousand feet of cable at the beginning of the lower séracs. We placed the winch-head on a rock promontory overlooking the glacier. Tomorrow we shall begin winching the first loads and I am somewhat anxious to know how it will work.

27 June. Base Camp. It has been snowing for ten days. Every morning I am scarcely awake when I cock my ear and detect at once the slight but ceaseless rustle of snow falling on the tent fabric. As the days roll by, our chances shrink like untanned leather. This makes it fifteen days since we arrived here, and Camp I is not yet established. Our main occupations are eating, sleeping and listening to the avalanches which sometimes thunder for whole minutes without interruption. Our only diversions are bridge and chess, and we should soon have tired of these without the wireless sets to distract us; the distraction is not, as you might think, listening to these but trying to manufacture the batteries needed to make them function. By what mystery did these batteries, ordered in Paris, never reach Pakistan?

On the 25th, Paul and I took advantage of this period of inaction to pay a visit to the British expedition. At Urdukas I had written to John Hartog to bring him up to date on our plans. His reply reached me on the 24th; as I expected, he claimed priority of authorization. It was quite clear that we had reached a stage when it was impossible to alter this position. It was best to have it out by word of mouth.

The reserve of our first contact did not last long over the traditional tea. The conversation soon took a friendly turn. Could one

speak of rivalry? They had every chance of getting to the top before us; our Base Camps were a day and a half's march apart, and our routes totally different. Unless on the summit, we should not set foot on a single one of their tracks. We parted without bitterness, each party wishing the other good luck.

30 June. 5 a.m. Base Camp. During our absence, Conta and Robert have opened and maintained the track to the foot of the séracs. Every day the Hunzas have carried loads to the start of the *télé*—usually cross at going out in such weather. At last, just as we despaired of it, good weather reappeared. Two days ago the work began, and almost all the high-altitude loads are above the winch. This morning nearly everyone is leaving Base Camp. Only Florence and the Balti porters will be left to watch over the camp and maintain contact with Ali, our liaison officer, installed at Ibex Camp on the Baltoro. What torment it must be for this unrepentant sportsman to be without a gun in this place swarming with game, bears, leopards, ibex and wolves; their tracks come right up to the camp, but he has to be content to assault his prey with voice and gesture.

I have laid down a plan which should gain us some time. Today all of us, both sahibs and Hunzas, will go straight up to the upper plateau of the glacier. While the sahibs are setting up Camp II, the Hunzas will go down to sleep at Camp I on the intermediate plateau. In the days following they will shuttle to and fro between the winch and our camp, while we are preparing the way on the spur leading towards the future Camp III. Florence, down below, will keep an eye on the final loads, then follow to bring up the rear.

2 July. Camp II. Joy reigns in the camp tonight. Despite the length and danger of the route between the winch and us, the loads have arrived and Florence has rejoined us. We have found a site for Camp III just above the spur overlooking Camp II.

We have already fixed 1,300 ft. of rope on this face, but I doubt if men with loads could regularly use this route, which is as difficult as the north face of the Courtes. Perhaps we shall have to take the left side of the rib, which is exposed to ice avalanches almost the whole way? Tomorrow Keller, Conta, Paragot and I will stay at Camp III to try to force the great barrier of séracs above.

5 July. Camp III (19,500 ft.). We have been established on our rib for three days now, just enough time to set up the camp and equip the route up the slope and the gully of the great barrier. Above a vertical wall, a 600-ft. band of séracs bars the way right across the mountain and overlooks us. One single point of weakness

THE SOUTH-EAST SIDE OF THE MUZTAGH TOWER, SHOWING ROUTE.

on the right may permit us to set foot on the top of the icecliff. If we can reach that point, the most speculative section of the ascent will have been climbed.

Very early tomorrow morning we shall go up with Florence and our two best Hunzas, Amin Ullah and Gueri Khan. We shall pull ourselves up the 1,000 ft. of fixed ropes that we have rigged on the slope these last two days. Yesterday evening Paul and Robert finished fixing ropes up the extremely steep gully in which it finishes.

6 July. Midday. Florence and the Hunzas have just left us. We are on the plateau. The implacable sun blazes down on us overwhelmingly from a dark sky. With slow movements we are stamping down deep, waterlogged snow to make a place for the tent. Heat and altitude are making our heads sing a little. The last three thousand feet of the Tower are before us, of a steepness to pour cold water on our optimistic ideas: the face direct had appeared to me an obvious way, but at its foot I must confess that another solution is preferable. In fact the only remaining way is the south-east ridge, which splits the face vertically; but it is still necessary to get on to it.

8 July. Camp IV (20,500 ft.). Yesterday Robert suddenly saw two minute black dots outlined against the sky. Two men were just beside this coveted goal of ours; the British expedition was arriving at the top.[1]

We are meeting such difficulties that we have only just reached the ridge today. Two days to do 800 feet. Yesterday two pitches above the bergschrund required hours of effort. Today it was only after six hours of unremitting labour on an almost vertical wall, six hours of cramponning at the limit of balance, of iced slabs surmounted with pitons, of violent arm-pulls that leave you exhausted, that we emerged in a notch of the ridge. Certainly one of the hardest bits of climbing that has been done in the Himalaya at this altitude.

At midday, the morning sun disappeared and all parts of the sky clouded up. On the ridge one deep gap succeeded another without intermission; they so slowed our advance that, when at 4 p.m. we turned back, we had not gone more than a hundred yards horizontally. It began to snow and we made a gloomy retreat to

[1] The west summit was reached by Ian McNaught-Davis and Joe Brown on 7th July. The following day, John Hartog and Tom Patey, using their tracks to the W. summit, descended to a Col, and after a stretch of Grade V climbing, reached the east summit which Hartog has described as being higher by about ten feet.—EDITOR.

Camp IV. We have put out as fixed ropes all the ropes we have left, climbing ropes included.

14 July. 3-30 a.m. For two days we have been shut up in the tent. Yesterday the sky cleared and we feel we must try our luck without delay.

7-15 a.m. The weather is very good. We reached the notch quickly, thanks to the fixed ropes. But we had scarcely passed the end of our tracks when we began to sink in to the middle of our thighs. The battle is on, and though we do not know it, we shall be at it for two days. Vertical towers bar our way. Sometimes our only choice is between steep icy slopes on the left and cornices of rotten snow overhanging the Younghusband Glacier on the right.

4 p.m. We have reached the foot of the third great tower, the last. Beyond it, the summit appears within close reach. This is just an illusion, for it will take hours to climb the tower: we are not yet above 22,500 ft. Our progress is so slow that it comes home to me that we shall find ourselves on the final slope at nightfall. On the rocks it is still nice and warm; we must choose a bivouac place while we have the chance. After a long search we can only find two narrow places to sit down, where we shall fix pitons, and each of us has to work for quite a time to arrange a little comfort. If the place is precarious, the view is unique, for around us is a fantastic semi-circle. From K2 to Masherbrum, with Broad Peak, the Gasherbrum peaks and Hidden Peak between, the mountains of the Karakoram roll like waves to the horizon.

Soon night begins, fine but very cold. I wonder how we are going to stand it. We are at 22,900 ft., we have had nothing to drink for a long time, and it is with difficulty that we have managed to swallow a few slices of tinned fruit. The interminable wait begins, the fatigue of the day weighs on us, and every instant of drowsiness is broken by the whistling torment of the wind. We shiver with cold, at first by fits and starts, soon continuously, all the time until morning.

Dawn rises on 12th July after one of the most difficult bivouacs we have ever had. Long streamers are invading the sky. We realize that we must move quickly.

We get going at 5-30; our movements are clumsy; we are numb from head to foot and must be careful. Robert launches away in the lead to surmount the final pitches of the great tower. Soon the first battles set our blood circulating vigorously.

Now we continue up slopes that appeared straightforward. But we only make progress with difficulty, stamping steps unceasingly in deep loose snow. The whole slope sounds hollow, and none of us

is secure, for there is no single solid belay point for the whole length of the party. Making the track is extremely strenuous; in some places it is a veritable trench that the man in front has to open. Each man takes his turn and does thirty or forty steps, and then without a word hands over to someone else.

At midday we are below the summit peak, where it steepens abruptly. Conta and Robert try to get up by the rocks, Paul and I prefer to carry on straight up. The snow is so deep that a few yards from the summit ridge, Paul gets stuck on the slope, buried higher than his waist, and has to drive in his axe and his arms up to the shoulders to hoist himself up on to the ridge. With difficulty we all get there and pull ourselves up. Hold by hold, step by step, we advance on a tight rope, axes planted up to the head.

At last I am touching the summit. It is 1 p.m. The actual top is so sharp and unstable that it is impossible to stand up on it, and to make our conquest still more ephemeral we can scarcely pause a few moments on this summit for which we have journeyed for weeks and which has cost us so much effort. We must go down without delay. It has been snowing for half an hour and already the mountain shapes are disappearing in a whitish blanket that fills the whole sky.

In spite of our haste, we have to fix numerous rappels; the descent is slow and night is overtaking us. We slip and slide in a greyness in which we cannot distinguish snow from empty air. It is completely dark by the time that the first of us, Contamine, reaches the notch. It remains to make one more rappel, of 150 ft., before we find the fixed ropes.

Two hours of interminable manoeuvres, groping about in squalls of thickly falling snow, release us at last at the foot of the bergschrund, where we find Florence, who is moved to tears. In a mad slide amid cataracts of fresh snow we reach at last the shelter of Camp IV. Of all ambitions there remain but the simplest desires, drink, eat, sleep.

19 July. Ibex Camp. We are starting the return march. Yesterday we assembled our baggage and evacuated Base Camp. When we arrived on the Baltoro we were surprised to find Dr. Patey waiting for us. He came to ask Florence's help in looking after Hartog, whose feet are severely frost-bitten. This evening we shall see again the flowers of Urdukas, where the members of the British expedition have been resting for several days.

20 July. Urdukas. We are taking Hartog out. Florence is of the opinion that he must be got down as quickly as possible to prevent

infection. Dr. Patey will come with us also. Thus they will both be able to watch over the sick man as far as the hospital at Skardu.

As we make our way back down the interminable Baltoro moraines, I think of the simple, warm welcome with which the British climbers greeted us yesterday. A few hours after our arrival, we were sat down before a banquet of Pantagruel; all rivalry disappeared, we celebrated our double success. I am sure that it was our new-born friendship that we celebrated that evening, the friendship of men lost on the edge of the world, joined in brotherhood by the same passion and the same ideal, just as much as we celebrated the beginning of a new conquest, the conquest of the finest and most difficult Himalayan summits.

MACHHAPUCHHARE[1]

By MAJOR C. G. WYLIE

'A WONDERFUL mountain, but of course quite impossible.'

It was 1950 and Jimmy Roberts was showing me a photograph of Machhapuchhare which he had taken from the north during Tilman's expedition to Annapurna IV earlier that year. There was no doubt about the truth of the first part of his remark, but I wondered about the second. Certainly, it looked right out of the normal standard of Himalayan climbing, but I could not help feeling that if one actually rubbed noses with Machhapuchhare, it might not be quite as hard as it looked; and even if the attempt proved abortive, one would clearly have an exciting climb on a superlative mountain.

These thoughts, and the picture of Machhapuchhare, remained with me as the years passed, but no opportunity came to put them to the test. In 1956, however, the wind seemed to be blowing more favourably. Roberts was posted to the Gurkha Depot at Lehra from where on a fine day he could actually see Machhapuchhare; and I, on a staff tour in the U.K., was due to return to Malaya in 1957. If I could return via India and take my leave there, we could attempt Machhapuchhare together. But first it was essential to make sure that an attempt was in fact justified. I put the idea to Roberts and asked if he would do a reconnaissance in 1956.

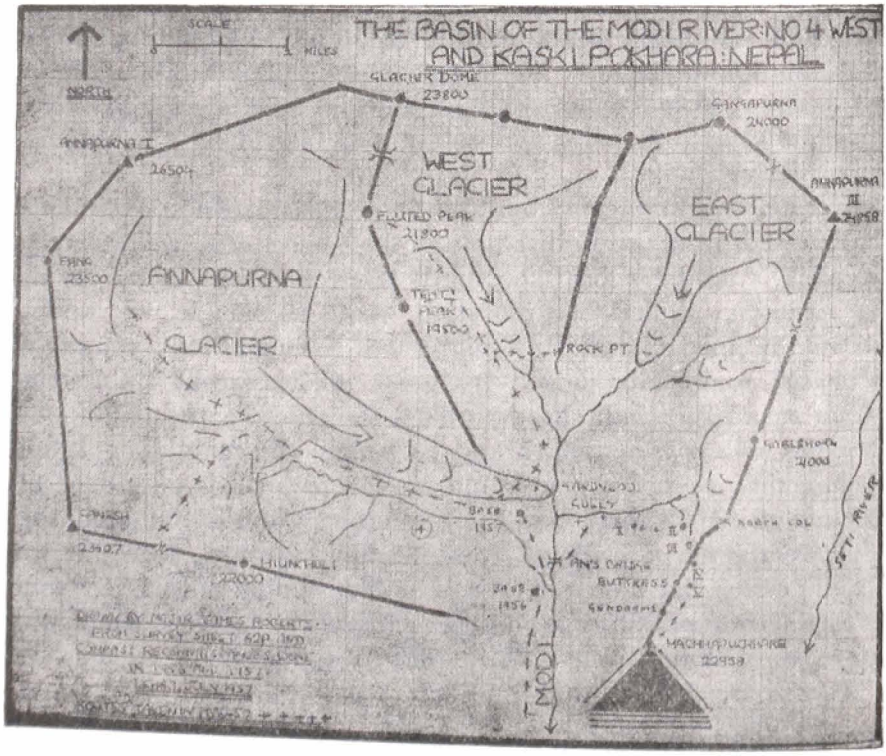
To this he readily agreed, and his leave was spent in penetrating the upper gorge of the Modi Khola to the basin it drains. Although the basin is used by local shepherds to graze their flocks during the monsoon, Roberts' exploration was, so far as we know, the first by an outsider. He found there a magnificent mountain sanctuary, completely ringed by great peaks except where the narrow cut of the Modi sliced through the rim. To the north was the large bulk of Annapurna and its range, the main Himalayan chain, and to the east, south and west fine peaks and ridges of upwards of 19,000 feet. But the mountain which dominated the basin from every viewpoint was Machhapuchhare, towering in the S.E. corner like a sentinel over the Modi gorge entrance. From various points of vantage in the sanctuary Roberts could see one route—and only one—which offered a chance of success. It

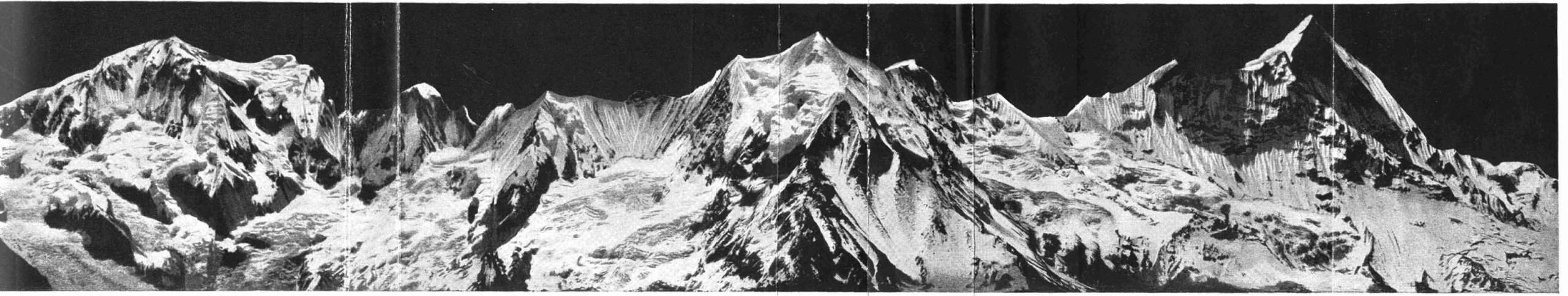
[1] Literally, 'The Fish's Tail' which is just the impression given by the twin summits of the mountain when viewed from the north-east.—ED.

involved climbing 7,000 ft. from the Modi to the North Col at the foot of the North ridge of Machhapuchhare. This ridge would then have to be climbed for some way—a mile or more—until one could drop down on the far side (i.e. east or Seti Khola side) to gain the snowfield visible in Roberts' photo from Annapurna. This would give access to the actual peak which would have to be climbed up its north-east face direct. It was a steep, long and difficult route and it was clear that we would need the strongest party we could muster.

Such was the attraction of Machhapuchhare that the task of enlisting the best climbers was easily accomplished and Wilfrid Noyce, David Cox, and Roger Chorley all managed to persuade their employers to let them come. Roberts and I could not have asked for three more capable climbers or more pleasant companions.

Our preparations throughout the winter months were made easy by the detailed knowledge about such matters as the availability of local supplies, coolies, wood for Base Camp, etc., gleaned by Roberts during his reconnaissance. It was also a great help having Roberts, the leader of the party, in India. Roberts was well placed to deal with the Nepalese and Indian Governments





PANORAMA TAKEN FROM WEST. ANNAPURNA III, 24,858 FT., EXTREME LEFT; 'GABELHORN' CENTRE; MACHHAPUCHHARE EXTREME RIGHT.

Photo Maj. J. O. M. Roberts, 1956.

THE APPROACH WAS UP GLACIER SLOPES SIX O'CLOCK OF SUMMIT, THENCE DIAGONALLY LEFT TO DEPRESSION OF NORTH COL. TO RIGHT OF COL THE FIRST FEATURE IS THE ROCK BUTTRESS.
EVENTUAL ROUTE GAINED CREST LINE BY GOING UP COULOIRS BELOW BUTTRESS, THEN BREAKING OUT LEFT ON TO TOP OF HANGING GLACIER BULGES.

over permits, regulations, customs, and to engage Sherpas and buy supplies and stores which could be obtained more cheaply in India or Nepal than in the U.K. At our end we collected the food and equipment unobtainable in the East, solicited financial support and dealt with the Foreign Office. By the end of January all our kit was aboard the s.s. *Chinkoa*, due in Calcutta on March 20th.

Meanwhile the mountain was already beginning to receive our attentions. Ang Nyima, who had carried to Camp IX on Everest in 1953 and now, off season, acted as Roberts' servant, went up the Modi after the monsoon and built a bridge at the foot of our proposed route. He also bought potatoes and rice—then cheap and plentiful—and stored them in the highest village on our approach route.

At the beginning of April 1957, Roberts flew to Katmandu to report our final plans to the Nepalese Government, pay them the newly instituted royalty—(in our case Rs.1,000)—and collect our Nepalese liaison officer, Dikshyamansing Newar. The rest of us assembled at the Gurkha Depot at Lehra and then flew to Pokhara to join Roberts and Dikshyaman on their return from Katmandu.

Now, for the first time, we were all together, including our Sherpas. Besides Ang Nyima we had Tashi, a veteran Tiger who had carried to the highest camp on Kangchenjunga, his son-in-law, young Ang Tsering, whose first major expedition this was, and Da Temba.

All we lacked was our kit. The s.s. *Chinkoa* was delayed, and had not yet reached Calcutta. We kept getting hopeful forecasts of her arrival—in two days, or three, or before the end of the week. Time passed, and to ease our frustration we spent four days sightseeing in Katmandu. Finally, *Chinkoa* arrived 19 days late in Calcutta; but from there on, thanks to the efforts of many well-briefed helpers along the route, our stores' progress was much swifter. One hurdle remained; in spite of the customs exemption granted by the Nepalese Government, and in spite of assurances from the customs official at Bhairawa, our kit was held there and Roberts and our liaison officer had to fly out to get it cleared. At last the Dakota, heavily laden with our crates, landed at Pokhara, and within a few hours our train of 50 coolies was heading towards Machhapuchhare, just 9 days behind our original schedule.

But it had been a late winter, and we had allowed plenty of time for the climb, so we were not unduly worried by our late start. The march to Base Camp was unhurried and pleasant, at first

through Gurung country and then up the steep-sided, jungle-covered upper gorge of the Modi. On April 24th, we emerged from the gorge to find our Base Camp site—at not much more than 13,000 ft.—still deep in winter snow. The year before Roberts had by this date enjoyed flowers and green grass for some time.

But, although the winter was a late one, we could not count on the monsoon being late as well. We therefore got to grips with Machhapuchhare straight away. During the week we allowed for acclimatization, our strongest party—Noyce, Cox and Chorley—reconnoitred the first part of our proposed route. Descending some 800 ft. from Base Camp, which was on the west bank of the Modi, they crossed that river by Ang Nyima's bridge. From here the route lay up the only breach in the steep lower cliffs of the mountain, a deep and narrow couloir which drained the whole of the west face of Machhapuchhare and which we named 'Gardyloo Gully'. The gully was filled with snow, and they climbed without difficulty up its floor until a break in its southern wall gave access to snow slopes above. Quite a lot of boulders obviously fell into the gully from its steep retaining walls, but one would have been very unlucky indeed to have been at exactly the wrong place at exactly the wrong time. And there were no signs of big avalanches sweeping right down the gully. So the gully was passed as a safe part of our L of C, though it was certainly no place in which to tarry.

Above the gully, the party traversed diagonally to the left over easy slopes and pitched Camp I on top of a small promontory at about 16,000 ft. From here they climbed directly up steeper slopes, but still without much difficulty, to site Camp II at about 18,000 ft. at the foot of the steep slopes of the North ridge. A small cliff gave protection from avalanches.

During the climb to Camp II, Roger Chorley who had been going badly since the day before began to feel worse and decided to return to Base. It was not till the rest of us joined him there some 5 days later that we realized it was not just a case of bad acclimatization. By that time his legs were completely paralysed and his right arm partially so. He had in fact got polio, and we made arrangements for his evacuation with all speed. Da Temba was despatched to send carriers up from Chomrong, the nearest village, and to inform the Pokhara Mission Hospital. Led by a stalwart pensioner of the 1st Gurkhas (Roberts' and my old regiment) a bunch of hardy Gurung youths who had carried for us on the march-in came up once more barefoot through the snow and carried Chorley down in a *doko* (bamboo basket). Roberts

went with him and was not to return for a fortnight. Meanwhile the good Miss Steele, Principal of the Mission Hospital, came up from Pokhara at a speed which belied her years and put to shame all but record-breaking male performances. She met the party on the steep slabs of the Modi gorge, well above Chomrong. From then on Chorley was in safe hands. After 3 hot weeks of quarantine in the Pokhara Hospital he was flown home to England. The report in the Indian Press that he was completely cured was unfortunately far from correct. He is, however, now mobile on crutches, and there is a good chance of ultimate recovery.

His departure was a severe blow to the expedition. His skill and enthusiasm would have stood us in good stead later on. No one was keener than he to climb the mountain, and it must have been specially galling for him to be rendered powerless just when we were starting the climb. No less serious was the absence of our leader Roberts during the main period of the expedition.

Meanwhile Noyce and Cox continued their reconnaissance and acclimatization. From Camp II, after a long climb, they reached the North Col and examined the North ridge which we would have to follow for at least a mile before being able to drop down to the snowfield on the far (Seti Khola) side of the ridge. The Col itself, they found, overhung on the far side and the ridge looked most unpromising although they could not see far as a large gendarme hid all but the first part of it. They returned the next day and climbed the gendarme. The ridge beyond was quite out of the question—particularly for laden Sherpas. It was very narrow, heavily corniced and blocked by a series of gendarmes. We would have to reach the snowfield by crossing the ridge much higher up. This meant making a direct ascent to the ridge from Camp II.

After a few days' rest at Base, Noyce, Cox and I with Tashi, Ang Nyima and Ang Tsering returned to the assault. While based at Camp II our tents were all but buried by an astonishing flow of hail which poured like a torrent down the mountain, and curled round the sides of our protecting cliff on to the camp. Only nonstop shovelling and the timely end of the hailstorm saved the camp from being engulfed. Next morning we moved it to the north, just below a large crevasse which protected it alike from hail and from ice-séracs on the wall above.

It was to this wall that we now turned our attention. While the Sherpas ferried loads up from Base, we reconnoitred the route onwards. The slopes were steep but not too steep, and composed of snow flutings separated by couloirs. Fortunately there was a gap between the ice-bulges and séracs on the wall to the left, and

the rock precipices to the right. The couloirs in this gap were therefore safe from falls from above. During hailstorms, which seemed to occur most days at this time, hailstones used to flow down at an astonishing rate, even obliterating the leader's steps before the second could put his foot in them. But these rivers of hail were a nuisance rather than a danger.

We climbed 1,500 ft. without much difficulty up a steepening couloir and fixed 200 ft. of rope at the top of it. We then traversed to the left and climbed some rather steeper ribs for about 300 ft. fixing ropes again, until we could traverse on to the ice-bulges to the left. A short passage through these led to a good site for Camp III on the top of one of them at about 20,000 ft. We were lucky to have this site, the only possible one between Camp II and Camp IV, some four hours beyond.

From Camp III a couloir similar to that above Camp II, but steeper, led in about 700 ft. to the North ridge. It was an exciting moment when Noyce chipped the final steps on to the ridge. Was the snowfield below on the other side? If so, could we reach it? There was indeed a snowfield, below and to the right, smooth and invitingly flat after the steep slopes we had climbed. But to reach it we must descend a fearsomely sheer gully for some 300 ft. and then traverse about 400 yards to the right across steep snow. Without more ado, Noyce started to descend the gully. The snow —east-facing and therefore exposed to the sun during the morning when it was nearly always fine—was quite rotten; not just soft, but sometimes secure and sometimes without cohesion and sometimes hiding a large cavity under the surface. Quite undismayed, Noyce descended 300 ft., fixing ropes as he went, and cheerfully called to Cox and me to follow. When we had joined Noyce, I had developed a dislike for that gully which grew stronger on each of the subsequent five occasions I ascended or descended it. The traverse to the snowfield was hardly less unpleasant; the snow was variable, both on different parts of the traverse itself and on each different day we used it. We had, however, opened the way to Camp IV and to the snowfield which, we believed, would lead us to the foot of the summit tower itself.

We returned, fixing ropes in the couloir between Camp III and the 'Nick' as we came to know the spot where we crossed the ridge. Having collected the three Sherpas we later re-crossed the Nick and set up Camp IV at about 20,500 ft. in the middle of the snowfield during the usual daily snowstorm. When the weather cleared I emerged from my tent and looked out. I had not yet seen the summit of Machhapuchhare from this side. It was, I

MACHHAPUCHHARE SEEN FROM ANNAPURNA IV IN JUNE 1950. ROCK BUTTRESS EMERGES FROM CLOUD ON RIGHT. CAMP III BELOW THIS; CAMP IV ON SNOWFIELD HIGHER LEFT. NORTH SUMMIT ON RIGHT.

think, the most dramatic mountain view I have ever seen.[2] A sheer solid soaring ice-fluted wedge, breath-takingly beautiful. We all gazed at it for some moments, spellbound. Then we came to earth and tried to trace a route to the top. The North ridge, to the right, we had known all along was out of the question. It was blocked low down by a vast rock overhang. The ridge falling from the summit to the left consisted of a jagged series of enormous ice-séracs. And the heavily-fluted face in between these ridges seemed to be all but vertical. The serious possibility of a practical route hardly crossed my mind. So far as I was concerned this was the end of our attempt. We would record this wonderful sight on film, then return to Base and try another mountain. Cox said, 'I suppose we ought to try and look round the far side of the left-hand ridge first'. But Noyce said simply that he thought the face would go. And so, of course, it proved.

A few yards from Camp IV a low ridge crossed the snowfield hiding the route beyond. To see what the upper snowfield held in store for us we climbed the 25 ft. to the crest of this ridge, which because of its narrowness we called 'The Knife-Edge'. We were horrified to find that the far side of the Knife-Edge fell cleanly away, down couloirs and precipices, to the Seti Khola some 7,000 ft. below. We were in fact completely cut off from the upper snowfield. The only hope was to traverse across the slopes of the North ridge. Noyce and Cox tried this, but found the snow even more rotten than below the Nick and too dangerous to use. While attempting this traverse, however, they saw that a long narrow tongue of the upper snowfield stretched down almost as far as the Knife-Edge and some 300 ft. below it. If this descent was in fact possible, we would require in addition to fixed ropes all the way, a 300-ft. climbing rope with which the leader could be secured from above both during the descent and subsequent ascent on the return journey. We had with us neither enough rope to cope with this, nor enough food to set up a fifth camp which, it was now clear, was required. Dumping what we could at Camp IV, we therefore returned to Base to refurbish and rest.

We had been away from Base a fortnight, and our arrival there coincided with Roberts' return from Pokhara. He brought reassuring news of Chorley, five weeks' accumulation of mail, and large hunks of fresh meat of a luckless *thar*, which had been chased by the irrepressible Chomrong Gurungs who lacked a weapon, up

[2] *See* Frontispiece.

a cliff from which it could find no escape. It leapt for safety, broke its leg in the fall and was dispatched with Roberts' ice-axe. We later measured its horns and found them to equal the record.

Now ably reinforced by Roberts and Da Temba, we returned to the assault laden with rope and rations. The route to our re-sited Camp II lay over the snow slopes below the main wall of the North ridge; we knew that snow-slides debouched from above on to these slopes, particularly on hot days after snowfalls. These snow-slides, however, were small and always stopped on the snow slopes below. We knew therefore that we would come to no harm by putting our route across them. It was nevertheless quite an experience to be involved in one such slide. Noyce, Cox and I were resting and actually talking of avalanches, when Cox looked up and said 'Here's one coming now'. We had about two seconds before it hit us. I plunged my ice-axe in up to the head but the next moment it was plucked out and the waist-high mass of silent-flowing snow tumbled me over and over inside itself. I struggled, but the snow had taken charge of my limbs, and there wasn't very much to be done about it. Soon, however, the slide slowed down and stopped. I had been carried down about 50 ft.; the others, nearer the edge of the slide, not so far and none of us was any the worse.

Roberts and Da Temba, less acclimatized than the rest after their trip to Pokhara, returned after carrying to Camp III, thereby leaving fewer mouths to feed high up. Ang Nyima and Ang Tsering also returned after carrying to Camp IV. They re-crossed the Nick unescorted: a good effort. Noyce, Cox, Tashi and I were established at Camp IV.

The first day was spent roping the route to the upper glacier. We fixed a rope-ladder (made by Tashi at Base Camp) up to Knife-Edge, and then began to fix a handline down the descent on the other side. A minor tragedy occurred here when a 300-ft. climbing rope slipped from Noyce's hands and slid swiftly off down to the Seti. By joining other ropes, however, we were able to improvise the length of climbing rope we required, although neither it nor the fixed rope stretched quite as far as the shelf below. Needless to say, it was Noyce who did all this work, and even he was unenthusiastic about the state of the snow. This was undoubtedly the crux of the climb.

Next morning we rose at 4 a.m. and Noyce and Cox were on the descent from the Knife-Edge before the sun had got to work on it. Nevertheless, the snow was still far from safe. Tashi and I looked after the rope from above until we heard a faint shout from below announcing their arrival on the snow-tongue. By descending

diagonally they had just reached this snow-shelf, but with no rope to spare. Later, they saw from higher up that this shelf was in fact overhanging and would sooner or later fall away, leaving virtually no way of reaching the upper snowfield. They prayed that the shelf would remain intact at least till after their return.

On the upper snowfield at last, Noyce and Cox were now faced with a weary plod with very heavy loads in soft snow with the sun increasing hourly in strength. There were two large crevasses, requiring big detours, one to the left and the other to the right, but both fortunately bridged, albeit somewhat precariously. Glacier lassitude sapped their strength and they eventually had to camp just below the Col on the North ridge at the foot of the main peak at about 21,000 ft. This left them 2,000 ft. to climb next day.

Meanwhile Tashi had a brain wave. 'Why don't we tunnel through the Knife-Edge ridge, Sahib?' The advantages were obvious; not only would one be saved the 25-ft. ascent to the crest of the ridge and a similar descent the other side, but the rope-ladder could then be fixed from the far mouth of the tunnel and so safeguard a further 25 ft. of the ascent Noyce and Cox must make on the return. Small distances, perhaps, but every foot saved of that fearsome 300 ft. was worth while. I was rather dubious that we would be able to make much headway through the hard ice of the core of the ridge but there was no harm in trying. But I need not have had any qualms for Tashi went at it like a veteran coal-miner, and I was hard put to it to keep up with shovelling the chips away from the entrance. In two days we had a fine tunnel some twenty feet long and the rope-ladder hanging from its far entrance.

On June 2nd Noyce and Cox got up at 2 a.m. and were away by 4-15. At this time one can reasonably expect hard snow, but Machhapuchhare was fighting back to the last and they sank up to their knees. Nevertheless they made steady, though slow, progress. I watched with admiration and growing excitement from below. By 9 o'clock they were across the bergschrund at the foot of the 800-ft. high face of the actual peak. Now they saw that the face was, as they had feared, composed of ice. But here and there were streaks of snow and by chipping steps up first one and then another of these, they made height fairly fast. The angle of the slope, which had appeared all but vertical from Camp IV, was, according to Noyce, 'steep but reasonable'. I wonder how many other climbers would have described it in these words; Noyce has special standards of his own.

At about 9-30 a few mackerel clouds appeared in the blue sky

and in an astonishingly short time it began to snow. Noyce and Cox continued till about 11 o'clock, when they had reached a point about 150 ft. below the jagged summit crest. Here the snow gave place to hard blue ice. Noyce cut two steps; each took two minutes. They now took stock of their position. There were no further difficulties between them and the summit, but to get there would take a good two hours' tiring step-cutting, and they had already been on the move for nearly seven hours. The snowstorm showed no signs of abating and their upward tracks had already been obliterated. They therefore decided that with the mountain virtually climbed it was prudent to return. They dug a hole in the snow and in it buried the Nepalese flag and Union Jack. Noyce hammered in an ice-piton and to it fixed 500 ft. of nylon line specially brought to safeguard their descent. Steps had to be re-made all the way; even after reaching the snowfield below the bergschrund, they could see no trace of their knee-deep upward tracks. Fortunately, on the way up they had taken a compass bearing and planted a marker-flag. Otherwise they might well have failed to find their tent which had been half buried by the snowfall. They reached it at 2-30 p.m., 10¼ hours after they had left it.

Next day the sun rose with an ominous halo round it. Fearing really bad weather, they lost no time in descending. Tashi and I were waiting for them at the entrance to our tunnel, but unfortunately we could give Noyce no protection until he was three-quarters of the way up the slope, as the ropes were frozen into the snow. Cox came up with a full load. Two days later we were reunited with the rest of the party at Base. Roberts was back having finished his survey of the sanctuary.

After a few days' rest Noyce and Cox went off to the north in search of further conquests. They climbed a fine unnamed peak of about 22,000 ft. on the ridge which projects into the sanctuary from the main Annapurna range. It gave them a long, difficult but very rewarding climb. The summit block proved all but impregnable, but a way was found—a fitting climax to a first-class climb. This was mountaineering at its best. From the top they saw Machhapuchhare from a new angle. As from all other angles, it soared majestically, aloof and alone.

Roberts and I went ahead on the return journey, Roberts to report to the Nepalese Government on our activities and I to spend a few days up the Seti Khola. There was no time to penetrate the gorge, which appears from its entrance to be very similar to the Modi gorge, but I was able to climb a high ridge to the east, above the highest village, Bharabhari—surprisingly enough,

a Pun village—and see Machhapuchhare from the east. From here it is a solid pyramid, rather than a Fish's Tail, but no less magnificent.

We joined up again as a party at Pokhara where the ever-hospitable ladies of the Mission gave us a wonderful welcome. Roger Chorley, we learnt, had been flown home earlier in the month, escorted by a member of the Yorkshire Rambler's party. They were full of praise for his courage and cheerfulness during the pre-monsoon heat in bed, and spoke hopefully of his chances of ultimate recovery.

The Modi Basin offers several good new climbs other than The Fish's Tail and we hope that our exploration may encourage and help other parties to enjoy this fine and easily accessible district. Two points should, however, be stressed: Firstly, the party should be a thoroughly experienced one; there seemed to be no easy routes at all. Secondly, they should pay particular heed to the religious beliefs of the Gurungs through whose country they will pass. These happy and hospitable people are not yet used to expeditions as are, for instance, the Sherpas of Khumbu. They are still not convinced that climbing parties will not bring disaster to the crops on which they rely so completely for their meagre existence. We hope our party may have helped to allay their superstitions; fortunately, no natural misfortune could be laid at our door, in fact our passage through their villages seemed to bring them rain or sun as required at the right time. But another party cannot expect to be so lucky, and as we consulted the local *mukhiyas*[3] and observed most scrupulously the conditions on which they let us into the sanctuary, they will expect others to do the same.

We chose Machhapuchhare because it had everything to offer—a virgin peak, a challenge in which the scales would certainly not be tilted in favour of the climbers whatever their skill, numbers or resources, a mountaineering problem of the highest order without the attendant requirements of the highest peaks—no large trains of stores and porters, no oxygen, no inordinate cost.

In the event, the issue was so finely drawn that I like to feel that both man and mountain were happy in the result. Certainly we were happy to leave the summit untrodden, not believing the last 150 ft. to be of great consequence and feeling that the Goddess of Machhapuchhare should remain inviolate in return for the rewarding resistance she gave us. We hope she is equally satisfied in her continuing seclusion. We feel that this is how it should remain.

[3] Village headmen.

RENEWED ATTACK ON RAKAPOSHI

An Account of the British-American Karakoram Expedition, 1956

By HAMISH MacINNES

Before our arrival in Pakistan, plans of the British-American Karakoram Expedition were changed. This was due to the large number of parties going to the Baltoro area where our early objective, the Muztagh Tower, is located. We chose instead Rakaposhi, a peak of 25,550 ft., which is surely one of the most accessible mountains of its height in the world, and it is certainly difficult.

Our party of four members could not have been more scattered. Mike Banks (later appointed leader) was in England, Bob Swift in California and Dick Irvin also from California had travelled to New Zealand and joined me. Needless to say, it was with great relief when we all met in Rawalpindi.

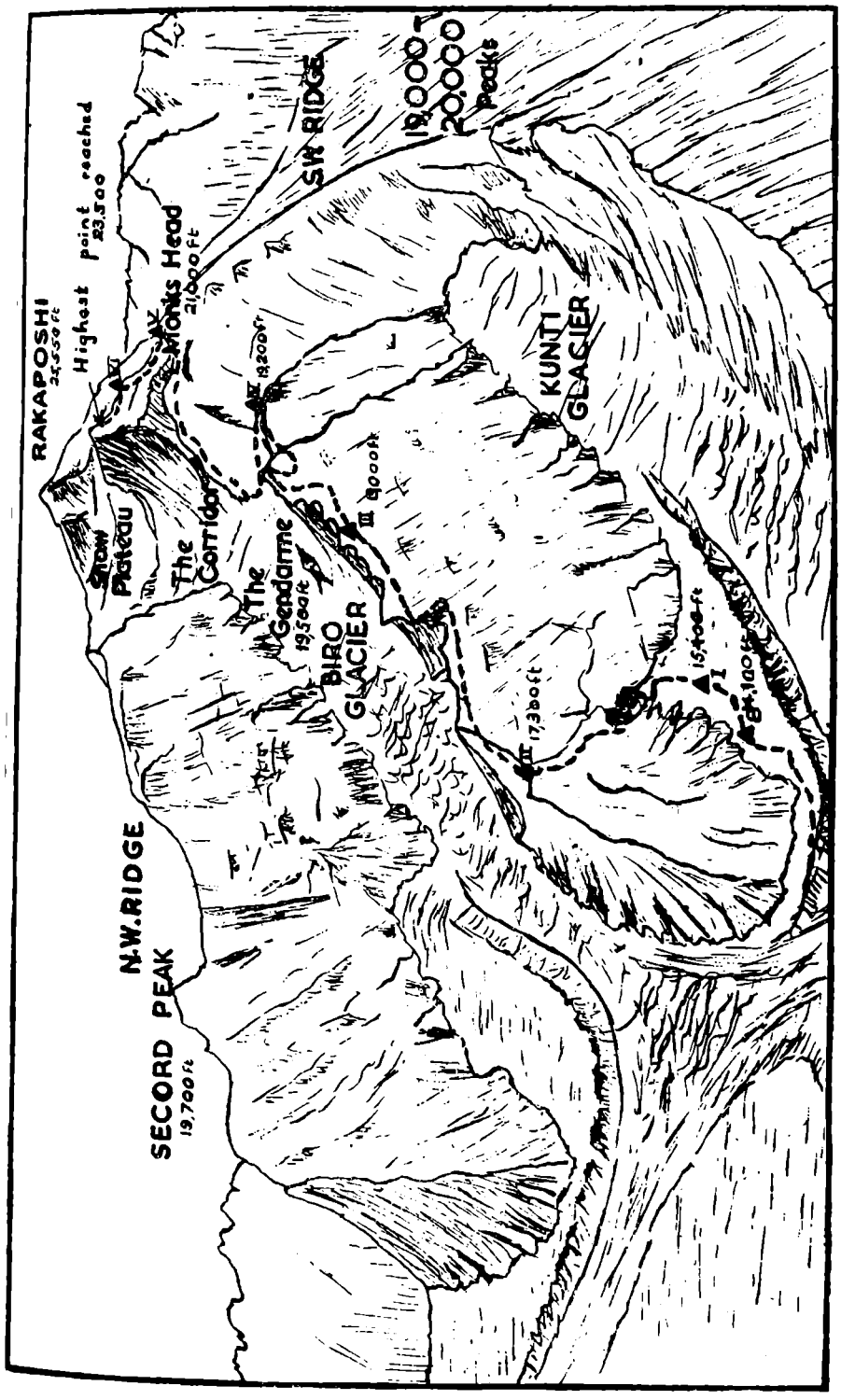
The morning of the 25th of May saw all members and supplies in one of the Dakotas which are engaged on the difficult flight to Gilgit. The great wall of Nanga Parbat was passed on our right, and in front the white heads of the Karakoram giants appeared above the sun-baked ridges.

After this interesting flight, we went up to our Base Camp at 14,000 ft. after a four-day march with coolies. The only excitement on this short trek was the crossing of the turbulent Hunza river by *zakh*. We had decided to attempt the mountain by the route chosen by the Cambridge Expedition in 1954,[1] and indeed on investigation we found that this was the only way.

Base Camp was situated in a delectable spot where primulas and bubbling streams enchant a valley walled by stately peaks. It was sited on a shelf on the moraine near the snout of the Kunti glacier, and at nights when the stream slowed to a trickle, eider-down jackets were not long in appearing. We had four Hunza porters, Issa Khan, of K2 and Nanga Parbat fame, being the Sirdar. As is customary, we were given a Pakistani liaison officer, in this case a Captain of the Education Corps.

Camp I was some distance up the Kunti glacier and was more of a stores dump than a camp; usually it was by-passed. We established Camp II by the 5th of June. Three of us occupied it whilst

[1] See *Himalayan Journal*, Vol. XIX, 1955-56, p. 109.



By courtesy of the Editor, ALPINE JOURNAL

Dick, who had lung trouble, retreated to the pinewoods lower down the valley to recuperate. With him went Fazal-i-Haque our liaison officer. Camp II was on the crest of the south-west spur, and was overshadowed by a symmetrical pinnacle which we later climbed. It commanded a wonderful view of Nanga Parbat and its neighbours. Haramosh (this mountain though lower than Rakaposhi is even more accessible, as a road from Gilgit goes right to its base), a shapely mountain offering no visible route, rose above the south-west ridge; and on the other side of camp, above the cornice on the crest, were the great chain of peaks of the Hindu Kush.

On the 6th of June, Mike Banks and I climbed the slope above Camp II and reached the start of the ridge which runs along to the gendarme. The gendarme we knew was our first big obstacle, and from this angle its steep sides were shown to their best, or worst, advantage. We were impressed by the cornices and steep slopes of the ridge and, I think for the first time, we realized the immense task that lay ahead of us. Later that day the weather deteriorated and it snowed intermittently for several days, confining us to our camp. The routine was sleeping, eating and digging the tents out.

On June 12th, the weather was good enough to force a route up the slopes to the ridge. As we were ascending, Dick arrived with laden porters and shouted the bad news that a tent and most of the fixed rope had been lost in an avalanche. He returned to Base that day intending to come up again to stay on the morrow. Next day we had a full complement of climbers at Camp II. Fazal-i-Haque who had accompanied Dick up the gully to camp had, on return, slipped and taken a tumble, but luckily he was unhurt.

On the 14th, straws were passed round and as Mike and Bob pulled the long ones they had the privilege of occupying the next camp. The following morning, with Dick and I acting as porters, we pitched a two-man tent on the crest of the ridge which leads along to the gendarme. We called this 'Cornice Camp' as it was not to be permanent. Mike and Bob, after spending the night there, relayed up to Camp III which was on the lip of a schrund at the base of the gendarme. It was an airy spot and large icicles like organ pipes hung from the vertical ice-face on the other side of the schrund. A day or so later, when Dick and I were carrying up to Camp III, we saw Mike and Bob cutting their way up the steep flanks of the gendarme. The plastered rock reminded me of the north face of Ben Nevis in winter. Dick returned to Camp II ahead of me and by the time I got back to camp, ominous clouds were mustering their forces over Haramosh. The gentle zephyr of morning

had developed into a veritable gale and powder snow shot off the cornices.

Again it was days of storm, eleven this time, and between digging the tent out and making elaborate sweets, the Cricket Test provided some diversion. Our wireless was used mainly to receive the weather bulletins from Radio Pakistan. After listening to a news bulletin in the cook-tent, I shouted to Dick telling him there was a great accident in Aberdeen. He muttered a few magic words when I told him, 'there were twenty killed in a taxi'. A wind in the region of 100 m.p.h. was the last gesture on the part of the elements, for a short time at least. On the 27th, the weather cleared and as we were excavating the tents and food dump, our two companions returned from Camp III. They brought ill tidings—the 'Gerry' tent had been damaged in a small avalanche when they were both in it.

Next morning, following the trail of the previous day and our bamboo markers, we reached Camp III in fine weather. It was Dick and I who now occupied that camp while Bob and Mike, who were acting porters, returned to Camp II. The following morning when the sun's rays touched camp we had breakfast and then cut our way up the gendarme, fixing a rope from bottom to top. From its summit, we saw the great ice-face of the Monk's Head—and no wonder Tilman said 'hopeless' when he saw it. We descended the back of the gendarme and continued in good weather looking for a site for Camp IV. *En route* I fell into a hidden crevasse.

The next few days were spent in relaying loads over the gendarme and on to the site of Camp IV. Instead of going over a whaleback which is between the gendarme and the Monk's Head, we found a route through a great rift in the ice which we called the 'Notch'. Our porters had by this time carried between Camps II and III, but refused to go over the gendarme. Issa Khan, who had been up to the high camps on K2, said it was much too difficult. We had been expecting this, so it did not cause us great concern. On July 3rd, we all occupied Camp IV, which was situated on a slope opposite the face of the Monk's Head. Meanwhile our porters, who were now of no use to us, returned to Base.

We awoke in undecided weather the following morning and as the tasks were as usual allotted, Mike and I set off on ours—to make a route up the Monk's Head. Bob returned to the gendarme for fixed rope whilst Dick had a rest-day taking photographs. Banks and I, using twelve-point crampons, dispensed with step-cutting and from rock bollards and ice-pitons, we hung approximately 500 ft. of fixed rope. There is no disputing the fact that

the climbing of the Monk's Head is of Alpine standard, and the angle of 45° is unrelenting. As 500 ft. was all the rope we had with us, we returned to Camp IV. Half the Monk's Head had still to be climbed.

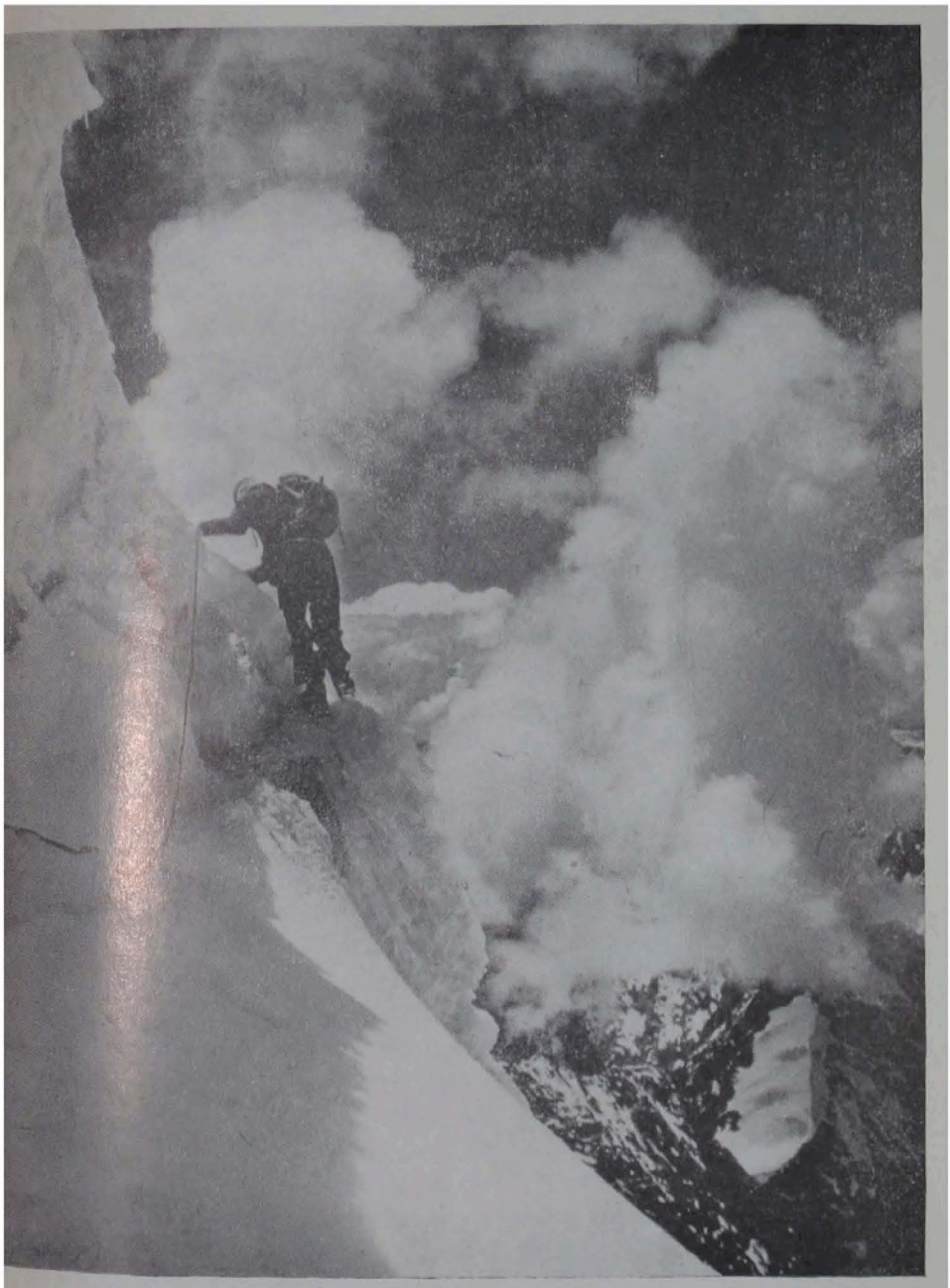
Dick and Bob led up the Monk's Head slope the following morning. Mike and I followed, packing supplies and equipment. Where the ropes were secured to ice-pitons we hacked out platforms for resting, as pulling up the fixed rope without steps imposed considerable strain on the ankles. Even with the rope from the gendarme we did not have enough for the whole face, but within a few hours of leaving Camp IV we were higher than any previous expedition. When we were nearing the summit of the Monk's Head, a blizzard sprang up with alarming speed and we had no alternative but to cache our loads, using the tent poles as markers, and beat a hasty retreat.

It was a hard day up the fixed rope of the Monk's Head on the 6th of July, and then over its summit to the site of Camp V at 21,000 ft. Arms and ankles were aching and we had a fuller understanding of the hard work of Himalayan climbing. We dumped our loads on the level snow and gazed at the slopes above. They looked as bad as the Monk's Head, and we realized that Rakaposhi was going to make us fight for every foot we gained. We returned to Camp IV that same day.

The 7th of July was my birthday, and a rest-day. That morning I had double rations for breakfast and the usual bantering between the Scots and English prevailed. We thought it a great pity that one of the Americans did not come from the Southern States, which would have completed the national discord of the quarter!

Next day we left camp at 5 a.m. and by 11 a.m. we were on top of the ice-face. We collected the supplies left during the blizzard, which made our packs 40 lbs. each. At the site for Camp V, which we had previously selected, we erected two Gerry tents. Dick and I were chosen to occupy Camp VI and attempt the summit.

On July 9th we took turns at kicking steps up the slopes above Camp V. There was no shortage of crevasses, hidden and open and, as I said to Mike: The cracks were so frequent, so deep and so wide, we thought the mountain was hollow inside. In places the ice was as steep as the Monk's Head, and infinitely more dangerous. The weather, which had worsened during the day, made us frequently feel like turning back. Standing on an ice slope with cloud creeping round us we had a conference. Were we going to cut a platform for the tent, or keep going? I volunteered to go a little higher to see if there was a better site above. I had climbed



CLIMBING A SÉRAC ON THE MONK'S HEAD.

only a few hundred feet when the weather cleared and I found an ideal platform on a narrow ridge. The others joined me and we pitched our tent, Camp VI, at 23,000 ft. Still the slopes above us looked steep, in places 50°, but the summit looked enticingly near. As Bob and Mike were descending the slopes below Camp VI, Bob slipped on steep ice and fell 100 ft. Luckily he stopped on rocks at the lip of a face which falls to the Biro glacier. Mike also had a tumble lower down and fell into a crevasse, but both were unhurt and reached Camp V safely.

That night Dick woke me out of a deep sleep saying it was twelve minutes to four. I thought it had been a very short night, but blamed it on the altitude. Later, we discovered it was ten minutes to ten. I shall omit my description of Dick and his watch. At dawn the weather didn't look too good, and as Dick was suffering from a bad cough and sore limbs we decided to postpone the summit bid. Later that day we were joined by Mike and Bob, who had come up to support our supposed summit bid. We spent a terrible night with four of us in a two-man tent, and by 5-30 a.m. we left camp. It was cold, and a fresh wind bit at our faces. Above camp, after crossing a schrund, a steep snow-rib had to be climbed and beyond treacherous crevasses reduced our progress to a snail's pace. Bob who was wearing tight 'Vapour Barrier' boots with no socks suffered from cold feet and we had to call a halt to thaw them. At 23,500 ft., 2,000 ft. short of the summit, we called it a day. The two Americans advocated retreat, but Mike and I were feeling fit and reasonably warm so we agreed that, as we had wasted so much time and energy for so little height, we would have a good night's sleep and knock the peak off on the morrow. Tomorrow never came as the good spell had, unknown to us, ended. A cold wind was blowing drift snow across the slopes and clouds were building up in the valleys. In the distance, K2 looked stately. Above us, the slope leading to the last step on the mountain steepened to 50°; so there was still difficulty above. Needless to say, when we were at Camp VI again the weather cleared, and I think we all had regrets for not pressing on. Dick who was still not as fit as usual decided to go down to Camp V; Bob accompanied him. As there was still some food available, Mike and I resolved to stay on for another attempt on the summit.

Our try the next morning was stillborn. On ascending a few feet from camp, a circle around the sun predicted bad weather and gathering storm clouds substantiated it. We retired to our tent and the dwindling supply of food and watched nature's fireworks. That same day Bob and Dick had some excitement going down

to Camp IV. Bob fell into two crevasses, and when going down the Monk's Head face on the fixed rope they were caught in an electric storm. Bob received several potent charges and an extra big one almost stunned him and caused him to drop his rucksack, which fell to the Biro glacier, 4,000 ft. below in the wrong valley. The cine-camera which he was carrying went down 600 ft., to the base of the Monk's Head. His pack was gone for good, with it all his personal equipment. That night at Camp IV Dick lent him his inner sleeping-bag.

In bad weather the following morning Mike and I went down with difficulty to Camp V as food had run out, but we intended making another attempt on the mountain later, when we had rested and recovered some of our lost weight. The morning after that, we again went down and arrived at Camp IV in poor visibility. We found the Monk's Head slope in a dangerous condition with most of the ice-pitons out. Bob and Dick, who were one stage ahead of us, reached Camp III that day. On July 15th, we struggled up the steep slopes on the reverse, or Monk's Head, side of the gendarme. The gendarme itself had to be descended using nylon boot-laces tied together as a rope, as all our rope was left on the Monk's Head slope. Meanwhile, the two Americans were trying to get to Base, and Dick slipped whilst traversing some steep ice between Camps III and II. Luckily he grabbed a protruding rock, which saved him a nasty fall of 4,000 ft. In this fall he hurt his leg, though not seriously.

Mike and I arrived at Base Camp without any further incident. On July 24th, having rested and eaten our fill of mutton and chicken, we went back up to Camp II with two porters. The Americans had decided to withdraw. Unfortunately, the following day on the slopes above Camp II, I fell sick and later discovered that I had fever. Next day we all returned to Base. Later we found it was dengue fever. We sent our two best porters up to Camp II on the 28th, to cut the long stairway of steps up and along to Camp III. That day, when Issa Khan was cutting on the slope above Camp II his companion pulled him off. They crashed down 500 ft. Though not seriously injured they were obviously finished for the rest of the expedition.

I was still very weak when Mike and I set off on the 29th for our third attempt. We fully realized the risk involved in two of us attempting a 25,000-ft. peak, but we had confidence in each other and perhaps avoided thinking too much about what would happen if there was an accident. Beyond the gendarme there would be no possibility of rescue, and indeed little hope of the porters

even getting back up to Camp III, soft snow and névé had given way to hard ice. The two other porters carried our packs to Camp II and the following day accompanied us for a short distance beyond camp, then returned. It took us 7 hours to reach Camp III and we had to summon all our energy to re-pitch the tent. We realized how small our reserves of strength were. The weather which had been undecided all day deteriorated and the clouds in the Kunti valley seemed to be boiling. Next day Mike had a pain in his chest and after thinking of all the horrible diseases and illnesses we discovered that he had taken an extra strong drink of acidic lemon crystals. However, this delay proved fortunate for the weather steadily worsened and we were prevented from crossing the precipitous gendarme. Again it was storm with plenty of snow and poor visibility. On August 1st we packed to retreat, but the weather and visibility were too bad. Next morning we realized that we must try to get back to Base; food was running low and it was snowing steadily and heavily.

We shouldered 60-lb. packs and proceeded along the ridge. I started the day's excitements by falling into a hidden crevasse; then Mike, when traversing a snow-covered ice slope, slipped and fell about 20 ft. before being stopped by the rope. Here again we were lucky for my ice-axe belay was pulled out, but throwing myself backwards seemed to be the correct reaction. So another long drop was averted. Due to the high wind and drift snow we found that we could not wear goggles. By the time we reached the ice slope above Camp II we were feeling very tired. At the top of this slope, snow avalanched under me and we both fell 300 ft. Again we were unhurt. Over 7 hours after leaving Camp III we arrived soaked to the skin at the partly covered tent at Camp II. That night at 10 o'clock we discovered we were snow-blind. Mike was the first to discover it and slowly but surely the pricking pains in our eyes increased. As we had no medical supplies with us, we tried to ease the pain with moist tea-leaves, but it was to no avail. Another gale commenced, and the stove refused to work. The storm raged all night and the next day, when by afternoon we were able to open our eyes for short periods.

The following morning, we managed to reach Base Camp in very deep snow with Mike seeing double. Reflecting now on his seeing double, I think it would have been interesting to have given him half his allocation of food. On the way down to Base, several avalanches had a last try at scaring us. So with Camps IV, V and VI still up there, we bid farewell to the great mountain.

It seems a pity that no more expeditions are to be permitted to attempt Rakaposhi. The Pakistan Government are reserving it for their own mountaineers. After saying good-bye to Mike at Gilgit, I left with permission to visit the State of Hunza and to do a rough reconnaissance of the north face of Rakaposhi. One has just to glance at that 20,000-ft. north precipice, to know that the south-west spur is the only way to climb the mountain.

THE GERMAN NEPAL EXPEDITION, 1955

By HEINZ STEINMETZ

We acknowledge our thanks to the Deutsche Himalaja Stiftung for permitting us to use this article. The translation is by Hugh Merrick.—EDITOR.

THE Annapurna Himal cuts across the heart of Nepal from west to east, being bounded on the west by the river Kali and on the eastern end by the Marsyandi. Four important summits rise from its backbone ridge. These, from west to east, are Annapurna I (26,492 ft.), the first 8,000-metre peak to be climbed when, in 1950, a French expedition reached its summit;[1] Gangapurna or Annapurna III (24,858 ft.), a savage peak so far undisturbed, Annapurna IV (24,688 ft.) and Annapurna II (26,041 ft.), whose black, rocky ridge soars high above the surrounding hanging-glaciers. This group of great mountains, with its outliers as far as the Tibetan border away to the north, was the objective of our operations.

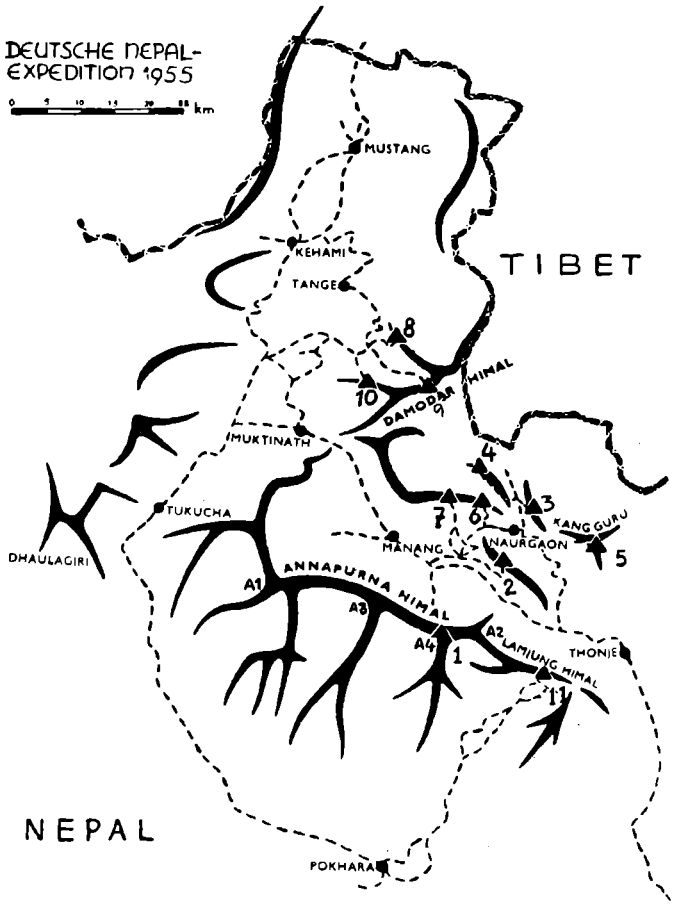
The expedition was mounted, equipped and put into execution by the *Deutsche Himalaja Stiftung* (German Himalaya Foundation) in co-operation with the *Deutsches Alpenverein* (German Alpine Club). It consisted of four members: Heinz Steinmetz, 29, a Munich businessman (leader), Fritz Lobbichler, 29, of Straubing, an inspector of schools, Harald Biller, 24, of Nürnberg, a technician in machine construction, and Jürgen Wellenkamp, 24, a mathematics student from Bad Reichenhall.

We left Munich on March 28th, 1955, after more than three years of preparation, conditioned by the long delay in obtaining a permit from the Nepalese Government. We reached Raxaul on the frontier of Nepal, by way of Genoa and Bombay, without any untoward incidents. The expedition's baggage, amounting to rather more than three tons, was flown in from there to Katmandu, the capital of Nepal.

After attending to the various formalities in the capital, we were able to start off on the approach march from Katmandu to the Annapurna Himal on April 26th with a train of 126 coolies. Two Sherpas had meanwhile left Darjeeling to join us on the way.

We were delighted and relieved when it became clear, during the very first days of the westerly march through the foothills,

[1] See *H.J.*, Vol. XVI, p. 9, *et seq.*



1. ANNAPURNA IV, 24,600 FT.
2. PISANG PEAK, 20,050 FT.
3. UNNAMED PEAK, 18,373 FT.
4. NAURHORN, 17,881 FT.
5. KANG GURU, 22,997 FT.
6. UNNAMED PEAK, 20,177 FT.
7. EAST CHULU PEAK, 20,342 FT.
8. DAM KANG, 20,013 FT.
9. YULO KANG, 20,998 FT.
10. KANG JURI, 19,029 FT.
11. WEST LAMJUNG PEAK, 20,342 FT.

that we would be able to get along with the porters from Katmandu. This was an extremely important point for us, because of the large number of porters in relation to the European composition of the expedition; and also because the Sherpas had not yet joined us. Experience has shown that the familiar manifestations of porter-trouble, with demands for pay increase, strikes and the like, are to be feared especially on the approach march.

The stages of our approach march went according to plan. This does not mean that they were arbitrarily laid down beforehand; on the contrary, they were selected in the light of the proved experience and advice of local inhabitants. We had, however, worked out an overall calculation of twenty days' marching to cover the distance from Katmandu to Manangbhot; in fact, we arrived there at the end of the eighteenth day. The passage of the Marsyandi Gorge, which cuts through the main Himalayan backbone from south to north, provided a considerable test of the reliability and zeal of our coolies. Parts of the road through the gorge were in extremely poor condition, whole sectors having been swept away by landslides, while in other places the track consisted of galleries of wooden beams and bamboo ramps projecting from precipitous rock-faces. Obvious signs of doubt and fear on the part of the coolies were swept aside by the resolute assistance of the sahibs and Sherpas, who had meanwhile joined the column; as a result even this most critical point on the whole route caused us no delay.

The successful passage of the gorge to the northern side brought us to our scene of operations and on May 13th we were able to establish our Base Camp in the Sabzi Chu, a small lateral valley running from the upper course of the Marsyandi to the foot of Annapurna IV.

We were able to push forward a reconnaissance party on the very same day as far as the moraines at the head of the re-entrant, and so obtained a first survey of the route up the mountain and the general conditions we were likely to meet on it. The weather was so good and the glaciers in such excellent condition that we decided on an immediate attempt. Back at Base Camp we prepared loads for an assault which might last as long as three weeks. Then we engaged natives from the neighbouring villages to carry the loads up over the moraines; and as early as May 15th the four members of the expedition, with the two Sherpas and the coolies, set out to climb the mountain. Unfortunately the local porters, mostly women and young boys, proved so much less reliable that we had to dispense with their services above the treeline. It took

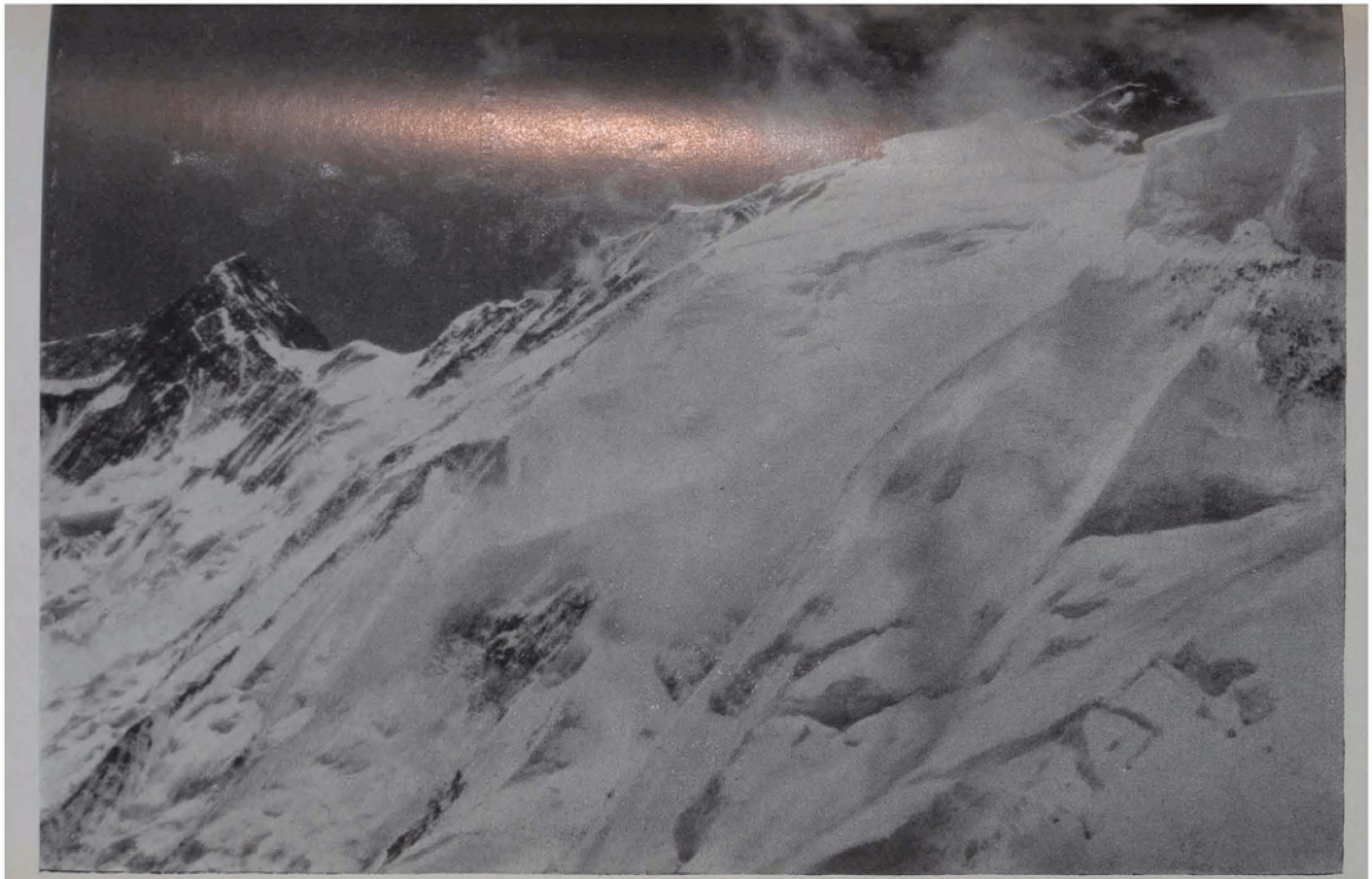
the sahibs, the two Sherpas and two coolies, whom we kept permanently with the expedition, two days to get the loads up to the edge of the ice, where we established an Assault Camp for our attack on Annapurna IV.

From this camp we started, with the help of the two Sherpas, to follow Tilman's route up the mountain, over an ice-rib to the so-called Dome, a snow summit on the main comb of the Annapurna massif. During his 1950 attempt Tilman had chosen this as the safest of several possible routes for an assault on Annapurna IV and II, and had established that it was practicable to a point close under the summit of Annapurna IV.[1] We climbed by way of steep gullies, exposed to threats from avalanches of snow and ice, and on May 19th succeeded in placing Camp I on the first step in the ridge at 17,850 ft.

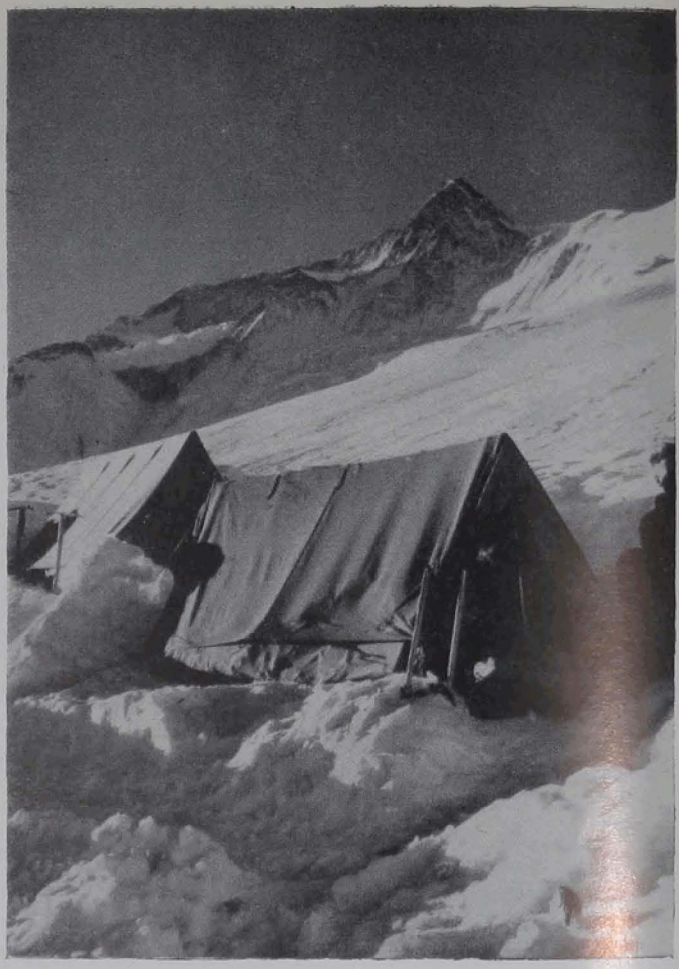
The way forward was now blocked by an ice-bulge, which had held up Tilman and the two Japanese parties, which had since attempted the climb, to a serious degree. This year, however, the bulge proved less intractable, for an ice-chimney made a traverse to the left possible and we were thus able to turn the overhanging upper section with its armour of icicles. It took us two hours of hard work in the ice to make this pitch passable; but even then there was no way of safeguarding the Sherpas, and a very short discussion of the problem led us to a decision to do without their assistance. We then sent the two porters back to Base Camp, with instructions to come up again to Camp I on a given date.

Before moving on from Camp I to establish Camp II at 20,000 ft., we made a depot of the loads above the ice-bulge. At nightfall on the 24th we occupied Camp II, after an exhausting day's work in an unpleasant snowstorm. Our next preoccupation was to master the Dome and so get a footing on the main ridge as soon as possible; an ice-corridor offered us a good line of approach and after a little trouble with the cornice, the way ahead, across the big snow plateau between the Dome and the final surge of the summit ridge, lay open to us. It was on the 25th that we anchored the first tent of Camp III at 21,200 ft. at the foot of the summit ridge, intending to make that our final camp for the assault on the summit and to occupy it on the following day. This intention was frustrated by a local storm which broke into the fine weather period, and prevented our leaving our tents for two days and nights. The four of us lay in our sleeping-bags, alternately hoping and despairing. Naturally it was impossible to rest, so that we were not in the

[1] H. W. Tilman, *Nepal Himalaya*, Camb. Univ. Press, 1952, p. 152, *et seq.*



ANNAPURNA II AND IV, SEEN FROM BETWEEN CAMPS I AND II.



CAMP I, *c.* 17,850 FT., LOOKING TOWARD ANNAPURNA II.

ON THE SUMMIT OF ANNAPURNA IV WITH ANNAPURNA II IN THE BACKGROUND

best shape when we pushed on up to Camp III as soon as it cleared up again. One member of the party, Fritz Lobbichler, had to give in on the ice-wall below the Dome because he was in such poor condition, but decided to await the return of the three others, Wellenkamp, Biller and Steinmetz, who went on and occupied Camp III on May 29th.

We had no misconceptions about the enormous difference in height between Camp III and the summit, involving an ascent of about 3,500 ft. and back again in a single day. But we wanted at all costs to avoid establishing yet another camp, in order not to overtax our strength by more load-carrying—for the whole weight of the transport had been on the shoulders of the sahibs ever since the ice-bulge.

The three of us set off at first-light on the 30th, complete with bivouac-equipment and food for three days. The summit ridge proved to be technically much more difficult than we had expected, but the splendid condition of the ice and snow made good any time lost through belaying, and route-making. We caught our first glimpse of the rocky summit-pyramid at about noon, and gave ourselves an hour's rest there at about 23,300 ft.; then, leaving all our bivouac-equipment behind, we started off for the summit. It took us the whole afternoon to climb the sector of the ridge and the ice-slopes beneath it, though they had looked so ridiculously short from below. We had made up our minds long ago that we could still reach the summit, but that to get back to Camp III during the same day was out of the question. At about 5-30 p.m. we hoisted the pennants of Nepal and Germany on an ice-axe in the summit snow and we also left a small statue of the Madonna up there.

Night was falling as we began our return journey. The party arrived at the place where we had left the bivouac-equipment in pitch darkness, and there we dug ourselves into the wall of a crevasse. That bivouac at 23,300 ft. in the bitter cold of the night, coming on top of an exhausting day, was as trying as any of the hardships on the way to the summit of Annapurna IV, but the knowledge that we had attained the main objective of the expedition helped us to bear the ordeal with greater equanimity. It took us three days to evacuate the camps and get off the mountain.

A few rest-days at Base Camp ensued before Wellenkamp started out again and made a solitary ascent of Pisang Peak, 20,057 ft., on June 10th.

The first signs of the monsoon were already in evidence, so we knew we would have to reckon with rain and higher temperatures

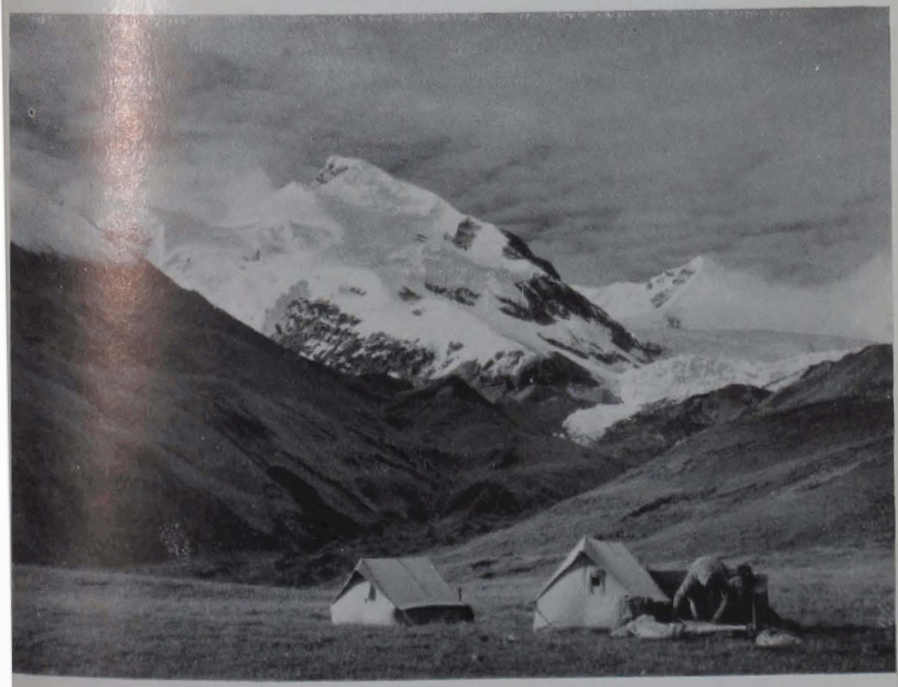
in planning any further attempts on neighbouring peaks. However, one of our main tasks was to explore the weather conditions on the north side of the range during the rainy season and to establish whether climbing is possible at that period. This duty and the attractions of Kang Guru, a 22,997-ft. peak above Naurgaon, (Tilman's Naurgaon Peak) settled our next objective for us, and we decided to make an attempt on it in spite of the fact that the monsoon had obviously broken. We crossed over from the Marsyandi Valley to the Naur Valley between June 16th and 18th and established a Base Camp at Naurgaon. Our intention to climb the peak at once was negatived by continuous bad weather, so we decided on two lesser objectives while waiting. These were the highest crests between the Phu and Naur valleys, a summit of 18,374 ft., ascended by Biller on June 22nd; and the highest point between the Naur and Chow valleys, a sheer rock-needle of 17,887 ft., which we christened the Naurhorn, climbed by Wellenkamp, Lobbichler and Steinmetz.

The knowledge of weather conditions gained during these undertakings helped us to decide on attempting Kang Guru, come what may. Biller went sick and had to go down to the Sabzi Chu; the three remaining members of the expedition established an Assault Camp at the foot of the mountain, at a point where a great ravine, rich in foliage, strikes up into its flanks. In the existing conditions our tactics on this peak had of necessity to be quite different from those adopted on Annapurna; this had to be a lightning assault of the shortest possible duration.

We sited our first camp at 16,400 ft., just under the great rock barrier which seals off the upper end of the ravine, and began our assault on June 29th. On the 30th, after a difficult passage through the rock-curtain in exceedingly bad weather, we established Camp II at 19,030 ft., on a prominent rock-rib between the hanging-glaciers. Next day we pushed a camp forward to 20,350 ft. at the base of a secondary rib, which gives access to the summit ridge. This camp consisted of a small tent in which the three of us spent the night cramped together in uncomfortable proximity!

The route up to the main ridge lay over fearfully steep ice slopes. We only discovered when we got up there that, contrary to everyone's expectations, the main ridge leading to the summit was an excessively sharp snow crest with immense precipices sweeping down to the north-east and providing four long hours of nerve-racking ascent. We reached the summit at about 1 p.m., but were compelled to start down again immediately by the onset of bad weather. We got back to Camp III the same day; on the next

KANG GURU PEAK, 22,997 FT., CLIMBED ON JULY 2ND, 1955.



YULO KANG PEAK, 20,998 FT., IN THE DAMODAR HIMAL. CLIMBED ON AUGUST 29TH, 1955. ROUTE FOLLOWS SKYLINE (SOUTH-WEST) RIDGE.

we evacuated all the camps and reached Base Camp, in drenching monsoon rain, after an absence of five days. We then returned to the Sabzi Chu by way of the Naur Gorge and the Marsyandi Valley.

On July 14th Biller, who had meanwhile recovered, took the Sherpa Da Tondu with him and climbed an unnamed peak of 20,078 ft. in the eastern Chulu Group, a range running westwards to the north of the upper course of the Marsyandi.

On the 23rd, all four of us climbed East Chulu Peak, 20,337 ft.; West Chulu had already been climbed by the Japanese in 1952. On the way down we all had a hairsbreadth escape from a terrific avalanche.

After these activities around Manangbhot, we transferred our area of operations to Mustangbhot, by way of the 18,000-ft. Thorum Lake Pass. Besides extensive photographic work in the area, the most important item to be recorded is the first ascent of three peaks in the Damodar Himal. We camped a day's march below the Mustang La (crossed by Tilman in 1950), and from our base there Wellenkamp climbed the western peak of Dam Kang, 20,009 ft., on August 25th. On the 29th, all four of us reached the top of Yulo Kang, 20,998 ft. Two days later, Lobbichler made the ascent of Kang Juri, 19,030 ft.

We had set ourselves a post-monsoon task of reconnoitring an approach route to Annapurna II from the south. Prolonged monsoon weather and negotiations with the authorities in Katmandu, which had by then become essential, delayed our putting this plan into effect so that when the reconnaissance at last got under way we had hardly any time left. On October 6th we moved off towards the Namun Pass from Pokhara, which we had reached by way of the Kali Gorge. On the way up we had to concede that the southern approaches to Annapurna II are so unpromising that the northern route over Annapurna IV is probably the only one worth considering.

We next cast our eye on the principal peak of the Lamjung Himal, 22,921 ft.; but weather conditions remained so bad that we had to abandon the idea. On October 17th, Steinmetz and Wellenkamp made a final ascent of the 20,300-ft. ice-cap of the western Lamjung Peak, and on November 11th, the expedition left Nepal on its return journey.

EXPEDITIONS TO THE RATANG AND PARBATI REGIONS, 1955 AND 1956

By P. F. HOLMES

ORIGINALLY we had intended, in 1955, to attempt Istor-o-nal up in the N.W. corner of Pakistan but news of another expedition, lack of funds and the plea of an eminent geologist turned us towards Spiti on the borders of the Punjab. Trevor Braham and I were the climbers of a mainly scientific expedition from Cambridge. Our objectives were twofold: first, to penetrate one of the two nullahs, the Ratang or the Gyundi, which led to the peaks of the Great Divide; and second, to establish once and for all the true height of Shilla, claimed by the Survey of India to be 23,050 ft., and by Marcel Kurz,. in *The Mountain World, 1954*, to be well under 22,000 ft. On this depended more than the reputation of a mountain. Climbed in 1860 by a Survey *khalasi*, it was claimed as an altitude record for a peak climbed which was to stand—ignoring W. W. Graham's dubious claims to Kabru—until 1907, when Longstaff climbed Trisul, 23,360 ft.

We approached Spiti by way of the Rohtang La, the Chandra valley and the Kunzum La. The walk-in was uneventful apart from two near-drownings in the difficult nullahs. Our pony-men demanded a day's rest after crossing the second pass, so Braham and I took the opportunity to climb a virgin peak of some 18,500 ft. on the Taktsi-Karcha watershed. Loose rock, an ice slab and a rotten cornice which had to be cut away made the climb more dangerous than difficult. From the summit we gazed on the five tributary glaciers of the Karcha, all unmapped, nestling like quintuplets under the southern wall of the nullah. The total ascent of just over four thousand feet took five hours and made a wonderful training climb for our unacclimatized legs and lungs.

A few days later, while the scientists were busy collecting ammonites, we made a sortie up the Gyundi nullah. Two days' hard work and difficult going, in which we progressed a total of two miles, convinced us that there was no way here while the waters were in flood. Early-June or late-October are the only possibilities. This defeat was thoroughly depressing, for we had no reason to expect a different outcome with the Ratang. When J. O. M. Roberts made his lightning reconnaissance in 1939 the entrances of both the Ratang and the Gyundi had given him little hope for a route being

forced up either of them except in October when the cold nights of an approaching winter had brought the water level down.[1]

In the event, we found the Ratang a little more accommodating. In five long and arduous days Braham and I, with the help of our three Ladakhi boys, forced our way through the gorge to a meadow about fifteen miles above the junction of the nullah and the main Spiti river. The second day was the worst. Abandoned by two local coolies, the five of us were carrying 350 lb. between us. All morning was spent climbing a 600-ft. rock spire which blocked our way, all afternoon was spent descending to nullah level again. In all we covered 400 yards in nine hours. The climbing was dangerous and exasperatingly difficult. The same can be said for the gorge; mud-cliffs, stonefalls and hazardous fordings gave us an impression of literally fighting against nature. But not only the difficulties impressed us; the grandeur of the cliffs above us, the fantastic contortions of rock, the thundering fierceness of the water are difficult to forget. Almost as impressive was the behaviour of our Ladakhi boys, Rikzen, Sunom and Jigme.[2] At times they were frightened, always they were tired with their mammoth loads, yet only once, when faced with a terrible *mauvais pas*, did they falter; and then they accepted our decision to push on without a murmur.

On the fifth evening we camped in the meadow, on the sixth day we pushed up over moraine and ice to a camp at *c.* 18,000 ft., and on the seventh we climbed two peaks, one 19,500 ft. and the other 19,720 ft. The climb was at times airy, but never hard, and the view was magnificent, without a cloud in the sky.

A quick look about us showed that the existing Survey map based on the surveys of the 1850's and 1860's had been drawn entirely by guess-work. To the north-west, west and south-west lay the tributary glaciers of the Parahio and the Ratang, huge sheets of ice which were not even hinted at by the map. Towering above and behind were the peaks of the Great Divide, while all about us were a profusion of smaller peaks and glaciers. A whole world to be explored. It was tiresome to gain no more than a glimpse of this exciting ground, but with both supplies and time running out, we had no choice.

Back in the Spiti valley we turned to our second problem; the height of Shilla. Its history is straightforward if chequered. Climbed

[1] See *H.J.*, Vol. XII, 1940, p. 129.

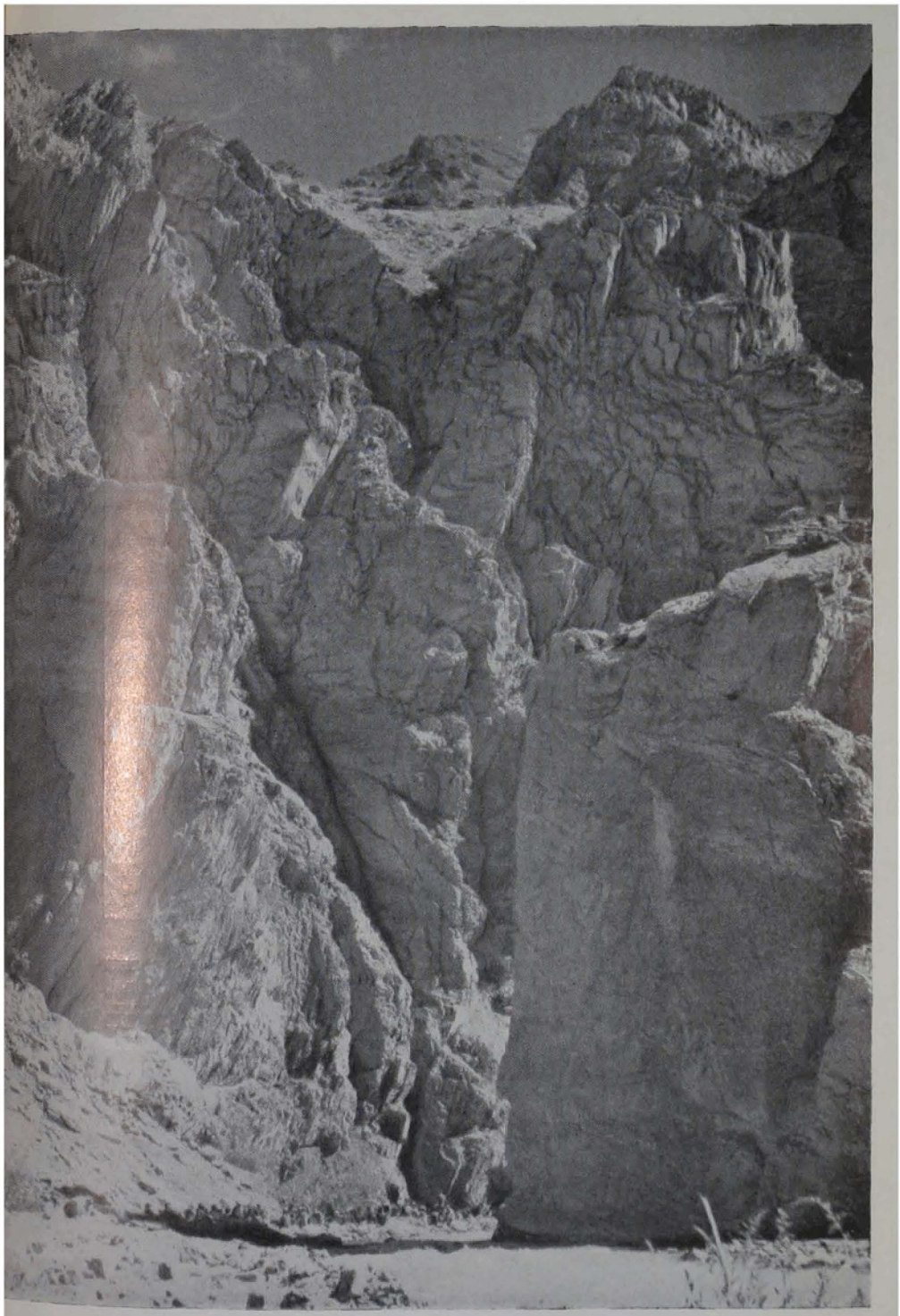
[2] Controversy over the spelling of these names is futile; but is likely to persist until their respective owners begin to express their own views, and so silence the contenders. It is worth pointing out, however, that, to one member of the expedition at least, Rinzing, Sonam and Jigmy were the names of this unforgettable trio.—EDITOR.

in 1860, its height was recorded as 23,050 ft. Its ascent established a record for a summit climbed; it was 'the highest yet', a record which was to stand for 47 years. Roberts climbed Point 20,680 ft. in 1939, but in mist, so he was unable to see anything. J. de V. Graaf's visit to the immediate area in 1952 added nothing to what was already known, but his panorama of the whole area from the summit of Mani Kang, 21,630 ft., on the border of Bashahr, raised the whole question again. According to Marcel Kurz (*The Mountain World, 1954*, p. 221) this panorama 'proves beyond doubt that Shilla does not attain 23,000 ft., perhaps not even 21,325 ft.!' But advocates of the older school clung to the original height as the true one. We hoped to solve the question once and for all.

Firstly, we discovered that Point 20,680 ft. is not called Shilla, 'the place of the monastery', as Roberts suggested, but Guan Nelda, 'Snow Moon in the Sky'. Shilla, according to all the locals we questioned, referred to the nullah alone—though they admitted that 'there might be a high mountain near the source of the stream'. Secondly, we climbed Guan Nelda. The climb, from an uncomfortable camp at 17,800 ft., and involving no more than three hours of easy snow work to cover the 3,000 ft. to the summit, proved nothing. We arrived at the top in a dense mist and descended in a storm. Obviously Shilla was determined to keep its secret. So we countered with evasive tactics. The next day was clear, and we walked as far to the west as we could from our camp above Langja (wrongly marked as Hikim on the map), to the very edge of the terrific canyon of the Shilla nullah. To our great relief we could see Shilla clearly. Beyond any shadow of doubt the problem was solved. Shilla cannot be much higher than Guan Nelda's subsidiary peak which we had estimated to be about 19,800 ft. So Shilla's true height must be about 20,000 ft., give or take a few hundred feet. It was easy to see why it had been climbed alone by an untrained climber so long ago. The west ridge could not be gentler, never exceeding an angle of twenty degrees.

Our main objectives were accomplished, the scientists were happy with their 3 cwt. of ammonite fossils, and our time was up. Base Camp was packed and the caravan started back towards Manali. We left the inhabitants of Spiti to their cruel winter.

Having touched on such an exciting area it was inevitable that we should go back in 1956. So a second expedition was organized. Our plan was to push up the Ratang gorge once again, this time in force, establishing a fully stocked and equipped Base Camp on the meadow. From here the climbers would continue up to the head of the valley, climbing such peaks as presented themselves.



THE EXPEDITION RESTING IN THE RATANG GORGE.

VIEW FROM 14,000 FT. ON THE S.W. BANK OF THE RATANG VALLEY SHOWING, LEFT TO RIGHT, SHILLA, GUAN NELDA SUBSIDIARY PEAK (ESTIMATED HEIGHT 19,800 FT.) AND GUAN NELDA, 20,680 FT., PARTLY OBSCURED BY CLOUD. THE COMPARATIVE SNOW LINES INDICATE THAT SHILLA'S HEIGHT CANNOT BE 23,000 FT. SHILLA NALA AND MAIN SPITI VALLEY IN MIDDLE DISTANCE.

After six weeks of this a return would be made, not through Spiti as before, but by pushing across into the Parahio and then into the Parbati. This would involve the crossing of two high passes, both over 18,000 ft.; the first, which I had briefly seen from the summit of peak 19,500 ft., was virgin, but the second had, we thought, been crossed once before.

For the undertaking of such an ambitious plan it was essential that we should be a small and highly mobile party. Unhappily, Braham was unable to join us at the last minute. Our party finally consisted of two climbers, G. W. Walker and myself; my wife, who was in charge of medicine and food; and Pran Nath, an Indian security officer. When I heard of the Indian Government's decision to send a security officer with us I was slightly indignant. But he quickly proved himself so co-operative, pleasant and generally helpful that I relented. Finally, through the kind offices of Major H. M. Banon at Sunshine Orchards (the local Himalayan Club Secretary), we were able to contact Rikzen and Sunom again; and at our request they brought two friends with them, Angrupp and Jolson. So in all we were eight.

We arrived at Shigri on June 17th. Here we would stop for a week while an excursion was made up the Karcha nullah. Pran Nath and Walker were both unwell, so I set off with three porters. No one had ever been up the Karcha before; the reason being, I suspect, that no one could be bothered. The walk was tiring, because there was still a lot of winter snow about, and dull, because the walls of the nullah were too steep to allow a view, but we covered the ground without difficulty.

I had hoped to climb one peak on the Karcha-Taktsi watershed, and another on the Karcha-Gyundi watershed before crossing over to the Bara Shigri and attempting the 'Lion'. With perfect weather this should have been possible within the seven days allotted to the excursion. But the weather was terrible. It snowed, sleeted, hailed and rained. There were numerous avalanches all about us and visibility was seldom more than a few yards.

Nevertheless we achieved some measure of success. Abandoning the Karcha-Taktsi peak from the first, on the second day we pushed up the Boomerang glacier to a Col at 17,500 ft. On the third day, Rikzen and I made the first ascent of a peak of about 19,000 ft. on the Karcha-Gyundi Divide in a terrific storm. We could see nothing all day, we were miserably cold, and on the descent Rikzen fell 400 ft. In spite of all this we did open up a new pass (c. 17,800 ft.) between the Karcha and the Gyundi at the foot of our peak; and also a minor pass between the Boomerang

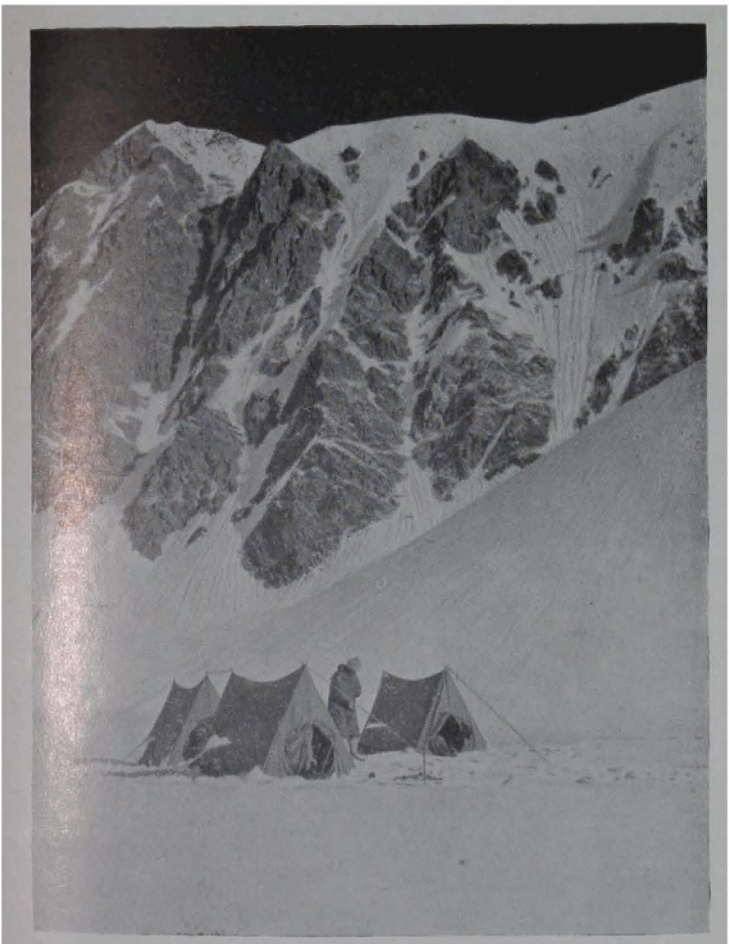
glacier and C glacier. The weather cleared that evening for the first time in three days, so to spite it Rikzen and I rounded the day off by climbing a very minor peak of 18,500 ft. after supper.

The fourth day saw another minor pass, between the Boomerang glacier and glacier E and then a major pass at 18,000 ft. This we called the B and K Pass (Bara Shigri-Karcha). We camped on its crest, hoping for good weather on the morrow. With luck Rikzen and I could climb a peak while Sunom and Jolsun carried our camp to the foot of the 'Lion'. We would then climb that. The weather decided otherwise, however, for it snowed heavily all night. There was no point in anything but retreat, so forcing our fifth new pass in three days we returned to the Shigri meadow. A thoroughly disappointing but not quite wasted excursion.

We marched over the Kunzum La and down the Spiti valley, as before. Two weeks were spent collecting ammonites, visiting the Nono and Kee Monastery, and renewing old friendships; and then we turned to the gorge. Because of Pran Nath's administrative and diplomatic genius we were able to secure the co-operation of 22 Spiti coolies; the first time, I believe, they have worked for outsiders. We started up the gorge on July 6th, and thanks to an almost uninterrupted succession of snow bridges we were able to reach the meadow in three easy days. A striking contrast to the five long hard days Braham and I had experienced the year before.

The coolies dismissed and Base Camp established, six of us continued up the now more amiable valley. On succeeding days camps were established at 16,000 ft., 17,500 ft., 19,000 ft., and 20,500 ft., with three to four miles between each. The last camp was on a saddle between 'The Twins', both of which were climbed the same evening. The next day a party of four climbed what at the time we took to be Snelson's Dibibokri Pyramid. Of course it was nothing of the kind, as we discovered to our cost a few weeks later. From the summit at about 20,700 ft., we could see across the Gyundi to the Karcha peaks; down a mammoth ice-basin to the south; and, above all, up to a nearby peak which towered over us by at least two thousand feet.

A retreat was then forced on us by bad weather, so Pran Nath, Walker, and two porters retired right down to Base Camp to recuperate. Rikzen was unwell, so while he had a rest-day at the 17,500-ft. camp I wandered up the main Ratang glacier to the Divide. Clouds obscured my view, but certainly there was a way to the ice-basin beyond. In the evening I walked up to another pass, this one between the Ratang and the Parahio, all snow and ice.



CAMP IN THE CWM BELOW PEAK 20,700 FT.,
OUR FIRST CLIMB IN THE RATANG, 1956.

Rikzen felt better the next day, so we pushed up a subsidiary glacier to establish a camp at 19,000 ft., on a pass (our eighth) between the Ratang and the Gyundi. On the 19th we climbed peaks of 20,500 ft. and 20,705 ft., in indifferent conditions (20,705 ft. to differentiate from the first peak). The climb was notable for a small avalanche which overwhelmed us in a steep ice-gully and carried us down about 500 ft. I remember being very cross at having lost an hour's hard work. Luckily no serious damage. A poorish view from the summits because of the cloud.

Rikzen was really unwell by now, from overstrain and exhaustion, so we too retired to Base Camp. While Rikzen rested Walker and I made a reconnaissance of the first pass we were to return over. It turned out to be one of the longest days I can remember. We started at 14,700 ft., we walked a total of 12 miles on the map, we climbed and descended 7,000 vertical feet, getting up a virgin peak of 18,700 ft., in the process, and also crossing two high passes.

Rikzen was better, so a return was made to Camp I. He and I were then installed in a high camp below a fearsome looking peak which I believed to be the 21,410-ft. peak marked on the Survey map. The obvious route from a distance seemed to be the 'skyline ridge', but closer inspection from a minor peak we climbed that evening (*c.* 19,000 ft.) showed it to be hopeless. The alternatives were the south-east ridge and the east face, the one rock, the other ice.

We had thought in terms of the rocky ridge, but a large stonefall as we approached it early the next morning warned us off. The ice face was not particularly hospitable either, for after an hour's cramponning during which we climbed perhaps 500 ft., a cornice high above us gave way and we only just avoided the ensuing avalanche. We compromised by working from rock island to rock island, reaching the south-east ridge not too far from the summit. The crux of the climb was only 50 ft. below the summit, when we had to traverse out over a really frightening drop to the cwm below and then tackle a short overhanging crack. This went with jamming, but at over 20,000 ft., proved tiring to say the least. It would rate as technically severe by current Welsh standards. From the summit we had a really wonderful view. It was our first good-weather peak. We could see perhaps 75 miles, right into Tibet, Ladakh, Bashahr and Lahul. Only to the south, where monsoon clouds lapped against the Divide, was our view obstructed. This was the last peak we climbed in 1956, so this is as good a time as any to summarize the problem which arose over fixing the heights shown on my map.

The case for accepting the heights shown is as follows. From our last peak, which I measured as 20,710 ft., I had an extremely clear view of Guan Nelda, 23–25 miles away. Now Guan Nelda can easily be seen from many places in the Spiti valley, and because of this accessibility of view it is reasonable to assume that its height and position on the Survey map are accurate. When in 1955 Braham, Rikzen and I climbed it, our two altimeters confirmed the Survey height. From the summit of this last peak, 20,710 ft., our Abney Level told us that Guan Nelda, 20,680 ft., was slightly below us. Further, peaks 20,700 ft. and 20,705 ft. were exactly the same height as 20,710 ft. (as measured by the Abney Level, which cannot account for five or ten feet). Measuring distances, which are accurate to within $\frac{1}{2}$-mile, and vertical angles, which are accurate to within $\frac{1}{8}$ of a degree, I calculated the height for the largest peak of all. Altogether I took eight other bearings from minor peaks, passes, etc., and their average comes to 22,500 ft.

The case for down-grading these heights is based on the question, 'how could the surveyor have missed such a large peak?', and the fact that the acceptance of my heights seems to raise the overall height of the highest peaks in the area. I frankly do not know what to think, but until someone goes up the Ratang with a theodolite and disproves the heights given I will stick to those given on my map.

The climbing over, we began the return. The first pass was reached in three days and crossed in eight hours. Five days after this crossing we were approaching the second pass, across the main Himalayan Divide itself.

In 1952, J. de V. Graaf and Kenneth Snelson had explored and climbed in the Dibibokri Basin, to the south of the Divide. In Snelson's article,[3] he says they crossed or reached the crest of altogether three passes from the Dibibokri Basin to the main Parahio valley. When in 1955 Braham and I had seen an obvious pass at the head of the main Parahio valley from our 19,720-ft. peak we had naturally assumed it to be one of Snelson's. It seemed to fit in perfectly with his description of the first pass they crossed. We were making for this pass now.

I was a little alarmed when we saw that there could not conceivably be another pass, much less two, out of the Parahio. But we pushed on hopefully. The walk up the last glacier was long and unpleasant. We had very heavy loads—the porters over 100 lbs., the rest of us 70 lbs.—the ice seemed to go on for ever, and it was

[3] See *H.J.*, Vol. XVIII, p. 110, *et seq.*

bitterly cold. Rapidly descending clouds heralded an approaching storm. The porters, even the gallant Rikzen, needed constant encouraging, and we were not much better off. Only my promises of 'the warmth and luxury of a valley camp' kept everyone going; for Snelson had written that it was only a few hours from the pass' top to the main Parbati valley.

I reached the top first and looked down the far side, searching for the 'steep though feasible slopes' which I had promised the boys. Something was very wrong. No steep but feasible slope here. We were at the top of a terrific precipice, fully half a mile deep. A long way below we could see a huge glacier.

The porters arrived, looked over, and sat down in despair. There could be no doubt about it, they said, we would all die together. It seemed as if they were not far wrong. Retreat was hopeless, for we had only enough food for one more meal. It was too cold to stay where we were, postponing a decision until the morning. Somehow we must get down the cliff-face.

While the others went through the loads, throwing out the last vestiges of luxury, I descended alone to look for a route. I found that by doing an enormous Z across the face of the cliff we could reach a good ledge 600 ft. down. Gathering our forces we began the descent. We moved with the utmost care, for a slip could never have been checked. In 90 minutes we reached the ledge, which was just wide enough to accommodate three small tents. The storm broke and for most of the night it snowed. Mercifully, the ledge was out of the wind.

It had cleared by the next morning and over breakfast, the last of our food, we tried to piece together our whereabouts. Obviously this was not one of Snelson's passes. Equally obviously, there were no passes at all from the main Parahio valley to the south. Where, then, were we? There were magnificent peaks all around us, but none were familiar. Or were they? I rummaged in my rucksack and brought out the photographs and article I had irreligiously torn out of my *H.J.* before leaving Manali. There could be no doubt about it. There, only a few hundred yards away, was the Dibibokri Pyramid. The glacier below must be Snelson's main glacier.

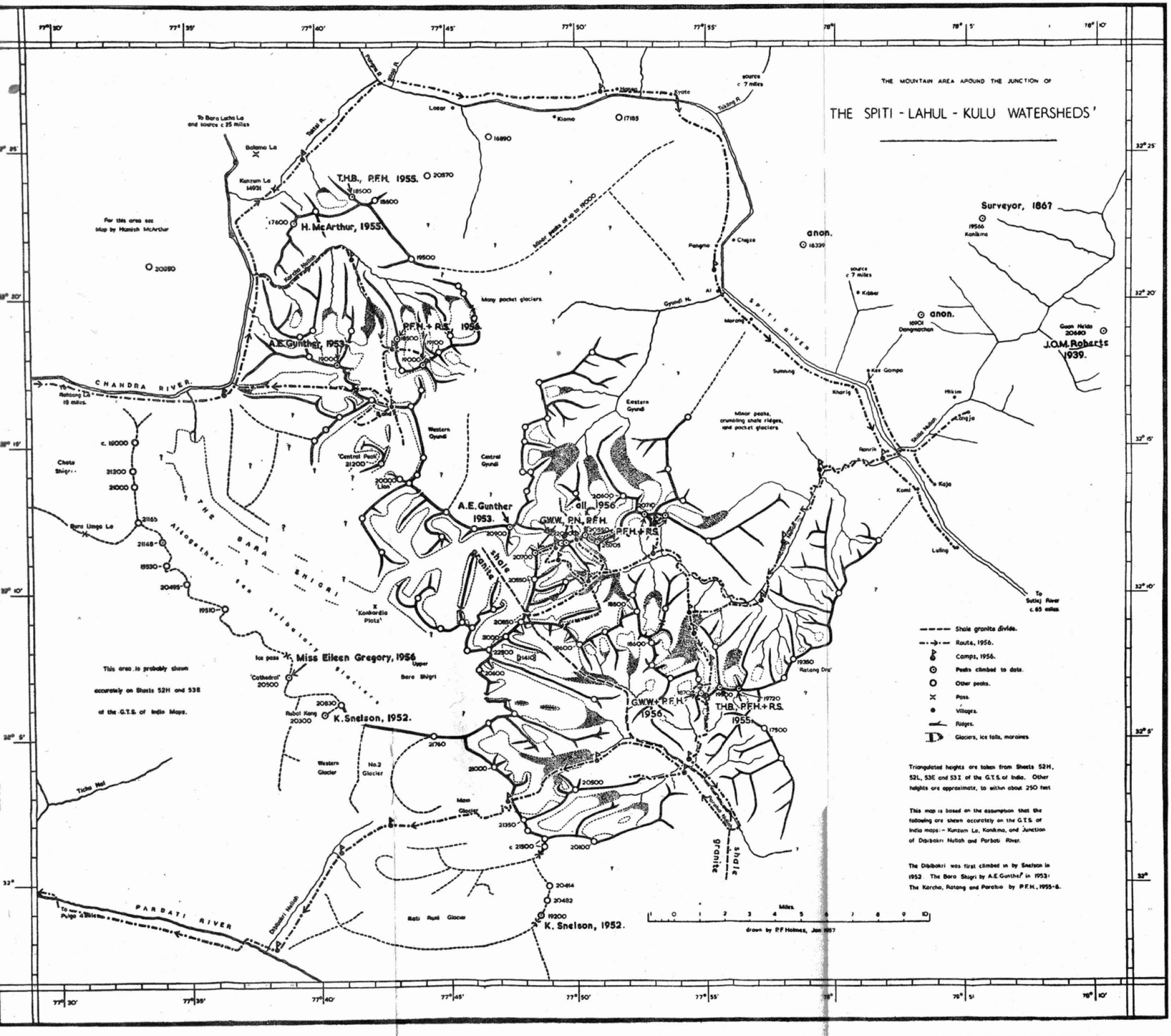
A look around, then and later, showed that both Snelson's map and the Survey map on which it is based are accurate—south of the Divide. But neither bears any relation to the ground on the Spiti side of the Divide. Snelson's passes do cross into a tributary of the Parahio, for it is a very wide valley, but they do not cross into the main branch. The fault lies entirely with the Survey map,

on which, reasonably enough, Snelson based his own map. The former seems to have been drawn entirely from imagination on the Spiti side.

Instead of four hours it took four days to reach the Parbati. For two of them we were without any food whatsoever. Swollen streams and our own exhaustion slowed us down. Just as we were wondering if we would collapse from hunger a flock of goats, out to graze for the summer, appeared above us. A wild chase and we caught one. Our one remaining knife was too blunt to cut its throat, so we had to strangle the poor beast.

It was a weary but happy party which descended the Parbati valley. Too exhausted to appreciate its beauty, we were intent only on getting back to Manali and the luxury of Sunshine Orchards. In spite of an adventurous and alarming ending, the expedition had been thoroughly enjoyable and reasonably successful. Twelve passes had been found, though the last two barely rate as 'passes', and ten peaks had been climbed. This in spite of the fact that we had successfully followed the atrocious weather wherever it went.

A word must be added about the superlative quality of our Ladakhi porters, both in 1955 and 1956. Jolsun is as strong a man as I ever wish to see; Angrupp and Jigme are uncomplaining and helpful men-about-the-camp; Sunom's sense of humour and fine cooking make him invaluable. All four are in addition excellent load-carriers. But Rikzen is in a class by himself. We inherited him from another expedition in 1955, and he came with Trevor and me to every summit that year. This year, on more difficult climbs, he blossomed forth into a first-rate mountaineer. It is certain that, locally, Ladakhi porters like these will soon replace imported Sherpas. They are less expensive, more willing, less sophisticated and just as dependable.



By courtesy of the Editor, ALPINE JOURNAL

MOUNT CHAMLANG SURVEY EXPEDITION

By N. D. HARDIE

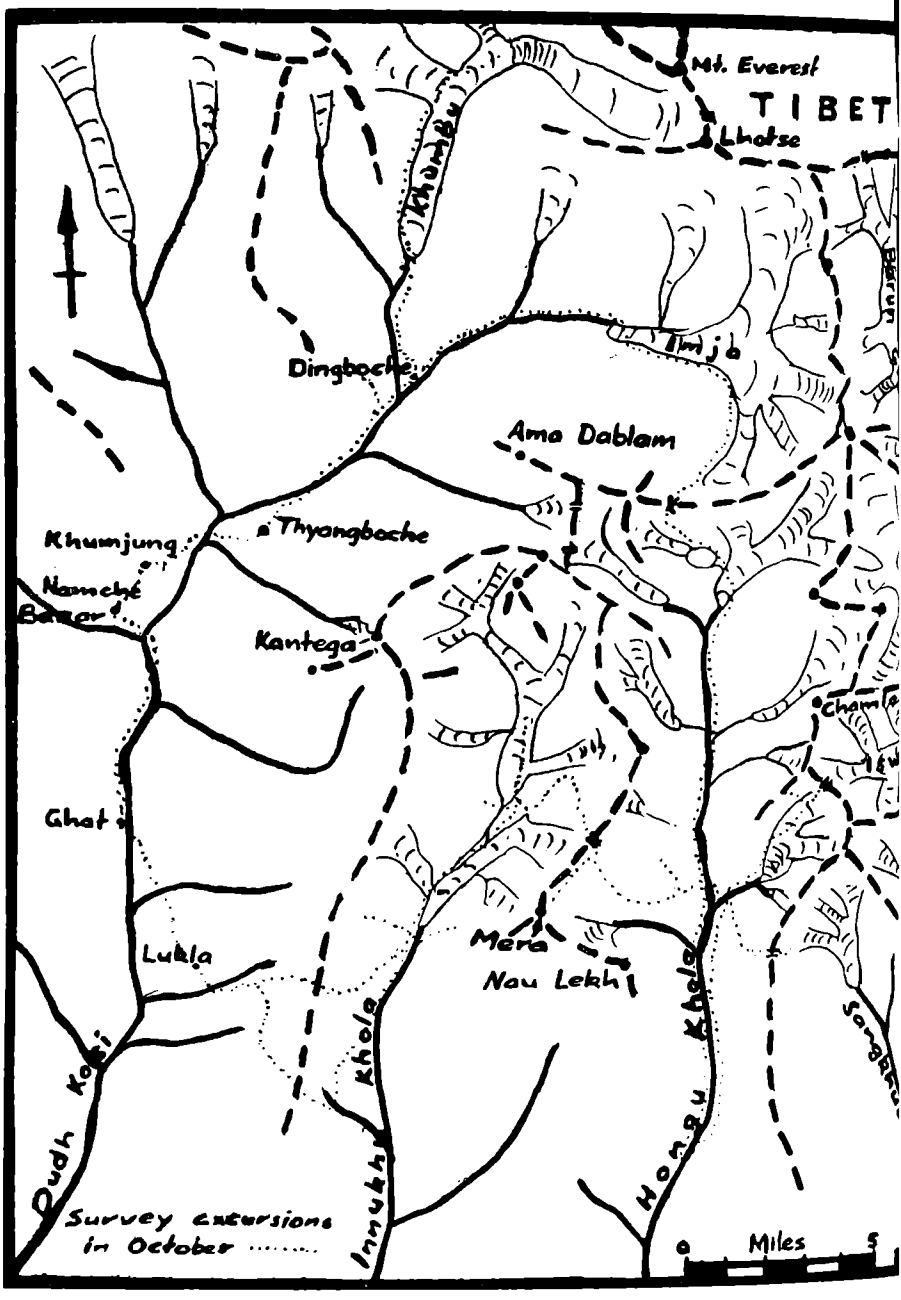
In 1953, Charles Evans surveyed a large area of country south and south-west of Mt. Everest. In the following year Evans, McFarlane and I, as part of the New Zealand Alpine Club's Himalayan Expedition, recorded a south-easterly portion in the Barun, Iswa and Chhoyang valleys. Between these two areas are the Hongu and Innukhu Khola, immediately west of Mt. Chamlang, 24,012 ft. Major J. O. M. Roberts had made the only extensive visits to these valleys when he climbed Mera peak for the first time and located the head of the Innukhu.[1] In the autumn of 1955, I wished to survey all the ground covered by Roberts—and more if possible. The Mount Everest Foundation gave some greatly appreciated assistance for survey purposes and these became our primary objectives. High in second priority was my desire to live in a Sherpa community over a longer period than is available to an ordinary climbing expedition.

From the time the Kangchenjunga Expedition 1955 left its Base Camp, I was to be a free agent. I therefore planned to travel westward from the Yalung glacier with a Sherpa trio, keeping as far north as possible in Nepal, in order to carry out an examination of the approaches to the country to be surveyed in October, and to visit some of the lesser known Arun and Yangma villages.

On the 6th of June, at Tseram, I sat on a hill and watched the Kangchenjunga party disappear southward into the monsoon mist. I was soon persuaded to move onward by the three Sherpas, Urkien, Gyalgen and Aila Tensing, who were anxious to reach the bright lights of Ghunza (the men of the village were escorting Evans' party to Darjeeling). Heavily laden with the larger expedition's loot, we climbed the pleasant flower-decked passes that separated us from that village, and there in two days, we tasted the luxuries of fresh food and enjoyed the fragrance of the pine forests.

In two further days we arrived in Walungchang, so accurately described by Sir Joseph Hooker over 100 years ago. He commented that the village was overcrowded, and pigs roamed the filthy tracks between the houses. From there we moved north, until just short

[1] See *H.J.*, Vol. XVIII, p. 59.


Mt. Everest
TIBET
Lhotse
Khumbu
Imja
Dingboche
Ama Dablam
Khumjung
Thyangboche
Namché
Kantega
Ghat
Lukla
Mera
Nau Lekh
Dudh Kosi
Imukhu Khola
Survey excursions in October .....
0 Miles

of the Topti La where a west-bound yak track was followed leading over a series of passes in the Lumba Sumba Himal. Various Bhotia groups graze their yak in the high basins in this range, and their hospitality was appreciated by our party, especially as we carried no European food apart from coffee.

Soon we passed through Thudam, the village which thrives on a wood-pulping industry, by breaking down junipers and pines, then exporting the pulp balls or the paper to Tibet. Another pass and another rain-storm and we were following the Pila Khola to its junction with the Arun below Ritak. The west bank of the humid Arun was followed downstream for five hungry days. At this time of the year the new crops were not quite ripe, and last season's surplus had been consumed by the coolies of the French Makalu party, who were about three weeks ahead of our group. After many precarious river crossings the Sangkhua Khola eventually appeared, and here we diverted upstream. On most maps this river is shown wrongly—rising at the summit of Chamlang. The Iswa and Hongu drain the complete Chamlang south face, and the true head of the Sangkhua was a problem which I hoped to settle. I recorded much of the lower stretches of that river, but in monsoon conditions it was impossible to see the headwaters. I would approach them from the north later in the year.

Travelling westward again we climbed to a Sherpa village below the Kemba La, and here our stomachs were tested to the utmost with copious quantities of potatoes, wild vegetables, yak products and chang. On top of the pass, one of the most beautiful viewpoints in Nepal, I found Gyalgen eating the leaf of a flower. 'I found a new kind of plant. Is it poisonous?'

The heavily populated lower Hongu had little food, and the inhabitants, with tightened belts spent much of their time keeping the langur apes away from their advancing crops. Next the Innukhu bridge had to be rebuilt before we could cross it, and then no difficulties were encountered right through to Namche Bazar and Khumjung where our arrival fortunately coincided with the last day of Dumji. The crossing from Tseram had taken twenty-six most enjoyable days. After enjoying the festivities for a time, we suddenly became aware that the news of the one casualty on Kangchenjunga had not reached the village, although some of us from the expedition had been in correspondence with the Namche Bazar check-post.[2] The news cast a tragic shadow over the district for a week until the remaining Kangchenjunga groups came home.

[2] Pemi Dorje, a high-altitude porter, died at Base Camp on May 26th from cerebral thrombosis.—ED.

I based myself in Khumjung for the next two months. Between the various summer festivals I made excursions up the Bhote Kosi, Chola Khola and Dudh Kosi, as well as eastwards to the Innukhu. For a time I lived with a yak-herd, tending his animals from day to day, and moving on with the family when it was time to transfer to another area of pastures.

At the beginning of September, with Urkien only, I went out to Raxaul, where I was joined by my wife and A. J. Macdonald of New Zealand. We returned to Sola Khumbu, having to take the high route above Junbesi owing to the not unusual absence of bridges over the Dudh Kosi. The arrival of the reinforcements was meant to coincide with the end of the monsoon, but the latter dribbled on into mid-October.

While Enid took up residence in Khumjung, Macdonald and I descended to Lukla, and with the assistance of our three permanent Sherpas and three temporary men we loaded ourselves with ten days' supplies to be taken into the Innukhu. On the way out of Lukla I passed one of our new recruits sitting on the track. I hurried him on. Two hours later he pointed to a rock, explaining that it was the last possible camping place before the pass. I refused to believe him, and kept going up. The man called out, 'We must stop. I have no food.'

'Come on, you can share ours.'

'I have no boots. I can't cross the snow pass.'

I asked, 'Have you no yak hide boots?'

'My mother is making them. If we stop here for the night she will bring up my boots and food.'

I groaned, and refused to stop for two more hours. Three hours after dark the man's mother came into camp carrying all that was required, and their cooking went on far into the night. Next day I noted that the boots were removed on the snow pass. On another occasion one of my coolies was observed to be stitching a three-inch split in his heel with a darning needle and a length of string. It was there that I parted with my gym. shoes.

We made a temporary base at Tangnuk (Lungsuma), a summer village for Lukla yak-herds. The deserted houses, Mani walls and a decaying Gompa indicated more than a temporary summer residence in the past. Apparently there was once a permanent settlement of Sherpas in Tangnuk, but after two successive winters resulting in severe yak losses, the village reverted to one for summer occupation only.

After many frustrating days of poor visibility, Macdonald and I were able to make observations of most of the features of our

valley, and then it was time for me to ferry in more supplies. A local man and I, by taking the high route over a Col too precipitous for yak, managed to reach Lukla in seven hours—a very different story from the two long days required when travelling under load along the yak tracks. As previously arranged, my wife descended from Khumjung to Lukla on the day after my crossing. She returned up the Dudh Kosi as soon as I had taken on the supplies which the survey group would need for a week in the Hongu.

We enlarged on the preliminary work recorded by Roberts, but the complicated topography was difficult to unravel. The winding and steep-walled valley permitted few observations of fixed positions from which to extend the survey. The existing map shows a large tributary of the Dudh Kosi draining the northern slopes of Mera peak, having its outlet close to Mingbo further north. In fact this area, some 20 sq. miles, is drained from the south, flowing into the deep gorge of the Innukhu.

Eventually the remote corners were visited and it was time to cross to the Hongu. Macdonald and I, with five Sherpas, carried all our supplies to the summit of Mera La in one lift. Through the thick mist on the pass we saw 80 yak being driven out of the Hongu. Their owners reported that winter was settling in already, and they were retreating two weeks ahead of their usual date. Many of the calves were so small that it was obvious that the Sherpas had not been completely successful in their breeding controls, which aim to promote births in June, the first month of the monsoon. From the pass our quintet descended to the Hongu, while Macdonald and I carried a camp about 1,000 ft. up the spur of Mera peak. We hoped to repeat the climb done by Roberts, and we had the theodolite with us, intending to use the summit as a survey station. The weather next morning prevented any movement above our camp. A foot of snow fell in three hours, and we had no alternative but to hurry down to the Hongu and join our Sherpas who were unable to proceed with the packing of stores over the river owing to a dense fog.

For three mornings the weather was fine, with a snow plume blowing southwards from the summit of Everest. Macdonald and Urkien carried a camp up the Hongu tributary south of Chamlang, and then climbed a peak commanding a fine view of the Hongu and upper Iswa basins. They also ascended the Col to the Iswa. This point had been reached for the first time in 1954, when the Todd and Evans parties from the New Zealand Himalayan Expedition climbed to it from the east. The delicate flutings on Chamlang are a fearsome sight from this angle.

Meanwhile Aila and I descended the Hongu until we were below the Col giving access from that river to the Sangkhua to the south-east. We practically sprinted to the icy Col to beat an advancing cloud bank by a few minutes. From the top I had a glimpse of the spurs which lead down into another unrecorded corner, and I was able to see most of what I had missed from the lower part of the valley in June. The Sangkhua has a deep and hostile gorge, but above the bushline we saw a delightful grassy river flat dotted with sturdily built shelters. The usual access to the Sangkhua is from the spur separating it from the Chhoyang, and the animals which graze there are owned by Bhotias who live on the west slopes of the Arun.

From the Sangkhua Col I climbed a snow summit to the south seeking a view which was not forthcoming. After this, a day was spent in going down the Hongu, well into the heavy forest and the main gorge. A track exists high on the west side of the gorge and this is sometimes used by Sherpas living in the vicinity of the Shutki La.

After the lower Hongu had revealed its secrets, Macdonald and four men left to return over our inward route, and again attempt Mera peak. Gyalgen and I, loaded with equipment and the theodolite, advanced to the head of the Hongu to join our surveys with those of Evans in 1953. This northward journey was on the only perfectly clear day until we were within a week of Katmandu. Chamlang, impressive from all angles, has a minor weakness in its line of defence when viewed from the west. What a pleasant expedition it would be for a small competent party to come up the Hongu, climb Sangkhua and Iswa peaks as aperitifs and acclimatizers, and then press Chamlang from the Hongu.

Fresh snow plastered the Ambu Lapcha, the pass at the head of the Hongu, and temperatures were low. Icebergs, breaking away from the parent glaciers, and moved by the wind across the inhospitable lakes, gave an impression of 78° latitude instead of 28°. Gyalgen had an off day, and I found myself bowed under a 70-lb. load. The climb up to the pass was moderately easy. We followed a single line of tracks, having footprints about nine inches long, and they were so well placed for an ascending mountaineer that I assumed Schneider, the surveyor of the Lhotse party, had been into the Hongu as he said he would do at the end of the monsoon. The north side of the pass was thickly plastered with snow, and it bore no sign of the well-defined ledges and scree tracks of the previous year—nor were there prints of the person I imagined to be a week or so ahead of me. With the utmost care we stamped

Photo N. D. Hardie

MOUNT CHAMLANG, 24,012 FT., AND THE UPPER HONGU LAKES FROM THE AMBU LAPCHA.

Photo A. J. Macdonald

THE MERA MASSIF FROM THE INNUKHU.

a downward track and heaved a sigh of relief when we were again on firm ground.

The familiar Imja was descended through deserted Chukhung to Dingboche, where I had the good fortune to see Schneider. I was astonished to learn that he had been nowhere near the Ambu Lapcha. I made further enquiries and the last known crossing was at the end of May when Sherpas left the French Makalu Expedition to go home the direct way. I am unable to guess at the origin of the prints I saw, nor were the impressions clear enough to give a more detailed description.

My wife was the next caller at Dingboche. Together we ascended the Chola Khola in search of the Lhotse Expedition. After camping at Lobuje we went to the Khumbu glacier and walked up it to the foot of the icefall. However, we saw no one. The whole party was in the Western Cwm at the time. Down the valley we stopped a day in Thyangboche where we were entertained by a monk who showered all kinds of delicacies on us, but at the end of the day he had to explain that in no circumstances could my wife stay under his roof for the night. He offered me a fine bed, which I declined on the grounds that I must keep the leopards away from my wife, outside under the stars. We slept in the monastery courtyard, to be disturbed from time to time by two yak, also there to seek protection from leopards.

Unfortunately October was drawing to a close and it was time for our party to reassemble in Khumjung and prepare for the outward journey. Macdonald had encountered the same bad snow on Mera peak as I had struck on the Ambu Lapcha, and he had wisely retreated, attempting no more peaks until he reached the Dudh Kosi-Innukhu Divide where Aila and he climbed two fine ice peaks of about 19,000 ft.—again for survey purposes.

We went out to Katmandu via Jubing as the bridge there had been repaired. On the last few days the weather was perfect, and the peaks to the north always glistened under a brilliant sun. Katmandu was reached on the eleventh day from Khumjung. Here there was bad news for me. While I had been living in Khumjung my Leica, without its lens hood, had at some stage been pointed at the sun. A pin hole was burned through the focal-plane shutter, and it produced a neat white disc in the middle of all my colour photographs. However, there was much satisfaction with the ground covered in the survey, the whole idea of moving about with a light mobile party, the amount of material gained about the Bhotias and Sherpas, and the joy of spending most of a year in the high hills.

TWO VALLEYS IN NAGIR

By C. H. TYNDALE-BISCOE

THE western end of the Great Karakoram in Hunza and Nagi used to be difficult to visit for political and geographica reasons but it is now one of the most accessible parts of the Kara koram. Regular air-services from Rawalpindi to Gilgit, and jeep roads penetrating far up the valleys beyond, enable one to ge into the mountains quickly and easily, so that it is likely to becom a popular region for the small expedition, like ours, organized i Pakistan.

I. F. Bennett and I planned to visit Gilgit for our summer vaca tion and, independently, R. L. Oliver and G. B. Westwood wer each hoping to arrange climbing trips there in July or August 1956 By good fortune we found one another and decided to go for thre weeks up the Bar Valley from Chalt and climb whatever we coul find. The map showed a number of peaks between 18,000 ft. and 22,000 ft. and a possible objective for us in Kampire Dior, 23,434 ft Bennett and I intended to stay on after the other two left, to do further exploring and some biological collecting. To our great regret Westwood at the last moment was unable to come, which curtailed our plans for Kampire Dior.

Through the generosity of the Pakistan Air Force, Bennett and I with all our equipment and food were flown to Gilgit in a service aircraft on July 4th, and Oliver followed the next day in a civil aircraft. We flew between the high rock walls of the Indus Valley and then around the cliffs of Nanga Parbat. Then we enjoyed some spectacular flying as the plane was made to circle several times in one of the narrow valleys in order to drop supplies to an isolated village, before flying on to Gilgit. A 30-mile drive by jeep took us from Gilgit to Chalt in Nagir State; a green oasis in the desert of steep barren hills, which stands at the confluence of the Bar and Hunza Rivers. It had been our intention to keep the expedition light and to carry everything ourselves, as Oliver and I have been accustomed to do in New Zealand, but not knowing what conditions to expect and burdened with the thought that climbing in the Karakoram required extra precautions, we left Chalt with 6 porters each carrying 50 lb., ourselves carrying about 40 lb. each and the lambadar of Chalt carrying an ice-axe.

On the first day we passed through several small villages where apricots were ripe but beyond Bar village, where we spent the night, the valley becomes utterly desolate. In 1947, Tilman explored the

Kukuay glacier, and reached a 19,000 ft. pass leading to the Batura glacier.[1] In 1954, the German-Austrian Karakoram Expedition came up this valley and explored the Baltar glacier.[2] Also in 1954, the Cambridge University Expedition to Rakaposhi spent a fortnight in this region for acclimatization before going to Rakaposhi, but they turned off to the west before Bar and climbed in the Kerengi Valley.[3]

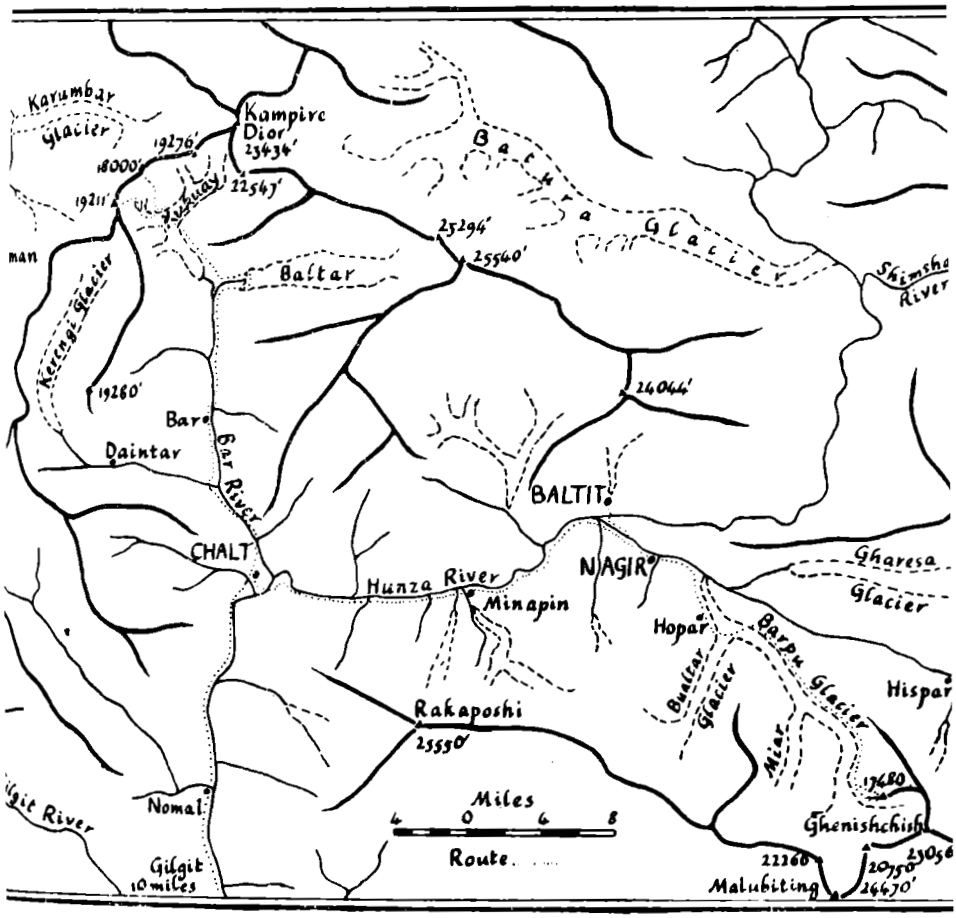


FIG. 1. SKETCH MAP OF NAGIR AND SURROUNDING COUNTRY.

[1] *Two Mountains and a River*, by H. W. Tilman, Camb. Univ. Press, 1949, p. 95, *et seq.* See map on p. 101.

[2] *Himalayan Journal*, Vol. XIX, 1955-56, p. 120, *et seq.* Also see Bibliography 8; this contains the preliminary report of the scientific work of the joint German-Austrian Himalaya-Karakoram Expedition, 1954, which includes a new topographical map.

[3] *Himalayan Journal*, Vol. XIX, 1955-56, p. 118. Also see Bibliography 1.

According to the Survey of Pakistan map, two glaciers meet 10 miles above Bar and we thought we would be able to cross the eastern one, the Baltar, and proceed up the western Kukuay glacier towards Kampire Dior. However, both glaciers have retreated up their respective valleys since the area was surveyed and we were obliged to make a four-mile detour to cross the snout of the Baltar glacier before we could walk up the Kukuay. The glacier was covered with loose moraine but we were spared the frustration of walking up it by one of the porters who led us up the moraine wall to grassy slopes above and we walked along these all day, finally camping amidst birch trees growing in the ablation valley above the glacier. The following day we had to drop down to the glacier at a point where a subsidiary glacier, not marked on the map, joins the Kukuay glacier from the west. The porters would not go on up the main glacier as we had hoped they would, because they said their footwear of raw-hide thongs was not sufficient protection when carrying loads; so we were obliged to go straight across the glacier and make our Base Camp in the ablation valley on the opposite side, again among silver birches. We paid off all the porters except one, and the lambadar stayed to keep him company. As the Kukuay glacier extends for several miles further, and as the porters had refused to carry our camp further, we reluctantly abandoned any attempt on Kampire Dior and decided to concentrate on a range of peaks surrounding the tributary glacier to the west. This decision was strengthened by the short time available to Oliver and the reduced size of the party due to Westwood's absence.

We chose for our first climb a peak of about 18,000 ft., which rose above our camp but was not marked on the map. The three of us left camp on July 10th, leaving the porter and the lambadar behind, and walked up the ablation valley through pleasant silver birchwoods until the valley abruptly ended at the edge of a deep cut-off. The packs had to be lowered 100 ft. down this, and two hours passed before we were up the other side, climbing towards a small stream that we intended to follow to the grassy alp above. The stream fell steeply by several waterfalls, so we chose the rock by the side of it, but the angle deceived us so much that we spent 6½ hours climbing 500 ft. The difficulty of the rock forced us to climb each pitch and then haul up the packs separately, so we were thankful to have Oliver's experience of English rock-climbing, which enabled him to find a route to the top and out to fairly steep slopes covered with Alpine shrubs and flowers. On our second climb, Oliver and I saw from the glacier an easier route to the

upper levels further up the glacier which would not have entailed nearly such arduous climbing.

We camped among bushes at 12,000 ft., the three of us in one Meade, and made a meal of rhubarb which was growing there in profusion. The next day we carried our camp to 15,000 ft. on the snow névé below our peak. From the camp we saw Rakaposhi rising above the nearer peaks of 18,000 ft. and the two Hunza peaks of 25,000 ft., and we enjoyed once again, after many months, the boundless calm of an evening in the high hills.

We left the tent at 4-15 next morning and cramponed across the névé to a short steep couloir which led out to a high snow-basin under the peak. It was separated from the main south ridge by a schrund, which we passed, and we rested on the ridge overlooking our camp. So far the snow had been in excellent condition, but the rest of the way along the south ridge was a laborious stretch in very soft snow, which at times let us down to our waists. We reached the top at 10-30 a.m. and the two altimeters registered 100 ft. above and below 18,000 ft.

From the top we were able to see the shape of the main Kukuay glacier and also the névé of the glacier to the west and these are shown in the sketch-map as we saw them then. Kampire Dior is set well back and would require more than three weeks for an attempt, but it is not nearly so attractive as a beautiful snow spire of 22,547 ft. nearby, which reminded me of photographs of Nilkanta. Incidentally, there seems to be some doubt about the exact identity of Kampire Dior. The peak of that name on the Survey map does not appear to be very significant and no one we spoke to in Nagir had heard of it, although there is a village called Kampire Dior in the Chapursan valley north of the Batura glacier. Later, we were told by the Governor of Gupis that Kampire Dior is a peak considerably further north in the Hindu Kush and could not possibly be approached from the Bar valley. The Governor is a keen hunter and seems to know the country well, and the absence of a prominent peak in the area we saw tends to support his view. Without being properly equipped for surveying one cannot offer much useful information, but our conclusion is that the Survey map in the Kukuay valley is fairly inaccurate and needs considerable revision, a conclusion supported by Tilman, whose sketch-map of the Kukuay glacier in *Two Mountains and a River* agrees very closely with our observations.

The descent was almost as laborious as the ascent and we were all very tired before we reached camp at 4-15 p.m. The weather began to deteriorate and we prepared the tent for a storm but none

developed, and the next day we returned to Base Camp by the way we had come up, arriving at 7-30 p.m. after spending 4½ hours on the descent of the stream and some more at the cut-off.

We rested at Base Camp for a day and ate fresh ibex meat, shot by the porter while we were climbing. We now had four days left before Oliver had to return, and we debated whether to go up the Kukuay glacier as far as possible or to attempt a peak of 19,211 ft., south of the one we had already climbed. We chose the peak, so Oliver and I left the next morning carrying 40 lb. each. We retraced our steps as far as the cut-off where we dropped down to the glacier and walked up it for four miles. Unlike the Kukuay, this one was free of moraine and it was very pleasant to walk up its clean surface. We left the glacier above a small icefall and climbed a spur which led to the upper névé and avoided the intervening icefalls. The spur was covered in a profusion of flowers and shrubs, a most beautiful sight and a delight to climb. Above the flowers, winter snow was still lying and we kicked steps up this for 1,000 ft., and reached the névé, an extensive area on several levels surrounded by four peaks of over 18,000 ft. We camped on this in the shelter of a rock outcrop and enjoyed a long evening in the stillness, seeing the sun set on the Hunza peaks and being surprised by small birds going to roost in the cliffs far from vegetation.

Oliver rose at 1-30 a.m. to make breakfast and we left the tent at 3, and cramponed across the first level of the névé by torchlight, finding a way through the crevasses quite easily. By first light we were looking down on the second level of the névé, which we had to descend to and cross before we could reach a ridge, which led up to a subsidiary peak of our objective. We found, on gaining this ridge, that we could attempt the peak either by going over the subsidiary peak, or by crossing another snow level and climbing straight up the peak itself. This snow level is not part of the same system we had been crossing, but pours down to the west into Ishkuman and our ridge is, in fact, the watershed. We chose to go up the subsidiary peak and began plugging steps up the snow of the ridge, which was soft on top with a layer of ice and then soft snow underneath; very awkward to climb and difficult to belay in. We felt the height a bit and climbed slowly so that it was noon before we reached the top of the subsidiary peak at 18,400 ft. Storm clouds were gathering over towards Bar and occasional thunder rumbled in the hills, and this, coupled with our lassitude and the prospect of several more hours of soft snow, turned our thoughts towards the descent. We were not keen to retrace our steps up the ridge and

ooked for an alternative way down a steep ice couloir, but after nuch vacillation went down the way we had come up. It was much asier to descend and we were soon walking back over the firm névé to the tent and wondering why we had given up so easily.

During the night the tent protected us snugly from a thunderstorm, but in the morning we had to pack up in cold rain and eturn to camp. Four porters arrived at Base Camp shortly after is and the next morning we loaded them up and, carrying light packs ourselves, started back for Chalt. On the way we met some shepherds who gave us curds to drink and fresh bread to eat and one of the porters bought a ploughshare from them, carved from the trunk of a birch tree. At Chalt, Oliver returned to Gilgit while Bennett and I spent several days in idleness before moving on to Nagir and the second part of our trip.

Jeeps do not yet go beyond Chalt, although the road to Minapin has been built, so we hired two donkeys and walked in comfort along the well-levelled road. The journey to Nagir from Chalt takes two days and the way is mostly through cultivated land, in contrast to the Bar valley, and everywhere apricots had been laid out on flat rocks to dry and the wheat was being harvested. Cold mountain water flowed abundantly in the irrigation channels, turbid with a fine mica suspension. For drinking, most of the suspension is removed in settling tanks, which are roofed over to keep the water cool. On the way we passed through the village of Tol, which was the site of a famous action in the Hunza-Nagir war of 1891.[4] The Nagiris were defending Tol from very good defences overlooking a gorge and these defences were stormed by 100 Gurkha and Dogra troops led by two British officers, who climbed the conglomerate cliffs at dawn and overpowered the Nagiris from above, thus concluding the war. The climbing must have been of a severe order and meanwhile they were being harassed by stones thrown down from above. All along the route the huge north face of Rakaposhi kept appearing in each valley opening, and we wondered how the British-American Expedition were faring in their attempt on the mountain. The big peaks in this region are so very foreshortened by one's proximity to them that they do not look as impressive as one is led to believe they should. Later on, when we got higher and further from them I began to appreciate their colossal proportions.

We intended to spend some days at Nagir township because I wanted to renew acquaintance with the Mir, who had been a

[4] *See* Bibliography 2.

student of my father in Kashmir; and then we hoped to spend two weeks at the head of the Barpu glacier. There I planned to collect plants and animals living above the tree line, particularly the small mammals, and to make a reconnaissance of Ghenishchish, 23,056 ft., which is an impressive peak on the Barpu-Chogo Lungma watershed clearly visible from Nagir. Ghenishchish means the Golden Mountain in the language of Nagir, and it is certainly an appropriate name. The whole north face, 10,000 ft. high, is composed of yellow-white rock, devoid of snow, and at Nagir it catches the evening light and glows with an ineffable beauty. In the daytime it made for us the background to a Van Gogh-like picture of ripening wheat fields, stone walls and tall green poplars.

In 1939, Shipton's party visited the Barpu glacier briefly [5]; Scott Russell to study the plants, and Fazal Ellahi to make the survey map. Shipton and Scott Russell went to the head of the glacier to look for a route through to the Chogo Lungma glacier, but considered that the great wall of ice-covered mountains which block the head of the Barpu offered little chance of a pass. The Workmans explored the head of the Chogo Lungma glacier in 1903, and climbed some distance up a peak that they named the Pyramid Peak and estimated its height to be 24,500 ft. [6] From its position on their map and its configuration in their photographs, I think it must be Ghenishchish and their height was probably an overestimate, as their heights have generally been found to be. If their peak is in fact Ghenishchish it would appear that the main difficulties in an ascent of Ghenishchish or of a crossing from Barpu to Chogo Lungma would be on the northern side. It appears from their map that the Chogo Lungma glacier extends up to a Col at 19,000 ft. on the Nagir-Indus watershed, but as their map is much at variance with the Survey map it is difficult to see whether this Col is the same as the one that can be seen from the Barpu glacier (see photograph). If a route could be found up to the Col on the Barpu side this would be an interesting crossing to make, and Ghenishchish a fine peak to climb.

After savouring the hospitality of the Mirs of Nagir and Hunza for some days, we engaged two porters and set out for the Barpu glacier on August 4th. On our way up to Nagir the apricots had been drying in preparation for the winter; now as we approached the settlement of Hopar at 10,000 ft., they were ripe on the trees and we ate of them to excess as we had done four weeks before in the lower altitudes of Bar. Hopar is a cultivated piece of land

[5] *See* Bibliography 3.
[6] *See* Bibliography 4.

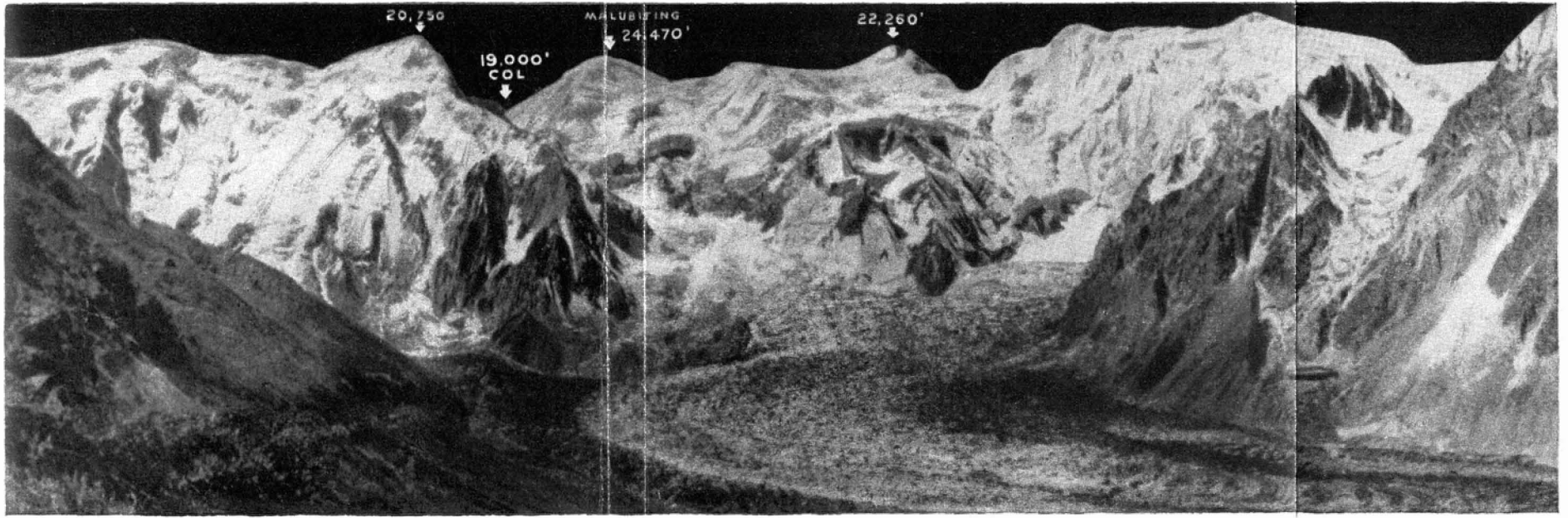


FIG. 2. THE HEAD OF THE BARPU GLACIER SHOWING 19,000-FT. COL LEADING TO CHOGO LUNGMA GLACIER.

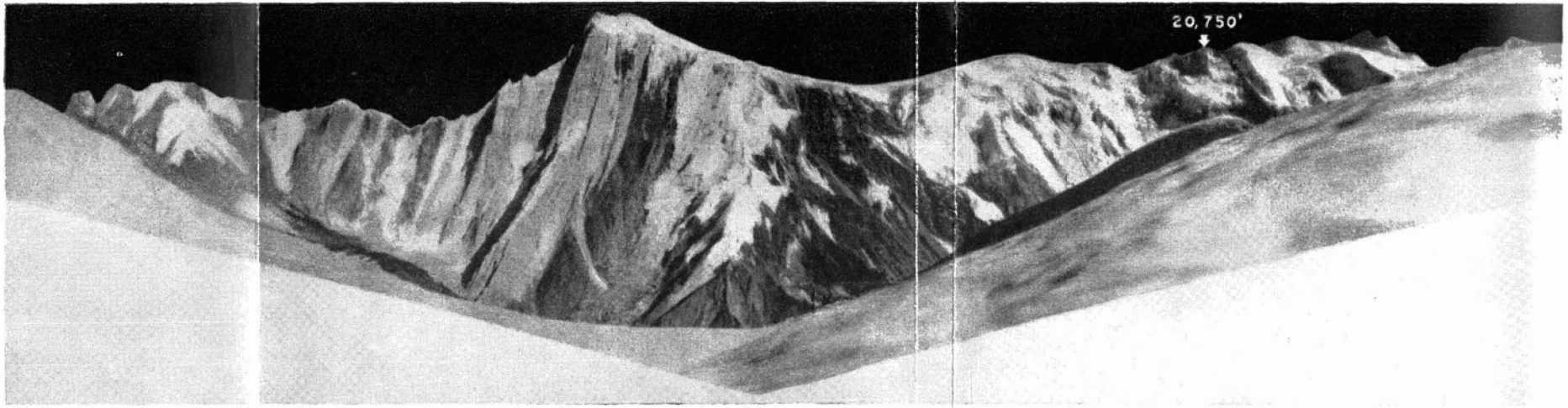


FIG. 3. NORTH FACE OF GHENISHCHISH, 23,056 FT., FROM PEAK 17,480 FT. ABOVE BARPU GLACIER.
THIS VIEW IS A CONTINUATION TO THE LEFT OF FIG. 2.

lying in a broad ablation valley between the southern mountain slopes and a large lateral moraine thrown up by the Bualtar glacier. As one comes to the edge of the moraine wall one looks down on the chaos of boulders that makes the surface of the Bualtar glacier where it is joined by the Barpu glacier. Strangely, the surface of the Barpu glacier is some 500 ft. higher than the Bualtar glacier, and the junction presents a steep face of moraine. Shipton mentions that the terminal face of the Barpu fell short of the Bualtar in 1939 but, contrary to the present-day widespread retreat of glaciers, the two glaciers appeared to be contiguous this year and we walked across both of them to gain the true right side of the Barpu. On this side an ablation valley has also formed between the hillside and the glacier but it is not cultivated. Shrub willows and rose bushes grow wherever there is water, and hares were abundant; we shot a number and they made excellent eating. Further up the glacier, juniper trees replace the willows; we made our camp among them, and I collected small mammals and the plants of the area.

On August 12th we left camp for a closer view of Ghenishchish. A peak of 17,480 ft. obscured the view from our camp, so we decided to climb this for a better view of the approach. The Barpu glacier curls around the base of this small peak and lies between it and Ghenishchish in its upper regions. It also receives subsidiary glaciers from the slopes of Malubiting, 24,470 ft. To the east of Malubiting the main divide drops to a Col of about 19,000 ft., and then rises to a peak of 20,750 ft., and then rises gradually for three miles to the summit of Ghenishchish on the eastern extremity. To the north, Ghenishchish presents a sheer face of 10,000 ft. from the summit to the Barpu glacier, but below Malubiting and the Col the mountainside is ice-covered and the only possible route would be in this region. Unfortunately, we did not get a view into the valley immediately below the Col where it looks most feasible. If Ghenishchish is to be attempted from the north it would be necessary to establish a camp at or near the 19,000-ft. Col, and then traverse the 20,750-ft. peak and the long ridge to the summit. If it is possible to do this, Malubiting might also be accessible from the same camp, and the pass to Chogo Lungma might also be crossed.

The view as we climbed peak 17,480 ft. was superb and I felt that at last I was seeing the great mountains in their true proportions. Close to us to the south were the peaks of Malubiting and Ghenishchish, and several lesser ones that rise above immense rock walls down which mud-stone avalanches rumbled incessantly to

the Barpu glacier curling away at the bottom. From the Barpu glacier one's eye was led upward again to the great peaks of Hunza in the north-west and to the Pamirs, faintly visible 150 miles away to the north.

For the most part, the climb was along a ridge of rotten rock and offered no difficulties except altitude which we both felt. The final 500 ft. was along firm snow to the rounded summit, from where we got our close view of Ghenishchish and could see the whole north face. We descended quickly by long scree slopes to Girgindil, a shepherd encampment, where we waited half-an-hour while our quart-size billy-can was filled from the milkings of twelve small nanny-goats, and then went back to our camp by moonlight. Five days later, we left Barpu and returned to Gilgit to prepare for the last part of our trip, which was to travel from Gilgit to Chitral over the Shandur Pass, 12,200 ft.

The road follows the valley of the Gilgit river, and in times past was the route taken by invaders from Chitral to Gilgit and later in 1894-95 by the British forces relieving Chitral from Gilgit.[7] The first 70 miles to Gupis can now be done by jeep, but thereafter one must walk or ride. We drove to Gupis by jeep and were entertained there by the Governor and enjoyed a pleasant evening in his company, discussing the geography of Kampire Dior and listening to him play haunting melodies on a *sitar*.

From Gupis, we rode and walked for two days up a valley which was mostly barren except for the settlement of Phandar, where the main valley is blocked by an old moraine or landslip and the river meanders through lush pastures and beneath drooping willows. Above Phandar we came out into a wide upland valley grazed by yaks, which led easily to the Shandur Pass where, as Tilman observes, are to be found three relics of the British period: a magnificent polo ground, a ruined rest-house and trout in the lake.[8]

Another march brought us to Mastuj, where we were the guests of the ex-Governor of the Province, and where we were also met by an escort of Chitral Scouts who made us travel the rest of the way to Chitral township in a more exalted manner than that to which we had been previously accustomed. Bennett remarked that, besides convicted criminals, we were probably the only people in Chitral to travel with an armed guard. The countryside of Chitral resembles Gilgit in that it is mostly barren, but where there is water it is abundantly fertile. At the township of Chitral we were met by my friend, the Commander of the Scouts, and were

[7] *See* Bibliography 5.
[8] *See* Bibliography 6.

entertained by people I had met on a previous visit to Chitral in December 1955. From Chitral we drove back to Peshawar over the Lowhari Pass, 10,000 ft., and through Dir State.

The first part of the trip up the Bar valley cost us each about £18, and the rest of the trip cost Bennett and myself £27 each, which seems to compare rather favourably with the expenses normally incurred in a trip to those parts, and would seem to suggest that more ambitious expeditions could be launched from Pakistan for considerably less than they cost from overseas. However, it is not easy to find experienced climbers in Pakistan and it is difficult to get suitable climbing equipment, the only source being that left behind by visiting expeditions. Emphasis is so often laid on the large expeditions which visit the Karakoram, that one tends to forget that there is so much there to occupy a small party and to provide a wonderful holiday at no great cost.

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ABINGER HIMALAYAN EXPEDITION 1956, TO BARA SHIGRI GLACIER[1]

By JOYCE DUNSHEATH

UP to now, those interested in Himalayan exploration have focused their attention mainly on the giant peaks but as these have fallen one by one to large-scale expeditions, the lesser peaks are coming into their own and the day of the small party of moderate means and capacity is here. Nor is this any longer the prerogative of the male, for already two women's expeditions have been successfully carried through.

When I heard that a small party of Scottish women had climbed in Nepal and reached 21,000 ft., I decided to look into the possibility of organizing an expedition myself. A whole year was to elapse between the germination of the idea and its fruition; twelve months of hard work, planning, organizing and surmounting difficulties. The first problem was to find three companions, good climbers, experienced campers, adventurous spirits who were free to leave England for at least two months and were prepared to pay a large part of their own expenses.

The first companion was at hand and ready to go—Hilda Reid with whom I had shared a tent at the Assiniboine camp of the Alpine Club of Canada in 1951. She is a theatre-sister at a London hospital and so was well qualified to look after the health of the party. She also agreed to organize the food while I studied surveying and had lessons in Hindustani.

While we were seeking two others, we began to plan where we should go. After reading articles in several journals and talking to people who had knowledge of Himalayan conditions, we came to the conclusion that the Kulu-Spiti-Lahul watershed of East Punjab provided all that a party such as ours could wish for. Mr. A. E. Gunther, who had been to the Bara Shigri glacier in 1953, convinced us that here was a worthwhile objective and we used his sketch-map as a basis for our plans.[2]

At this stage, a third conspirator was found in Eileen Gregory, a strong climber, and an enthusiastic camper. On hearing details of the proposals, she decided to give up her job as a biochemist

[1] The map, which appears on page 86 accompanying P. F. Holmes' article, shows the main outlines of the Bara Shigri glacier and its position in relation to adjoining glacier systems.—EDITOR.

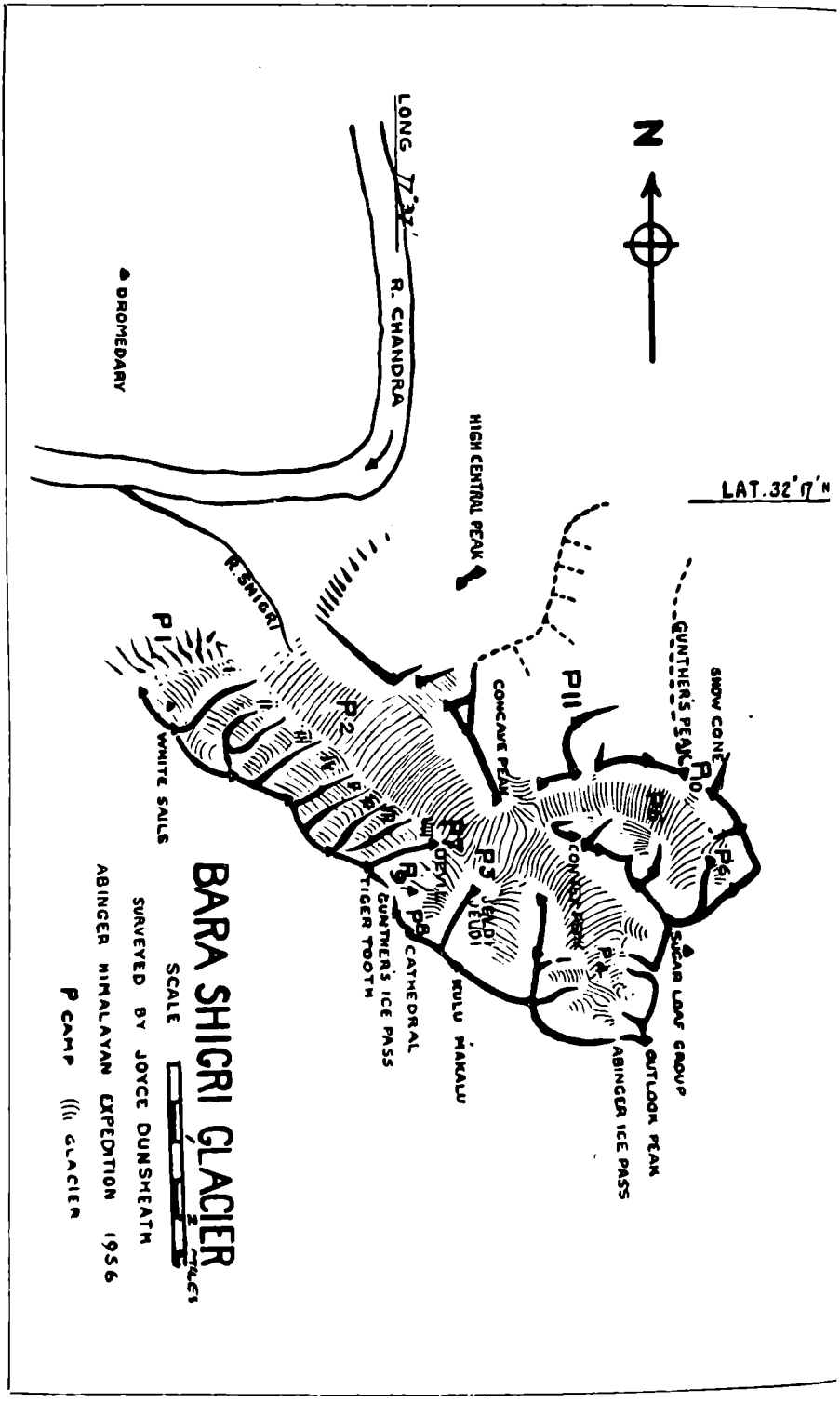
[2] See *Alpine Journal*, Vol. LIX (May 1954), p. 288.

and join us as equipment and climbing leader. We still lacked a fourth member, but in November 1955 the name of Frances Delany was given to us as an enthusiastic climber, who for some time had wanted to join a Himalayan expedition. The drawback was that she was working as a geologist in French Equatorial Africa and we could not meet beforehand.

With the party now complete and the area agreed upon, we were able to get down to details. We were helped considerably by the Himalayan Club, who arranged for 4 Sherpas to meet us in Manali and assisted with the transport of stores in India; by the Colonial and Foreign Offices, who gave valuable advice about customs and travel formalities; and by the Royal Geographical Society, who lent us surveying instruments. Major Banon, an Englishman settled in Manali, arranged for the hire of mules and local porters. Many firms provided gifts in kind, while others gave us special terms. The greatest encouragement came from the Mount Everest Foundation, who considered the objects of our expedition worthy of a substantial grant.

By working day and night, all was ready by the end of February. We travelled by different routes—Hilda and I by car; Eileen by sea, taking the equipment with her; and Frances by air from Nairobi. We met early in May at Manali, a village 6,000 ft. up at the head of the Kulu valley. Under Major Banon's hospitable roof we spent ten days sorting and repacking stores and acclimatizing ourselves after our long journey. On May 12th the Sherpas arrived. The Sirdar, Ang Tsering (Pansy) a veteran of 49, had been on Everest with Shipton in 1936; Pasang Dorje, the cook, was experienced and knew all about pressure cookers; Mingma Tsering had been to 25,000 ft. on Makalu and proved an excellent climber; and Nima Dorje had been postman at Base Camp on Makalu.

We were naturally anxious to be off but the news of snow conditions was disquieting. The Chandra valley was still filled with snow and ice and the Rohtang Pass, 13,050 ft., was impracticable for mules. Then news filtered through that the annual trek of nomads over the Hamtah Pass, 14,027 ft., had begun and we decided to change our plans. We would hire porters to carry three weeks' supplies over the Hamtah, leaving the rest to be brought over the Rohtang as soon as conditions permitted. So on May 18th, an impressive caravan of 4 Memsahibs, 4 Sherpas, 4 Ladakhis and 24 local porters set off on the great adventure. The sun was shining as we crossed the bridge outside the village and ascended the slopes ahead. On the second day, we reached the top of the pass and gazed down with some misgivings on a 45° slope covered with


BARA SHIGRI GLACIER
SCALE
SURVEYED BY JOYCE DUNSHEATH
ABINGER HIMALAYAN EXPEDITION 1956
P CAMP
GLACIER
N
LAT. 32° 17' N
LONG 77° 32'
R. CHANDRA
DROMEDARY
R. SHIGRI
HIGH CENTRAL PEAK
WHITE SAILS
CONCAVE PEAK
GUNTHER'S PEAK
SNOW CONE
SUGAR LOAF GROUP
OUTLOOK PEAK
ABINGER ICE PASS
KULU MAKALU
CATHEDRAL
GUNTHER'S ICE PASS
TIGER TOOTH
P1
P2
P3
P4
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treacherous ice. For heavily-laden porters, shod with rope-sandals, this seemed no place at all. My heart sank as I recalled tales of previous expeditions whose porters had simply put down their loads and refused to go any further on meeting lesser hazards than this. However, after fixing ropes and stationing Sherpas at intervals, all the porters made the descent without serious mishap.

We found the river almost completely blocked by ice, with here and there a glimpse of water rushing under ice-bridges and churning through ice-caves. We traversed the slopes well above the river and camped three nights on the few flat areas available. On the sixth day after leaving Manali, we were at the flats at the foot of the Bara Shigri glacier where we paid off the local porters, keeping only 4 Sherpas and 4 Ladakhis for the actual glacier climbs.

We had now arrived at a height of 13,400 ft., and we spent the next two days acclimatizing and practising our surveying.

On May 25th we struck camp and felt that at last our real adventure was about to begin. Turning our backs on the Chandra, we traversed a mile or more of moraine and started to climb the Bara Shigri. The going was hard and unpleasant for the glacier bed, over a mile wide here, had cracked over the years into a series of hills and dales up and down which we laboured. Rocks and boulders, brought down by the ice, had piled in odd-shaped masses around which we made a tortuous path; deep snow overlaid all. On our left, was a sheer rock face, but on the true left of the glacier magnificent tributary glaciers poured down one after another. Before dark, we stopped to set up camp opposite the fourth of these glaciers on top of a moraine ridge.

After a day spent exploring a side glacier and surveying, we climbed on to the centre core of the Bara Shigri (16,300 ft.). Here the glacier makes a wide sweep to the south-east leaving a short straight arm ahead. Gunther had named this Concordia; it was a mile and a half in diameter, its circumference filled with giant peaks. There was the Cathedral, a broad nave ending in a pointed spire, the adjacent Chapter House, Tiger Tooth rising in jagged outline against a rounded ice-boss, and the Devil frowning above us, his five fingers pointing in scorn at the puny mortals below. We climbed a mere 17,500-ft. pimple and took a panoramic photograph to record the area, using for the first time the camera attachment incorporating level and compass, made specially for the expedition. Glissading down its slopes to Camp III in the early afternoon, we named it ' Jeldi Jeldi ' (quickly). By now, we had seen enough to plan for the next few days and were anxious to get on while the weather held. A brilliant sun shone day after

day, but the cold at night was intense and we spent the hours between 6 p.m. and 6 a.m. snug in our double sleeping-bags on air-mattresses, our material needs supplied by the ever-attentive Sherpas.

After a day's rest in which we were busy with plane-table, cameras and diaries, Hilda and I moved up to the head of the short arm of the glacier (Camp IV). This provided perhaps the most perfect setting of the whole expedition. Our little tent was a mere speck in a vast arena of sparkling white, bounded by a steep-sided cirque of peaks. We searched in vain for a possible break until our eyes moved round to the south-east, where a promising pass gave access to a high peak. We were joined the following day by Eileen and Frances who had stayed to move Camp III nearer the bend. On June 1st at 5-30 a.m., all four Memsahibs with Mingma and Namgel set off for the Col. This rose in a series of ice-pitches up which we cut steps to a height of 18,000 ft., and looked out over the unknown Gyundi valley.[3] We were not yet fully acclimatized so Hilda and I stayed on the Col, taking a panoramic view and colour pictures, while Eileen and Frances with the porters made a first ascent of the northern buttress of Outlook Peak.

Back at high camp, we came to the conclusion that we had done all within our powers at this end of the glacier and decided to return to Concordia for an exploration of the upper north-eastern reaches of the main glacier round the big bend. This proved to be much further than it looked, and we called a halt under the shadow of the 20,000-ft. peak climbed by Gunther in 1953. Eileen and Frances, who climbed this next day from Camp V, found it difficult to reconcile his description of an enormous 'Lion Glacier', seen from its summit, with the numerous glaciers and valleys all flowing to the north.

Sixteen days had now passed since leaving Manali and it was time to expect the mules with our next three weeks' supplies, so Pansy went down to Base with all the porters. The three remaining Sherpas moved camp up to the head of the glacier (Camp VI), and we picked out a moderate summit that the whole party could climb together. However the weather, after giving us two glorious weeks, now deteriorated and shortage of fuel forced us to retreat

[3] The Gyundi valley actually lies much farther to the north-north-east. It is likely that the pass commanded a view of the Upper Ratang and Parahio valleys explored by P. F. Holmes in 1956. See P. F. Holmes' article above. —EDITOR.

to Concordia. The weather certainly improved but there was no fuel awaiting us. It was no good sitting in our tent counting our miseries however, so we planned to climb the jagged peak, 'Convex' Peak, at the turn of the glacier the next day.

Frances was not able to start as she was feeling the altitude, but the three of us were off before the sun reached the tents. After three hours' climbing in intense cold, Hilda, her hands and feet frozen, had to give up. I went on as far as the gendarme overlooking both the upper and lower glacier from which excellent views and bearings of peaks were obtainable. Eileen crawled along the sharp ridge to the summit reaching it as the sun emerged. That evening back at Concordia we burnt our only wooden box, gloomily ate our last hot meal, and got into our sleeping-bags. At 10 p.m. we were awakened from unpleasant dreams by distant shouts, and soon two figures could be discerned coming up the glacier with heavy loads. Two porters had made a forced march of 24 hours from the Chandra to bring us fuel and food. But they also brought a message from Pansy asking one Memsahib to go down, so early next morning Hilda and I reluctantly faced the descent. After eight hours of hard going, we reached the site of the old Base Camp, only to find that the tents had disappeared. A Sherpa was waiting to give us the cheerless news that the mules had had to come along the north bank of the Chandra and as there was no means of crossing, all packages were being brought across on a *jhula*, a wooden cage suspended on a double rope which could be pulled backwards and forwards by a man at each end.

Hungry and tired, and unable to face a further seven miles at this late hour, Hilda and I decided to pitch our tent there amidst the boulders and debris now uncovered by the melting snow, even though this meant going supperless to bed. Early next morning we completed the journey to Karcha, and immediately despatched two porters to Concordia with food for Eileen and Frances so that they could continue their explorations. While the porters ferried loads to the glacier, we took the opportunity to go further upstream towards the Kunzam La,[4] an important pass of about 15,000 ft., where, through the prayer flags fluttering in the breeze, we looked out into Spiti and beyond.

Eight precious days had been taken up with this unforeseen trip up and down the glacier, and now we had to revise our plans. Food was once more repacked, some being left at Base for the return journey. Pansy, Pasang and Namgel returned with us with

[4] Also spelt Kunzum and Kanzam; the latter form is used on Survey of India Sheet No. 52 H.—EDITOR.

all possible speed to Concordia and we established a camp on Stony Hill from which to fulfil a long-cherished ambition of exploring the ice-pass overlooking the Pir Panjal. Here Frances joined us, still suffering from heart-strain brought about by carrying loads at high altitudes. The next morning as we climbed the steep icefall leading to the Col, we saw dots on an adjoining ice-field which turned out to be Eileen and her party descending after their successful ascent of the Cathedral, *c.* 20,500 ft. She had named the lump at its northern end the Chapter House. Frances returned with them to Concordia while Hilda and I pressed on and set up a camp at about 18,000 ft. From the pass we looked down a precipitous but not impossible slope across to the ranges of the Pir Panjal, and we formed the opinion that a future party might well return to Manali that way.

Next morning Hilda returned to Concordia to repack food for the final journey back to Base Camp, which we planned to make in two parties so as to find two new routes down to the Chandra. Pansy, Namgel and I had a wonderful rock climb on Tiger Tooth, but within 400 ft. of the summit were defeated by avalanche conditions brought about by the impending monsoon. The next day we descended to Concordia and found that Eileen and Frances had already set off on the homeward trek choosing the route along the first glacier after the bend; and that Hilda had spent the night alone, an insignificant figure in the centre of a circle of 20,000-ft. peaks, seven days' march from the nearest habitation.

Our plan now was to go up the pass by Gunther's peak and then to follow the valleys north and rejoin the Chandra via the Kunzam La. But the initial difficulties proved too great: the pass was overhanging on the far side, and a big snow-cornice made it quite out of the question for laden porters. As our days in the Himalayas were now numbered, for monsoon clouds swept the skies every afternoon, we had to decide to return by our original route. I could not, however, resist the beauty of the Snow Cone, so Nima and I made the ascent the next morning. Visibility was very bad and a very worried Pansy greeted us on our return to camp.

We now pursued a steady course down the glacier to the Chandra, where the mules should already have arrived to carry back to Manali. What a change had come over the scene! Below 15,000 ft., ice-caves and snow mounds had changed to wet and stony wastes, and in many places dirty black patches had replaced the earlier glistening slopes. How glad we were that we had first seen them in all their pure white splendour of snow and ice.

At the original Camp II, Eileen caught us up with the request to send more food to Frances who was waiting higher up while her heart adjusted itself to ever-changing altitudes. A reluctant Nima and Atisha consented to return with Eileen, taking with them all we could spare from our dwindling stores, while the main body went on to Manali.

On the last day in June, the whole party was reunited at Major Banon's, and after a few days in which we did nothing but eat and sleep, we separated for home. Eileen, the indefatigable, stayed on for two more weeks and, with only two local porters, succeeded in climbing Deo Tibba, 19,687 ft.[5] She then returned home by sea with the equipment. Frances went back by air from Delhi to Nairobi ; Hilda and I, after putting the car on a cargo-boat at Karachi, flew to London.

Following hard on the heels of the Scottish Women's party, we have confirmed that women can organize and carry through a Himalayan expedition. No doubt, many other all-women parties of the future will taste the joys of Himalayan climbing.

[5] Believed to be the second ascent; a very creditable achievement.—EDITOR.

CAMBRIDGE EXPEDITION, 1956, TO THE ELBURZ MOUNTAINS, IRAN

By J. G. R. HARDING

ON June 21st, 1956, a party of six undergraduates, W. J. E. Norton (leader), W. B. Anderson, D. J. R. Cook, K. A. McDougall, J. E. H. Mustoe, and J. G. R. Harding, left Cambridge for the Elburz Mountains of North Persia. Four of us were designated climbers, two naturalists. Twenty-two days later in the calm of Gulhek, the summer compound of the British Embassy at Teheran, it seemed that the long and arduous overland journey packed with incident and excitement had been expedition enough for one summer. In their turn, our two long-suffering jeeps and trailers (once a placid Cambridge blue) had encountered the numerous perils which for us, at any rate, had made the journey to Persia, by way of north-east Turkey, memorable in itself. Dogged by overheating and unexpected mechanical troubles, to say nothing of an awesome number of tyre blowouts, the alarming tendency of our trailers to overturn with little prompting became but another of the accepted hazards which lie in wait for the traveller along the road to Teheran.

Preparations had taken a year. The Elburz Mountains were chosen because it appeared that here was an area within the reach of a small unqualified expedition. From all reports there were still opportunities for mountaineering exploration, particularly in the Takht-i-Suleiman massif which was yet to be visited by a British climbing party with enough time to cover the area thoroughly. Our primary objects were to spend up to three weeks in the Takht-i-Suleiman group and then to discover whether the Orim massif (some 200 miles further east) was really the high and mysterious plateau that certain maps would have us believe. It was indeed fortunate that the Mountain Climbing Federation of Iran had enough information on the Orim area to persuade us that our time would be wasted. An area north-west of Demavend was suggested as an alternative. Reportedly unexplored, there were virgin peaks in plenty on a range which was thought to harbour the eternal snows. This was seized on eagerly as a worthy successor to the now discredited heights of Orim, but we were later doomed to disappointment.

It would be as well to outline a history of the Takht-i-Suleiman group. Situated 60 miles north-west of Teheran, the massif boasts

four main glaciers and a number of peaks over 15,000 ft., culminating in Alam Kuh, 16,350 ft., the second highest mountain in Persia. The outstanding feature of the massif is the great northern escarpment stretching from Siah Kaman Kuh to the Lana peaks. Below Alam Kuh, this mighty wall of smooth granite slab rises a sheer 2,000 ft. from the source of the north-east glacier, while on the western side of the Alam Kuh-Takht-i-Suleiman ridge, the west face reaches a height of about 2,700 ft. Here too is a 50°–60° snow and ice slope leading to a *brèche* between a large gendarme and the west summit.

The first recorded ascent of Alam Kuh was made in 1902 by the German brothers Bornmüller. A more detailed exploration of the group was made by D. L. Busk in 1933-34. On both occasions he

approached the massif from the south; in 1933, traversing Siah Kaman Kuh to climb Alam Kuh by the east ridge, and in 1934 by the west. In 1936, a German expedition led by Dr. Hans Bobek advanced from the north. They made the first recorded ascent of Takht-i-Suleiman by the south ridge and climbed the small rock peak known as Chane Kuh or Mountain of the Comb. The expedition then proceeded to Demavend, where they spent a night on the summit, but Steinauer and Gorter returned to Alam Kuh to make the first ascent of the north face by the north buttress. Steinauer, who was a member of the party to make the third ascent of the north face of the Grand Jorasses, described this climb as the 'Persian Jorasses'. In 1954, a Franco-Iranian expedition, led by Bernard Pierre, made a further three ascents on the north face of Alam Kuh, twice by the north buttress and once by the 60° ice-slope which they christened the Ice-Curtain.

Reports by the French expedition were enthusiastic and implied that there were still numerous climbs to be attempted, particularly on the little known Haft Khan Ridge (Ridge of the Seven Summits). To us in Cambridge the potentialities of the area had appeared endless but we were not to know that another Franco-Iranian expedition, seemingly intent on clinching the two great remaining mountaineering problems of the Elburz, namely the north wall of Alam Kuh direct, and the north-east couloir of Demavend, were to forestall us, at least in part, as regards our intentions to complete the first traverse of the Haft Khan Ridge. Our plans were to approach the massif from the village of Rudbarek but, unlike previous expeditions, to establish camp on the south side of the group in the great cirque known as Hazar Chal or Place of a Thousand Hollows. From this base we would explore thoroughly the southern extensions of the group and when these had been exhausted, would cross the Col between Alam Kuh and the Lana peaks to set up a subsidiary camp on the north-west glacier from where we could investigate the Haft Khan Ridge and the northern escarpment.

The five days spent in Teheran were hectic, but sweet indeed compared to the rigours of the outward journey. Our sincere thanks must go to the Ambassador and other members of both the Embassy and British Community in Teheran who so kindly entertained us. Time seemed very precious, for in a country where it means little the battle for permits and permission was waged relentlessly. Had it not been for the concerted efforts of our liaison officer, Captain Akbar Ghaffari, the Mountain Climbing Federation of Iran, a member of the Iranian Cabinet and the sheer

influence of H.R.H. Prince Gholam Reza Pahlevi, the Shah's younger brother, our stay in Teheran would undoubtedly have been longer.

On the 19th of July, the first jeep crossed the Elburz watershed and by midnight we had established a camp near the village of Rudbarek, our roadhead. For 24 hours it had rained solidly and when the second jeep arrived 24 hours later, it was to find a miserable and disconsolate advance party crawling out from under dripping canvas erected in a sea of mud. It was not possible at that stage to appreciate the charms of this delightful Kurdish village of truly Alpine character.

Early on the morning of the 21st, our mule train arrived. Numerically impressive, it took a virtuoso display of bargaining by Captain Ghaffari to persuade the muleteers to view our needs in proper perspective. Many hours later ten mules, ten muleteers and appendages started up the valley of the Sardab Rud, choked in the insidious Caspian mist, which had been with us since our arrival and had restricted our much-longed-for view of the mountains to the flanks of the valley, richly covered with the magnificent beeches and oaks which make up much of the Mazanderan forest.

It was shortly after the long delayed start that two climbers suddenly appeared ahead of us, rushing hot-foot down the precipitous track. They were members of the 1956 Franco-Iranian expedition, and they told a story of storm and stress. Their attempts to climb the north face of Alam Kuh, avowedly the main object of the expedition, had not met with success though a number of subsidiary climbs had been done, and one of these happened to be the traverse of the Haft Khan Ridge: this we found out only after returning to Teheran.

That evening, camp was pitched at 8,000 ft. As darkness began to close in, the mist and cloud suddenly lifted to reveal ridge upon castellated ridge towering high above. The approach march took a further two days before Base Camp was established at 13,310 ft. high up the Hazar Chal. Our progress was held up by a mysterious ailment which struck at the very core of the expedition. Certainly general unfitness and the altitude played their part, but what was prepared for us by Captain Ghaffari and described as 'typical Persian cooking' undoubtedly took its toll of those of us with weaker constitutions. An expedition based on the south side of the massif has one great advantage in that mules can carry supplies to a considerable height without undue difficulty. On the northern glaciers this is impossible owing to the

rough terrain, and it has always been necessary for expeditions to man-handle their supplies and equipment for the last 3,500 ft. or so. This is apt to be tedious, because there are no porters available in Rudbarek.

Having left the tree-line at 8,000 ft., our caravan had followed the well-worn trade route up the Sardab Rud, which eventually crosses the 13,900-ft. Hazar Cham Pass (Pass of a Thousand Windings), one of the highest passes west of the Hindu Kush in regular use. It was difficult to persuade the muleteers to forsake the oft-trodden path for the snows of upper Hazar Chal, but our cajolery, which eventually gave way to curses, had its effect and after one temporary sit-down strike our equipment was unloaded and the muleteers paid off with instructions to return in 16 days.

Base Camp was situated on an isolated patch of grass, later to become carpeted with flowers as the melting snows retreated under the fierce heat of the Persian sun. The harsh ridges of snow and rock rose up on all but one side into an ever-vivid sky. That evening the atmosphere was full of the promise of things to come. To the immediate south-west, the challenging rock tower of Gardune Kuh stood sentinel over the camp. Our excitement was made complete that evening by the appearance of a great brown bear silhouetted on the top of a slope of snow but 200 yards away. Far away to the east, lay the white cone of Demavend, faintly discernible in the clear evening light, its solitary snows in cold contrast to the lesser summits which cluster around it.

In truth, the mountaineering at Hazar Chal was disappointing. The teething troubles of getting fit and used to the altitude could not explain away the shortage of good climbs. Extremes of temperature had left the rock treacherous and the scree all-pervading. We covered the ground quite thoroughly but had little to show for it. Climbs included:

(1) Ascents of Alam Kuh both from the east and west ridges. These were little more than exhausting scrambles, but gave us our first panoramic views of the massif. Outstanding features were the two northern glaciers, heavily bestrewn with moraine; the great abyss of the cliffs of Alam Kuh, and the promise of the Haft Khan Ridge with its clean white granite, a welcome change from the brittle limestone we had experienced.

(2) The ascents of Gardune Kuh, including what was almost certainly the first ascent of the north-east gully. This climb being marred, as were others, by the extreme rottenness of the rock—a particularly unpleasant hazard in the restricted space of the gully.

LANA PEAKS

POINT 14,800 FT.

GARDUNE KUH
14,370 FT.

KHARSAN
15,480 FT.

KHARSANG
15,600 FT.

ALAM KUH
16,350 FT.

CHANE KUH
14,000 FT.

TAKHT-I-SULEIMAN
15,610 FT.

BASE CAMP
SITUATED
BELOW GARDUNE
KUH

NORTH EAST OR
SARCHAL GLACIER

PANORAMA TAKEN FROM SIAH SANG KUH, 15,190 FT., OF THE TAKHT-I-SULEIMAN MASSIF.

(3) The traverse of the south-east ridge of Siah Sang Kuh. An enjoyable climb with fine situations, though technically easy. From Siah Sang Kuh itself we had an impressive view of the east ridge of Alam Kuh and the peculiar formations of rock which are to be found on the eastern margins of the east wall.

Smaller expeditions included a reconnaissance of the proposed route to the north-west glacier; a partial traverse of the Lana peaks, which was cut short by a vertical rock wall 200 ft. high, and one or two minor ice climbs. The possibilities of Hazar Chal were exhausted. The time was ripe to put our second plan into operation—the establishment of a subsidiary camp on the little-known north-west glacier. Our party split up; the naturalists were to cross the Hazar Cham Pass to survey the flora and fauna on the southern versant of the watershed, and incidentally to experience and enjoy nomadic hospitality. The four climbers and Captain Ghaffari would spend four days on the glacier.

Our loads were heavy and the Col between Alam Kuh and the Lana peaks was only reached after wearisome step-cutting. The descent to the glacier was painfully slow, for the steep scree, ever ready to avalanche, gave one a feeling of insecurity. Under normal conditions there would have been nothing to it, but the burden of the heavy packs upset equilibrium. As the last man straggled in at 7 p.m., it was almost dark.

Glacier Camp was little more than a bivouac of groundsheets, and the moraine on which we established ourselves was made up of innumerable sharp rocks which had disastrous effects on the air-mattresses. Life on the glacier was in complete contrast to the mellowness of Hazar Chal. Snow and ice, granite and moraine, made a harsh but impressive background to a ludicrously impromptu camp. As the evening sun disappeared behind the Haft Khan Ridge and the shadows rose ever higher up the Lana peaks, a still cold descended. This was the signal to put on every stitch of clothing that considerations of weight had allowed us to bring across the Col; and it only remained for the climbers to retire to their sleeping-bags, though the superb sunsets were always worth waiting for. Glacier Camp was well situated and four days were not sufficient to take in all that was available.

The main object of the first day was the ascent of Takht-i-Suleiman. This included an enjoyable rock climb on Chane Kuh, perched midway along the Alam Kuh-Takht-i-Suleiman ridge. Continuing up the ridge to Takht-i-Suleiman was little more than a tedious scree trudge but we were rewarded by some magnificent views from the summit. It was one of those rare occasions when

the Caspian mists had withdrawn. To the north-east and far below us, lay the valley of Rudbarek and the Kalardasht plain; while 30 miles beyond and 15,000 ft. below, was the Caspian—a blur of sea and sky. To the immediate south rose up the great rock faces of Alam Kuh, divided by the ridge up which we had just climbed. This is the ridge which leads up to the north buttress climb on Alam Kuh.

The following day we embarked on what was erroneously believed to be the first traverse of the Haft Khan Ridge. Far less formidable than in profile, the climb deteriorated into a scramble after the first two summits. However, we were given a chance to see what else the ridge had to offer. It appeared that on the east flank there were a number of good climbs mainly on sound rock and sometimes including snow and ice. One such climb undertaken by two members of the expedition was christened Bergschrund buttress. There were interesting pitches and fine situations. This particular buttress was not the most ambitious available, and there is scope for many new routes and first ascents to be made on the north-eastern flank of the Haft Khan.

After four days at Glacier Camp, the food situation gave us little option but to return to Hazar Chal. Time had not dimmed those uncomfortable memories of the scree-slope by which we had come, and my own conviction that a less unpleasant return route must be found was hardened by an impressive display of rock and ice avalanches coming off the Lana peaks close to the vicinity of our intended route back. A reconnaissance revealed that there was, in fact, a superior alternative by way of ascending the Col between the Lana peaks and the Haft Khan Ridge, skirting the south Lana peak, Kharsan, 15,480 ft., descending the ridge towards Gardune Kuh, and then cutting down a snow couloir into Hazar Chal.

Even after our few days' absence, Hazar Chal had changed its colours. The snow patches were rapidly disappearing and banks of flowers were springing up everywhere. Far down the valley, the first flocks of summer were steadily moving up towards our camp. Our time had run out. Two days later, the mules arrived and by the 8th of August we were once more at Rudbarek.

Looking back on those weeks it was difficult not to feel some pangs of disappointment, for our mountaineering achievements were negligible. Admittedly, we had broken some new ground, and an extensive area had been covered both by survey and on foot; but hard gained experience would have given us the knowledge of how best to allot our precious time to the various areas available. It must be stressed that, notwithstanding the severe

E KUH→

THE NORTH FACE OF ALAM KUH, 16,350 FT., TAKEN FROM TAKHT-I-SULEIMAN.

conditions and the difficulties of transport, a camp on the north side of the massif does give infinitely better access to the good climbs. Furthermore, there is comparatively little available between high-standard mountaineering and mere scrambling, though, for those who can appreciate it, there are always dubious escapades on rotten rock and for these there is ample scope. However, we had at least produced a map of the area, and though many of the heights differ considerably from those of Busk and the 1954 French Expedition, the plotting should be accurate.

But here is an area whose essential attraction is not simply derived from that first tempting glimpse of Solomon's Throne, which compels us to seek out those delectable mountains rising so clearly above the green valley of Rudbarek into the fierce Persian sky. It embraces a fascinating background, which must become an integral part of the experience of any climbing expedition. Here, in Rudbarek, are a proud and courteous people still living their lives within the framework of a feudal tribal system. They and their village are as yet unspoilt; their log-houses built from the trees of a mighty forest which stretches down to the very floor of a valley, where the cold foaming waters of the Sardab Rud rush through green fields in which cattle graze and where the haystacks rise on stilts. Here, too, is a paradise for naturalists. Leopard and tiger still roam the forest; while bear, ibex and mouflon can be found above the tree-line. We have happy memories indeed of four glorious days, when the inevitable corned-beef hash and tinned peas were supplanted by mouflon steak.

After a brief but harrowing sojourn on the shores of the Caspian Sea—for the mosquitoes make life a misery where the Elburz rise immediately from the narrow coastal plain swathed in humid mists and tropical jungle—all eyes were turned towards Demavend. Always at the back of our minds was the climb that Bernard Pierre had considered the second great problem of the Elburz; the north-east couloir of Demavend, described by him as 'an Alpine problem of the highest order'. Having reached Rehna, we were to discover that two of the French party were already engaged on this climb, which eventually fell to them. In fact, the couloir, which includes 3,000 ft. of ice, was probably beyond our own capabilities so there was little to grumble about.

Due to five hectic days of mechanical failures and financial crises, time was running out; but it did seem reasonable to try the suggestion of the Iranian Mountain Climbing Federation to explore the area north-west of Demavend. This area can claim nothing of mountaineering interest. There were mysterious

nomadic tribes; opportunities for the naturalists to collect and for the surveyors to survey; but the fabulous mountains which we had heard about did not exist. We returned after seven days to Pulur with the positive knowledge that here at least were no hidden prizes for the mountaineer. It only remained for us to climb Demavend, and by the rigid time-schedule which was beginning to bind our lives, there were only 24 hours in which to do it.

Demavend, 18,600 ft., the highest mountain between the Hindu Kush and the North Atlantic, is an extinct volcano, and although climbed every year by a score of people, its very dominance over the lesser peaks of the Elburz make it a mountain whose challenge is not to be ignored. At 10-45 p.m. the cloud level was down to 8,000 ft., and the six of us left the roadhead to align ourselves in the general direction of the mountain. As yet there was no moon, but by midnight we were well above the cold grey cloud-sea, which had flooded so completely the valleys far below. Ahead lay the bulk of Demavend, its snows a luminous pyramid against a black sky. It was only after 15,000 ft., that we began to feel the effects of altitude and our lack of sleep. The last 3,000 ft. took a disproportionately long time and progress was not helped by the sickening sulphurous fumes which are to be found on the upper reaches of the mountain. By midday, most of us lay gasping on the ill-defined summit, staring woodenly at the yellow fringe of rock which marks the edge of the crater. The swirling cloud disclosed little beneath us, and I was feeling sick. Cooking the evening meal alongside our jeeps at 7 p.m. that same evening, I could only reflect that the joys of Demavend were mainly objective.

For an expedition which can claim to have achieved little of mountaineering significance, it is perhaps presumptuous to put forward views on the mountaineering potential of the Elburz Mountains. Our own experience was a trifle disappointing, because the few great climbs of the range were beyond our scope and, apart from these, there is nothing of great merit. Certainly there are stern rock faces to be conquered, and doubtless winter and spring in these mountains will transform the brown hills of summer into an Alpine wonderland; but only in the Alam Kuh massif and on the northern slopes of Demavend will greater mountaineering be found.

I do not consider the Elburz sufficient in themselves to warrant a full-scale mountaineering expedition. But for a motorized party *en route* to the Himalayas, seeking either a period for acclimatization, a break in the long journey or simply an excuse to visit this truly fascinating area, there are problems of a very high order,

such as the north face of Alam Kuh, which still await ascents by British parties; and the same applies to the north-east couloir of Demavend.

Mountaineering in Persia is fast increasing in popularity. Although its inspiration has largely stemmed from the example of European climbers, particularly the French, there is already a nucleus of capable and experienced mountaineers who may fittingly be the first to overcome the problems of the Elburz which yet remain unsolved.

NOTES AND EXPEDITIONS

FOLK-LORE IN THE RUPKUND REGION

This article, describing a journey undertaken in December 1955, is of some interest in view of the publicity that has been given to recent finds near Rupkund Lake. Human remains and other specimens collected from there have been studied by scientists, and many theories have been put forward as to their history and origin.

The author of the article, N. Chuckerbutty, who was an assistant master at The Doon School, Dehra Dun, died on June 14th, 1956, at Dibrugheta alp in the basin of the Rishi Ganga, whilst taking part in an expedition led by Gurdial Singh to Mrigunthi, 22,490 ft.—EDITOR.

SEATED by a fire in our Mess at The Doon School one evening last winter, Gurdial Singh and I decided to visit the much-publicized Rupkund Lake in December. Not the ideal time to go into the mountains as many of our friends reminded us, but we felt that the beauty of the winter scenes would more than compensate for any hardship we might suffer.

Long before we had reached Wan, situated below the Jatropani ridge along which one might travel in two stages to Rupkund, we discovered that Trisul to the villagers in that region was not merely Trisul but also Kailash, the seat of the all-powerful Shiva and his consort Parvati. The other and more famous Kailash of Tibet is unknown and of no consequence to them. After we had been there for some time we ceased to be surprised at this because we found that Trisul and its neighbours completely dominate the lives of the simple folk. The place simply teems with legend and folk-lore centred round Shiva.

We made the acquaintance of one such legend in a very curious manner immediately on our arrival at Wan. There are two streams that girdle this village and meet further down. We were heading for the nearer one to wash in when we were warned that the water was dirty and fit only for inferior ablutions. To wash we should go to the other stream. To us, however, both streams appeared equally clear and sparkling. We discovered the reason later when on our way back we passed through Nandaprayag and met an old gentleman who several years previously had gone on a pilgrimage to Rupkund. This is the story he told us:

Ravan, the villain of the Ramayana epic, was in fact a most accomplished person and had pleased Shiva by his meditations. He wanted to take Shiva away from Kailash and establish him in the island kingdom of Ceylon. Shiva agreed but on one condition, namely that he should be transported between sunset and

sunrise. Confident of his ability to do so Ravan took Shiva up on his shoulders. Now Ravan was not a righteous king and the gods feared that if he should succeed in establishing Shiva in his kingdom he would be all powerful under the patronage of the Lord of Kailash. So they appealed to Brahma, one of the Trinity, and he caused Ravan to pause in his journey to fulfil an urgent bodily need. Ravan thought he would soon relieve himself and resume his journey and so he set Shiva down by the wayside. But Brahma do destined it that Ravan went on and on and relief never came, though he had caused a river to flow and the sun had risen. In exasperation he had to leave Shiva in the Himalayas and flee in shame to his kingdom. Because it was the symbol of frustration the river was called 'Karmnasa', which literally means 'Foiler of success'. The villagers of Wan identify the dirty stream with this river of mythology. Curiously enough, they do not seem to have any scruples about washing below the confluence of the two streams.

There has been much speculation and many theories about the presence of the large number of human remains around Rupkund Lake; but on our return to Wan after our attempt to reach the lake we heard another legend there, which at any rate for the believing rustics, provides sufficient explanation for the existence of the human bones. We were all assembled in the hut of one of our porters and the entire village had collected to listen to the Song of Rupkund. The old man who was to sing it to us was the *chaukidar* of the Forest *kuthia* at Wan. The manner of recitation was similar to the singing of religious verse anywhere else in India. The old man would sing a couplet which would then be repeated in chorus by the rest of the assembly. Thus sang the old man:

'One day Lord Shiva and his consort Gauri stood side by side on mount Kailash (Trisul), and looked down into the plains stretching far and wide before them. They saw many kinds of dwellings nestling in the valleys below but Gauri was particularly intrigued by a large palace which was visible in the far distance. Shiva told her that it was the palace of her sister Balaba, Queen of Kanauj. Gauri was seized with nostalgia on hearing this, and longed to pay a visit to her sister. But she could not bear to think of being parted from her Lord for long and so she built a large fire at the foot of Kailash and persuaded Shiva to sit by it, while she went away on a visit to her sister for one day and one night only.

Now Jasida, King of Kanauj and husband of Gauri's sister, was a vile man and he spread false rumours vilifying Gauri for her night's absence from Kailash. However, retribution followed

swiftly and the strangest kinds of mishaps began to occur in his kingdom. Fields sown to grain came up in obnoxious weeds; ugly buffalo calves were born to beautiful cows; milkmaids were seized by a strange hysteria, and instead of milking the cows they held the pails above their heads and danced; the heavens showered down blood instead of life-giving rain. The bewildered king sent for soothsayers from Benares and all of them said that these strange happenings were the result of the false rumours that Jasida had spread about Gauri, and he could obtain her pardon if he made a pilgrimage to the foot of Kailash and offered prayers to her there.

So the King assembled a large retinue, and collected many kinds of offerings gleaned from the four corners of his kingdom and prepared to set out. Balaba, his Queen, longed to go with him, but as she was with child he tried to persuade her not to go. But she refused to be persuaded, and at last she went too, riding on a stately palanquin. The procession after passing through many kingdoms (included in the list of places mentioned are Almorah and Wan) finally arrived at the foot of Kailash where the King encamped, turning the hillside into a miniature city. Gauri looked down upon the crowd below and was curious to know who all those people were. Shiva told her that none other than her sister Balaba and her brother-in-law King Jasida had come to do homage to her. She was overjoyed at this news and in her excitement ran all the way down to the encampment to greet her sister. But there her joy turned to horror when she discovered that her sister had given birth to a child and so tainted her holy Kailash.

She returned seething with rage and told Shiva of the calamity. He was inclined to be forgiving and philosophical about it, but she refused to be consoled and vowed that she would not rest until she had purified Kailash. She called a large number of deities from different parts of the country, including such celebrities as the all-powerful Kali of Calcutta, and asked for their help. But they all hung their heads in shame and admitted that they could do nothing. Then a local god named Lado stood before her and submitted respectfully, "O Mother, I have the power to cleanse your Kailash but would seek a reward for doing so". Gauri told him that if he was successful, he would be given the right to guard the entrance to Kailash and whoever came to do homage to her must first offer prayers to him. Then Lado mustered up his energies and for several days and nights rained down iron shots on the throng below until the whole company was annihilated. Thus was holy Kailash cleansed of the taint of child-birth.'

We had become completely engrossed in this fascinating story as it gradually unfolded, and when it ended we found ourselves spontaneously joining in the cries of 'Glory to Shiva, glory to his consort Gauri', raised by the assembly.

Rupkund is regarded as holy by the local people and once every twenty-four years a big procession consisting sometimes of as many as a thousand men and women visits it in late August. The pilgrims assemble at Wan before setting out, and offer prayers at the shrine of Lado.

We had to turn back when we were only about five hours from Rupkund, owing to foul weather and heavy snowfall; and the night that we spent at our highest camp, over 12,000 ft., was the coldest we had ever experienced. Yet we felt that in spite of all hardships, the sombre beauty of the mountains that we saw, and the interesting legends that we heard had made the trip entirely worth while.

RONTI—1955

Peter Aufschnaiter and George Hampson made what is believed to be the first ascent of Ronti, 19,893 ft., on June 15th, 1955.

The trek to the mountain commenced at Nandaprayag. The party ascended the Nandakini valley and crossed the Humkum Gala, 17,170 ft. They next ascended a pass separating Ronti from Nanda Ghunti. At a point a short distance below the summit of this pass, they set up camp opposite a prominent snow couloir showing avalanche tracks in the rocky south face of the ridge connecting Ronti with a point 19,350 ft. to the east. The following day the climbers ascended this couloir to a point about one-third of the way to the top. Here they turned to the left in a snow gully hidden from the pass below by a rock buttress. They followed this gully and subsequent ledges up to a snow slope leading to the crest of the above-mentioned ridge. The ridge was followed for a brief distance. The route lay across a narrow ridge of snow that was corniced.

The climb up the snowy slopes of the summit peak of Ronti was somewhat complicated by a number of small hidden crevasses. In this section, the climbers followed a slight hump of wind-blown snow dividing the eastern from the south-eastern snow slopes. The upper slopes are much foreshortened when seen from the pass below.

The climbers started at 6 a.m., and reached the summit at 1 p.m., returning to camp at 5-15 p.m. Crampons are required in the snow gullies which contain ice. There is also some potential danger from rock or snow avalanches.

TRISUL—1956

K. F. Bunshah, a member of the Bombay Section, and two climbers from W. Germany, Fritz and Adolf Hieber, with two Sherpas, Gyalzen (H.C. No. 163) and Wangdi, climbed Trisul, 23,360 ft., and attempted other peaks nearby in June 1956.

The party established Base Camp on June 6th. On the 10th Bunshah, Fritz and Gyalzen made a bid for the top of Trisul from Camp II, at about 20,000 ft. They came within 500 ft. of the summit, but had to return owing to lack of time. On June 12th, Fritz made a solitary attempt from Camp III. He got to within 500 ft. of the summit when the weather deteriorated and he was forced to return. The next day, Bunshah and Gyalzen left Camp III (21,200 ft.) at about 8-15 a.m. and reached the summit at 12 noon. After spending an hour on top, where they had a fine view, they returned to Base the same day, arriving at 9-30 p.m.

As the ice and snow conditions were not good during the day, Fritz and Adolf decided to climb Trisul by night. Accordingly, they left Base on June 15th at 8 p.m. along with the Sherpas and reached Camp II before daylight. On the 16th night they left camp and reached the summit of Trisul on the morning of the 17th at 7-50 a.m.; they had a very fine view from the top, and spent 4 hours there. On the 18th, Fritz and Gyalzen reached the top of one of the minor summits of Bethartoli Himal, to the south of the main summit. From there they went down to the Col between their summit and the main peak. Lack of time prevented an attempt on the main peak from the Col.

While the Hiebers were climbing Trisul, Bunshah and John Albiston, a member of the Mrigthuni Expedition, who had arrived at Base Camp, made an attempt on Mrigthuni, 22,490 ft., with one Garhwali porter. On the 19th they established Camp III at 20,500 ft., but were forced back from there the next day on account of bad weather.

On June 21st, Bunshah and the Hiebers made an attempt on Devistan II, 21,420 ft. They went up a steep rock ridge, and established a camp at 19,700 ft. Following heavy snowfall during the night, the rocks were found to be covered with ice and the party had to return.

On the 24th and 25th, Fritz and Gyalzen made an extensive reconnaissance of Bethartoli Himal from the north-east.[1] The party left Base Camp on June 23rd for the return journey.

[1] W. H. Murray's party in 1950 camped at 17,000 ft. on the north ridge which proved impracticable higher up. They recommended an attempt along the east ridge. See *H.J.*, XVI, 1950-51, p. 42.—ED.


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EVEREST: ANNUAL REUNIONS

AFTER the tumult of receptions and other festivities with which the returning Everest party was greeted in 1953, the ascent has since been celebrated in quieter fashion. In each subsequent year there has been a reunion in the British hills over the week-end closest to May 29th.

In 1954, the whole party gathered in Wales at Pen-y-Gwryd. A new route on a crag in Cwm Dyli was led by Tom Bourdillon and named 'Anniversary Wall'.

In 1955, the Everest reunion was in Skye at Sligachan Hotel during ten days of unforgettably brilliant weather. Few of the Everest party were able to travel so far or could spare the time, but the Reserves and some of the back-room boys were better represented. The best possible honour was done to Everest by a traverse of the whole main ridge of the Cuillin, the longest expedition in Britain, by a party of six—including Sir John and Lady Hunt, Emlyn Jones and Rawlinson.

The 1956 reunion was a memorable one, as this had now become a double event to celebrate both Everest and Kangchenjunga. Pen-y-Gwryd was again the focus, and forty or more came to stay at the Hotel, the Climbers Club hut at Ynys Ettws, or to camp nearby. The party included Sir John Hunt, Evans, Bourdillon, Wylie, Noyce, Westmacott, Ward and Pugh from Everest; Emlyn Jones, Rawlinson and Cox from the Everest Reserves; Longland from pre-war Everest; Streather, Mather, Jackson and Clegg from Kangchenjunga; and of the supporters, Sir Christopher Summerhayes, Jack Henderson, Hotz, Bain, Ann Debenham, and Goodfellow, with of course Briggs (the host); wives, fiancées, and families made up the numbers.

In 1957, the reunion was again at Pen-y-Gwryd, and was combined with the first of the two meets which the Alpine Club held to celebrate its Centenary Year. There was a large attendance at the Dinner in Llanberis, and the absent New Zealand Everesters remembered the occasion by sending cables—one from each side of the Antarctic Continent. Some outstanding climbing was done during the week-end, and the record for the 236-mile road journey from Marble Arch to Pen-y-Gwryd was lowered to 3 hours 9 minutes.

B. R. GOODFELLOW.

SUGGESTED EXPLANATIONS OF SHERPA NAMES

WE give below a list of the common, or better-known Sherpa names, together with suggested explanations of meanings and derivations. Column A is by Ludwig Krenek; Column B by Johannes Schubert, who also provides philological corrections.

We do not propose to enter the controversy over the meanings, still less over the variety of spellings and pronunciations, which appear to be legion.

Generally, however, the pronunciation of Tibetan names deviates considerably from the original Tibetan spelling. For example, the Tibetan 'p' and 'ch' are often pronounced 'b' and 'ts'. The prefix 'Ang' is always stressed, e.g. Ang Tsering is pronounced Angts(e)ring, with an almost inaudible e. The same applies to the prefixes Da and Pa, e.g. DaN (or) bu, PaN (or) bu; the or being practically inaudible.

It is interesting to find that in some cases there is perfect agreement between the two versions; whilst in others, the opposite seems to be the case.

Mr. Krenek says that he has been helped in his interpretations and spellings by Rai Bahadur Tenduf La, son-in-law of the late Sirdar Bahadur Laden La, one of the best-known figures of his time in Darjeeling.

DAYS OF THE WEEK:

Monday	Dawa
Tuesday	Mingma
Wednesday	Lhakpa
Thursday	Phurba (Purba)
Friday	Pasang
Saturday	Pemba
Sunday	Nyima (Njima).

Name	A	B
1. Ajiba	The fourth son	Tib. bzhi-pa = the fourth, i.e. son.
2. Ang, Anga	Infant, baby. As in similar cases (cf. Nullu) the name given to the small child is retained throughout life.	The meaning 'baby' is doubtful.
3. Changba	The youngest. This is not a Sherpa name. It derives from the Thamang, another branch of Nepalese Buddhists.	Tib. chun-ba (also chun-nu) = the small or young one. The youngest in the case of many children.
4. Chettan, Tsetan	Che = life, ten = safe, sure, hence an assured or long life.	Tib. tshe-brtan = enduring, eternal, long life.
5. Chödi	.. ..	Tib. chos-Idan = having religion, pious.
Chikade	One who prattles unceasingly.	.. ..
6. Chung	Small	(Cf. changba; Tib. chun-ba).
7. Da or Dawa	Born on a Monday	Tib. zla, zla-ba = moon, month. Pronounced da.
Dakshi	Perhaps the same as Dawa = born on a Monday.	.. ..
8. Dorji	Thunderbolt	Better with e (Tib. rdo-rje) = Dorje.
9. Dukpa	A native of Bhutan	Tib. 'abrug-pa' = the man from Bhutan. The Bhutan woman would be 'abrug-ma'. Pronounced dukpa and drukpa.
10. Genden Amdo	Genden (?) from the province of Amdo, a region on borders of China and Tibet.	Genden may be Tib. dge-ldan = virtuous. Uncertain. Amdo is Tib. a-mdo.
11. Gna (better Nga)	The fifth son	Tib. lna = five. Is, of course, an abbreviation of lna-pa (nga-ba, nga-wa), the fifth.
12. Gyalgen	Gyal = king, chen = great, hence great king.	Not 'great king' (Tib. rgyal-/po/chen/po), but 'emblem of victory' (Tib. rgyal-mtshan), pronounced djalchen.
13. Gyali	The victor (often in fisticuffs between brothers).	Tib. rgyal-ba, or rgyal-la, or rgyal-le, or jal(l)e/i.

SUGGESTED EXPLANATIONS OF SHERPA NAMES—(*contd.*)

Name	A	B
14. Hishe or Yishe ..	The son of a priest	Tib. ye-shes = absolute wisdom = Sskr. jnana. A very popular Tibetan name and, owing to the spread of Lamaism, also in Mongolia (Ishi).
15. Jigme	Designation of a low caste. When the first son dies, the parents often call the second son by the name of a low caste or an animal, hoping thereby to confuse death or the god of death, as if to say: It is not worth while taking him, for he is only an animal.	Tib. 'ajigs-med = fearless.
16. Karma	Star	Tib. skar-ma = star. Perhaps associated with Karmi and Kami?
17. Karsang	.. ..	Tib. skar-bzan = favourable star (born under a favourable star?).
18. Kesar Singh	.. ..	Tib. ge-sar. By popular etymology also skye-gsar or ke-sar. Name of the hero of the Tibetan national epic. Skr. simha = lion.
19. Kikuli	Name given to a dog (cf. Jigme) ..	Contains Ki, Tib. khyi = dog.
Kitar	One who leads a carefree life.	
Lewa (better Leba) ..	Of good looks.	
20. Lhakpa	Born on a Wednesday	Tib. lhag-pa = Wednesday.
21. Lobsang	Lob = heart, sang = good or big, hence kind, generous.	Tib. blo-bzan = of good understanding. The meaning 'heart' for lob is an error. It is a very frequent name.
22. Mingma	Born on a Tuesday	Tib. mig-dmar = Redeye = Mars = Tuesday.
23. Namgyal also Namge ..	Nam = heaven, Gyal = king ..	Tib. rnam (par) rgyal (-ba) = thoroughly victorious. No connection with 'heaven' or 'king'. A name often met with in Sikkim.

Norbu (the r almost inaudible).	Precious stone, jewel	.. ..
24. Naspati	.. ..	Probably Hindustani from Persian naspati = pear.
25. Norsang	Nor = riches, sang = much, great ..	Tib. nor-(bu) bzan(-po) = fine jewel.
Nullu	One who always cries. Name given to an infant (cf. Ang).	.. ..
26. Nyima (Njima) ..	Born on a Sunday	Tib. nyi-ma = sun, Sunday.
27. Palden	.. ..	Tib. dpal-ldan = having fame = famous.
28. Pasang	Born on a Friday	Tib. pa-sans or wa-sans = Venus, Friday.
29. Pemba	Born on a Saturday	Tib. spen-pa = Saturn, Saturday.
Phensing	Not a Tibetan name. Mr. Kydd of Darjeeling nicknamed Angtsering III 'Fancy'. Angtsering pronounced it 'Phansi'. On later expeditions this became 'Pansy'.	.. ..
30. Phu (pronounced more like pu)	Son	Not Tib. bu = son, but abbreviation of Phurba.
31. Phu or Phurba (Purba) ..	Born on a Thursday	Tib. phur-pa = peg, nail, magic dagger. Also = Jupiter, Thursday.
32. Pintso	.. ..	Tib. phun-(sum)-tshogs(-pa) = perfect, excellent; very common for men and women alike.
33. Rinsing	.. ..	Tib. rigs-'adzin = understanding science, having great talents.
34. Samdup	Reliable, true	Tib. bsam-'agrub = executing the will.
35. Sanglu	Good singer. His voice may have been good when he was a child.	Tib. bzan-glu = good song.
Sarki	Leather merchant (a very low caste, cf. Jigme).	.. ..

SUGGESTED EXPLANATIONS OF SHERPA NAMES—(*contd.*)

Name	A	B
36. Sona, Sona(m) ..	A happy one	Tib. bsod-nams = luck.
37. Tashi	One who lives happily	Tib. bkra-shis = blessing, happiness.
38. Temba	Equable, reliable	Tib. brtan-pa = sure, certain.
39. Tensing (better than Tenzing)	About the same as Temba	Tib. bstan-'adzin = understanding the teaching. A frequent name.
Tewang (more correctly Tewing)	Name of a monkey (cf. Jigme) ..	.. ..
Tharke	A name without a special meaning ..	.. ..
40. Thondup	Successful in life	Tib. don-grub = one who has reached his goal; Skr. Siddhartha.
Thundu		
Tendrup		
Thöndup		
41. Thupden	.. ..	Tib. thub-ldan = having strength, endurance.
42. Tinle	One who works fast	Tib. phrin-las = the busy one. Better Thinle. Also occurs as Thinlay.
43. Tobge	Very strong	Tib. stobs-rgyas = extended power.
44. Tse (I)	Tibetan che = life	Tib. tshe = life. Better aspirated with h.
45. Tse (II)	Mountain top, summit	Tib. rtse = summit.
46. Tsering	Long life. Abbr. Tsin	Tib. tshe-rin = long life (same as Chettan). Abbreviated to Tsin.
47. Tsong	Name of a Tibetan province near the borders of Nepal.	Tib. gtsan = pure. Name of one of the chief provinces of Tibet, the Sherpa pronunciation being tsong.
48. Urgen	A Bhutia name of unknown meaning ..	Tib. o-rgyan or u-rgyan = Skr. udyana = garden.
49. Wangdi also Ongdi (more correctly Wongdi)	A powerful or mighty one	Tib. dban-ldan = having power, strong, mighty.
50. Wangyal also Ongyal ..	.. ..	Tib. dban-rgyal = powerful.
51. Yulha, Yulu, Yul ..	A local god in the Khumbu district ..	Tib. yul-lha = a national god.

IN MEMORIAM

HARRY WALTER TOBIN

1879–1957

'TOBY' was a most popular figure with everyone who knew him. He was commissioned into the Royal Artillery in 1898 and later joined the 1st/4th Bombay Grenadiers. He saw service in Baluchistan, Somaliland, Egypt (in action against the Senussi), Anatolia and Waziristan.

On retirement he went to live in Darjeeling and while there he, together with Allsup, Gourlay and Shebbeare, founded the Mountain Club of India in 1927 in Calcutta, later to be amalgamated with the Himalayan Club, of which Tobin was a founder member.

His mountaineering was almost wholly related to the Himalayas. Between the years 1901 and 1914 he made such use as he could of short leaves to do rock scrambling in Frontier regions. In July 1920 he accompanied the late Harold Raeburn on the latter's first expedition to the Kangchenjunga massif and he was to be employed as transport officer on two further expeditions to this mountain—Bauer's in 1929 and Dyhrenfurth's in 1930. On the latter occasion, however, Tobin was invalided during the trip and had to return to Darjeeling. In 1931 he was of much assistance to Bauer again in the early preparations for the second Bavarian assault on Kangchenjunga. Later that same year he and R. Y. Jarvis made what was thought to be the first crossing by Europeans of the Sebu La between Kangchenjau and Chombu.

But more important than his actual mountaineering was his work as Honorary Secretary of the Royal Central Asian Society for the last seven years. Probably his most permanent memorial will be those volumes of the *Himalayan Journal* which he so ably edited from 1947 until his death; it will be difficult to find another so willing and capable of taking up so exacting a task. In 1938 he was elected to the Alpine Club and he was put upon the Joint Himalayan Committee whose final activity was to organize the 1953 Everest Expedition. When the Mount Everest Foundation was established, Tobin was elected to the Committee of Management. It was from this vantage point, as an 'elder statesman' of Himalayan travel (he made no pretensions to being an active climber, though in 1928 he had had a course of training climbs at the experienced hands of Franz Lochmatter), that his influence was

felt; he knew so many of the earlier generation of Himalaya travellers and climbers; and his home in Lymington became centre of information and encouragement where many a moun taineer (some, like Tilman, Streather, Braham, of much mor experience than Tobin's) was to be found and innumerable othe visitors from India.

He was twice married; his second wife was Helen Farquharson daughter of the Medical Officer to the Darjeeling Tea Planter whose death a few years ago came as a great shock. She was a outstanding figure in yachting circles in Lymington and a visito to their cheerful house might find himself entranced by the sigh of a new dinghy being built in the dining-room, or the garage rendered unusable for normal purposes owing to the prior needs o cutting out a new set of sails. 'Toby' himself prudently refuse to be engulfed by yacht racing and kept a small room strictl reserved for the study of the affairs of Himalayan climbing o Central Asian exploration.

To their daughter Barbara (now Mrs. Webb), to whom thi *Journal* has before now been indebted for translation of Frenc mountaineering articles, the Himalayan Club extends its sincere sympathy in a loss which occurred very suddenly and which ha been felt widely amongst mountaineers of every generation and nationality.

TOM G. LONGSTAFF
E. O. SHEBBEARE

(*By courtesy of the Editor*, ALPINE JOURNAL)

LT.-COL. H. W. TOBIN, D.S.O., O.B.E., was one of the oldes members of the Club, being an original member of the Mountai Club of India founded in 1927, and a founder member of th Himalayan Club. After retirement from the Army, he lived in Darjeeling for many years and as early as 1929 he served on th Committee of what was then the Eastern Section of the Club. H was elected Vice-President in 1950, an office which he held unti the time of his death in January 1957. The success of the Hima layan Club Annual Dinners which used to be held regularly i London before the war was largely the result of his efforts.

When he took over the editorship of the *Journal* in 1947, th future outlook appeared far from promising and it is to his credi that under his editorship the *Journal* gradually regained the very high standard achieved by the pre-war volumes. For Tobi

LT.-COL. H. W. TOBIN, D.S.O., O.B.E.

indeed this was a labour of love, and few could have been better fitted to the task than he. His friendship with mountaineers of every nationality was widespread, sympathetic and sincere. If it is as Editor of the *Himalayan Journal* that he will be remembered in his later years, he will be remembered perhaps even more by climbers both in Britain and elsewhere for the encouragement and assistance he was always ready to provide when approached on Himalayan matters. Serving as he did as the Club's representative in the U.K. and also on the Committee of the Mount Everest Foundation he was, as it were, situated in the very centre of things and he was able to render valuable assistance to very many individuals and expeditions planning to visit the Himalayas.

He bore his years lightly, and remained fit and active to the end. When I lunched with him in London a month before his death he discussed projects for expanding the Club's activities in Britain, and judging by the enthusiasm he showed there seemed little doubt that these would have been carried out but for his sudden death.

T. H. BRAHAM

At the time of going to Press, Anthony Streather wished to write an appreciation of H. W. Tobin but as he had only just returned from the expedition to Haramosh he was unable to complete it, and it will be included in the next issue.—ED.

DONALD STAFFORD MATTHEWS

1917–1956

DR. DONALD STAFFORD MATTHEWS, M.B., Ch.B., F.R.C.S., M.R.C.O.G., died of heart failure in Lima, Peru, at the age of thirty-nine. He packed into his life a wealth of experiences and possessed a zest for living that won him all those things that he valued most, adventure, friendship and freedom from the bondage of a circumscribed life.

Born in New Zealand he studied medicine in Edinburgh, and soon after qualifying entered the 'Wavy Navy' as a Naval Combat Surgeon. Wartime service in the Pacific and Mediterranean seemed wholly to satisfy his quest for travel and adventure. Thereafter, he returned to London for a time and settled down to study

gynaecology. His next venture comprised two years' doctoring in Nigeria where he combined his professional activities with investigations into many aspects of the life and customs of the people. Soon after this he came to Calcutta. He was not long in establishing a reputation as a competent surgeon, and began to take a prominent part in the social life of the city. The diversity of his friendships seemed to reflect the many-sided aspects of his character. He moved easily with the great and the small. There was no one he did not know and with whom he did not mix on terms of familiarity.

I began to know him well early in 1954 when he joined the Himalayan Club. John Kempe at that time was organizing the Kangchenjunga Reconnaissance, and he needed a doctor to complete the party. Though Don's experience of mountains was limited to skiing in New Zealand and some trekking in Nepal, I thought of him at once. He readily accepted as I knew he would and turned out to be a valuable member of the party. He had never handled a movie-camera, but he bought the most expensive model available and became the self-appointed photographer to the expedition. In addition he carried out some research on the effects of high-altitude and was in charge of the expedition's food. He was an ideal companion on the expedition, cheerful and unselfish. I can recollect the many evenings in the mess tent after supper when he held the floor with lively stories about his student days in Edinburgh, and his experiences in the Navy and in Nigeria. His impish humour often appeared at most curious moments. I remember how he cornered a rather embarrassed Charles Evans into repeating, during a lecture to the Club, Hillary's remark to George Lowe after his return from the summit of Everest.

Before he left Calcutta in 1956 he had already begun work on his book *Medicine My Passport* (published in London in September 1957, and reviewed elsewhere in this volume). He had decided to spend the next 12 to 18 months travelling around in search of new adventures. He soon teamed up with John Kempe and Jack Tucker again as a member of their expedition to the Peruvian Andes which included George Band, Mike Westmacott and John Streetly.

Generous to a fault and full of charm, he loved life and seized with both hands the many opportunities which came to him. There was nothing he was not prepared to try once; and this, combined with his gift for coping with situations from which the more daunted might shrink, was constantly widening his horizons, and enriching his experiences.

In Lima at the conclusion of the Peruvian Expedition, apparently in perfect health, he returned to his hotel room in the evening and was found dead the following morning. It was a death he himself would have wished for. His life had been filled with adventure widely shared and deeply enjoyed, and he had lived it fully to the end.

T. H. BRAHAM

Although Tom Bourdillon and Hermann Buhl were not members of the Himalayan Club, their sad passing is recorded here as a tribute to their exceptional achievements in the Himalayas.

T. D. BOURDILLON

1924–1956

TOM BOURDILLON was killed on July 29th, 1956, during an ascent of the East Buttress of the Jägihorn in the Bernese Oberland.

One of Britain's outstanding climbers, he did much to re-establish the prestige of British climbing in Europe during the last five years. In 1949 after leaving Oxford, where he obtained an Honours degree in Physics, he was attached to the Ministry of Supply. It was at the experimental station in Westcott that, together with his father, he devised the closed-circuit oxygen apparatus which Charles Evans and he used on May 26th, 1953, during their prodigious climb from the South Col to the South summit of Everest and back. He was a member of Eric Shipton's Everest Reconnaissance team in 1951, and also of the 1952 Cho Oyu party. Gentle and modest, he possessed remarkable qualities of determination. Even under the most adverse conditions he had an unruffled and cheerful manner. His talents covered a wide field. We express our deepest sympathy to his wife.

T. H. B.

HERMANN BUHL ✓

1924–1957

HERMANN BUHL was killed on June 27th, 1957, during an attempt on Chogolisa, 25,110 ft. He was a member of a 4-man Austrian team, and had earlier succeeded in climbing Broad Peak, 26,414 ft.,

thus achieving the distinction of becoming the first climber to reach the summits of two mountains over 26,000 ft.

Buhl, whose home was in Innsbruck, had gained a unique reputation for his remarkable mountaineering feats. His record of great climbs in Europe, often undertaken under exceptional conditions, and his many solitary ascents of very difficult routes, placed him in a class limited to very few climbers of the present generation.

He astonished the climbing world by his solitary ascent of Nanga Parbat in 1953—an unparalleled feat in Himalayan mountaineering. Buhl succeeded because he had the good fortune to enjoy perfect conditions for the climb; and because he had accustomed himself by force of long training to expose himself to the uttermost limits of endurance. He has described the climb fully in his autobiography, *Nanga Parbat Pilgrimage*, published in 1956 (reviewed elsewhere in this volume), which also contains vivid accounts of his early climbing experiences.

T. H. B.

GEORGE WOOD-JOHNSON

1905–1956

GEORGE WOOD-JOHNSON, who died on August 12th, 1956, was one of the most active members of the Club in its early days. He had passed his youth in the Lake District and had become a fine rock-climber. He came out to Darjeeling in 1929 as a tea planter, but with the primary object of attempting some of the Himalayan giants. While assistant at Gielle Tea Estate he did some useful exploration in the then less-known parts of Sikkim and, in 1930, joined the International Kangchenjunga Expedition led by G. O. Dyhrenfurth. The late Frank Smythe was also of the party. George accompanied them in the dual capacity, both as a climber and, with Tobin, as transport officer. He took part in the first attempt on Jonsong Peak on May 30th and displayed the utmost determination to attain the summit. In 1933, he was invited to join the Everest Expedition under Hugh Ruttledge and again did splendid work, mostly with transport. Not long afterwards he left tea and returned to his old haunts near his beloved Cumberland hills. His genial and loyal personality will be much missed by all who knew him.

H. W. TOBIN

SIR BASIL GOULD, C.M.G., C.I.E.

1883–1956

BORN in 1883, Basil Gould was educated at Winchester and New College, Oxford. He passed into the Indian Civil Service and thence entered the Political Department of the Government of India, where his career was brilliant and diversified. In 1913, he was placed in charge of the four Tibetan boys sent, as an experiment, to be educated at Rugby. He became Private Secretary to the Viceroy and then served for seven years in Persia. Then at Kabul as Counsellor, being instrumental in the evacuation by air of women and children from the British Legation. He held various posts in the North-West Frontier Provinces and in Baluchistan, nearly losing his life in the great Quetta earthquake while succouring the injured and infirm. His last years of service were as Political Officer in Sikkim and for Bhutan and Tibet. There he took the opportunity of learning the language and customs of the Tibetans and, in 1936, headed a British Mission to Lhasa. At that time relations between Tibet and China were even more than usually strained and no successor had been found to the great Dalai Lama, who had died four years previously. In Lhasa, he made many good friends, several of whom have visited him and Lady Gould in their home at Yarmouth, Isle of Wight. Sir Basil was widely recognized as a leading authority on the language and customs of Tibet, and kept in touch with conditions and current events there. Indeed, his advice was not infrequently sought by our Foreign Office. He was always a keen yachtsman, and after retirement raced with some success in his own Y.O.D. *Genesta* from the Royal Solent Yacht Club whereof he was a flag-officer.

The funeral service at St. James's Church, Yarmouth, was attended by many friends, including representatives both of the Royal Lymington Yacht Club and of the Royal Central Asian Society.

H. W. TOBIN

WHILE this *Journal* was still in print, we have learnt with deep regret of the death of Major N. D. Jayal. Maj. Jayal, aged 32, was Principal of the Himalayan Mountaineering Institute in Darjeeling from its inception in 1954, and his death is a severe loss to Indian mountaineering. He left Darjeeling in March 1958 to take part in the Indian Expedition to Cho Oyu and died of pneumonia on April 28th at the Expedition's Base Camp. An Obituary Notice will appear in the next volume.

T. H. B.

REVIEWS

KANGCHENJUNGA, THE UNTRODDEN PEAK. By CHARLES EVANS. *Pp.* 187. *Illus. Hodder & Stoughton, London.* 1956. *Price* 25*s.*

This is a book essentially by a mountaineer for mountaineers. As the official account of one of the greatest mountaineering achievements in the history of climbing, it is not only a very important document, but also faultless in its preparation and well illustrated. The impression is of high-altitude technique brought to perfection and unerringly applied.

To appreciate from the leader's (Dr. Evans) modest account the magnitude of the achievement, and the sheer skill and determination which made success possible, it is necessary to read between the lines, with some knowledge of climbing as a sport, as well as of the hardships and dangers of climbing at great heights. For, to the lay-reader, the climb must appear uneventful, even easy. The whole undertaking was too expertly planned and executed to be productive of adventures and desperate situations. Kangchenjunga has been essayed many times in the past fifty years, so the double ascent in 1955 at the first attempt, by an almost entirely new approach, is a classic achievement. On all sides for the first 6,000 to 7,000 ft., between soaring rock faces, the mountain is festooned with ice-falls, steep névé and avalanche slopes, which form a belt of truly enormous defences set at a formidable altitude and protect the upper snow slopes and steep rocks near the top. It is the successful penetration of this dangerous belt of defences, in limited time, which must always call for great mountain craft and is the special problem of the climbing of Kangchenjunga. Above this belt, there remain all the problems of high climbing and a final test of difficult rock to the summit cone.

Before the days of high-altitude mountaineering, it was once suggested by an early writer that Kangchenjunga appeared to be climbable from its west side, but that it might be advisable to take a wrap in case of a night out! Ideas have changed since then and the mountain has come to be recognized as one of the most difficult in the world and one of the most dangerous. In fact, 'Kanch' has acquired an almost fiendish reputation for bombardment with stones and avalanches of those who have dared its defences. This reputation has grown to the point where more than

one expedition after considering it carefully has decided against attempting it and gone elsewhere. The summit was almost regarded as impregnable, but Evans and his colleagues have dispelled that idea at one master-stroke; they surmounted all the difficulties and left only the final white cone of snow untrodden.

The climbing of Kangchenjunga was in a sense the culmination of the joint efforts of the Alpine Club and the Royal Geographical Society over a span of thirty years in the Mount Everest region. One tended to say 'at last Everest has been climbed—but there is still Kangchenjunga'. Technically more difficult and comparable in height, it required all the experience accumulated on Mount Everest for an ascent to be a possibility. Thus, it is a fortunate outcome that the enterprise of its organizers instigated by Sir John Hunt, financed from the Everest Foundation and sent out under the patronage of Prince Philip, should have completed the task. The primary purpose of the expedition was to find a solution to the problem of climbing Kangchenjunga, but while it was equipped to take advantage of the opportunity for a 'go' at the summit, a successful ascent first time was scarcely expected, and the Kangchenjunga committee had it in mind to send a further expedition in the following year.

There was a happy compromise in the decision to leave the actual summit cone untouched, in deference to the feelings of the Maharajah of Sikkim and his people. May it always remain so. Much credit is due to H.H. The Maharajah and his advisers in their acceptance of the parole given by Charles Evans and allowing the expedition to proceed. To the Sikkimese, Kangchenjunga is more than a mountain. It dominates the entire country. Its name, 'The Five Treasures of Great Snow', symbolizes much of the mystic attitude to the snowy mountains which look down on their own monastic way of life. Doubtless their request that the final peak must be left unclimbed will, in their minds, have pacified the demons of Kangchenjunga and saved the party from destruction.

The book, with its vivid account, and detailed descriptions and diagrams of the route, gives us a valuable record of how the job was done. The route, based on observations made by Kempe from Kabru, was almost entirely virgin ground and Evans in his account unfolds it stage by stage in fifteen chapters. Like the manner in which he attacked the task itself, there are no digressions—each chapter concentrates on and spotlights in detail the upward progress of the expedition from one stage to the next.

The style is brief, very readable and modest to a fault. On the rare occasions when our author pauses to paint a picture in its true colours, he shows considerable talent as a writer and one's only regret is that, being a factual account, he firmly excludes most of the personal and aesthetic side of his experiences.

Perhaps the most thrilling part of the story is the account of the discovery by Hardie and Band of the snow gully which affords the only practicable route off the western buttress on to the top of the lower ice-fall. This gully seems to be the key to the whole route up the south-west face. There is a good description of the delicate climbing from Kempe's buttress into the broken and heavily crevassed upper reaches of the lower ice-fall. This fine piece of reconnaissance disclosed the existence of the snow gully, and Evans showed judgment and leadership in forming his decision at once to concentrate the whole energies of the expedition on reaching this gully from the other side of the West Buttress. From this moment, the building of the route and line of camps up to the Great Shelf and beyond was conducted with great skill and determination.

The book is illustrated with some excellent photographs. The colour pictures are so realistic that it is a pity that all the photographs could not be in colour. In spite of the fact that photographs taken during the serious business of a climb can seldom give adequate impressions of scale and gradients, the pictures are very impressive, and show that the ice obstacles, séracs and crevasses, are on a very large scale indeed, calling for experience and judgment to allow for the movement of such huge masses of snow and ice. The aerial photographs by the Indian Air Force are magnificent and must have helped considerably in working out the route, even if they appal in showing what a terrific mountain Kangchenjunga is.

Of interest are the notes and appendices on the use of oxygen and details of the latest type of equipment.

Altogether, Charles Evans has produced a most readable and important contribution to the literature of climbing.

C. R. COOKE

MAKALU. By JEAN FRANCO. *Pp.* 215, *Illus.* *B. Arthaud, Paris.* 1956.

Gino Watkins once said that the well-conducted expedition should have no adventures. Yet the national Himalayan expedition must, both for prestige and financial reasons, have its expedition

book and the lay public demands adventure and 'derring-do'. It must, therefore, have been particularly difficult for M. Franco to write his account of the successful French expedition to Makalu. For the Makalu expedition was, in fact, so well conducted that it had no adventures. As M. Franco puts it: 'A 8,000 comme au sommet du Mont Blanc, au sommet nous étions neuf. Trois ascensions en trois jours, ce n'est pas une conquête. Et nous n'avions même pas eu froid aux pieds.'

Inevitably, therefore, in reviewing this book, one reviews the expedition and tries to discover what useful lessons can be drawn from it. One's overall impression is one of orthodoxy. All ingredients for success were thoroughly appreciated beforehand, and this mixing was carefully carried out according to what is now a well defined recipe. Their equipment and so on had no particular novelties, they had their autumn reconnaissance and their acclimatization period, the mountain was not rushed, the ratio of Sherpas to climbers (about 3 to 1) was typical, they took open-circuit oxygen whose performance seems to have been similar to the 1955 British sets. One expects nowadays that an expedition that follows all this should, given average luck with the greatest imponderable, the weather, have success. The French had exceptional luck with the weather (unbroken fine weather during the assault period) and so, having followed all these rules meticulously, were enabled to reap a complete harvest. Hence the impression one gets in the book is of the easy inevitability of success. But this conceals the importance and perfection of the final factor: leadership. In the book this is extremely unobtrusive, as it probably was on the expedition. And yet Franco managed to weld a group of seven highly individualistic climbers into a team that followed these rules, and yet kept the concepts of 'team', 'plan', which are anathema to most climbers, in the background. As a result it was clearly a very happy party who enjoyed themselves and climbed their mountain. And it seems clear that because of this they would still have climbed their mountain even if they had had worse than average luck with the weather.

Makalu also illustrates well another interesting subject: oxygen. It is not technically a very difficult mountain, and it could obviously have been climbed without oxygen. And equally obviously, if it had been climbed without using it, probably only one *cordée* would have reached the summit. But the use of it kept all eight climbers sufficiently fresh for them all to partake of the success. This, to my mind, is the most important argument for its use. For there is a great difference in the satisfaction of actually

getting to the summit and the less tangible satisfaction of knowing that by one's 'support' of a summit pair (in conducting Sherpa convoys on the lower reaches) one has enabled the pair to reach the summit. The other two points in favour of oxygen are well illustrated too. That of enjoyment, what one might call tactical enjoyment, i.e. actually enjoying one's high-altitude climbing, is already well known and the chapter on the assault emphasizes this once more. The other point is one of logistics. To revert to the classic analogy of the pyramid—the large base of men and equipment enabling the capstone of one pair of climbers to be built—by using oxygen one can build one's pyramid much more quickly and therefore have a much smaller base in terms of men, equipment and time. This possibility of speeding up of operations is graphically shown by (and is perhaps a portent of the future) the third assault pair who on their first day climbed, using oxygen, nearly 5,000 ft. from the advanced base (Camp III) to Camp IV and on the second day, after going up to the summit (more than 2,000 ft.), returned to Camp III. (It also shows how fantastically fit they must have been.)

Lacking as it is in doubt and drama, the book is remarkably readable. 'Preparations' hardly occupy any space, the 'approach march' is as brief as one can expect, the members of the party are never formally introduced but develop naturally as personalities, each with his own particular foibles, during the course of the book. Franco presents the actual ascent as a being almost carefree without any overbearing sense of a deep mission (apart from one revealing little sentence when the summit has been reached, 'Devies sera content maintenant'). The whole atmosphere is best summed up by Couzy's remark to Franco after he and Terray have returned from the summit. 'C'est comme dans les Alpes, la course de la matinée.' Inevitably one begins to draw a comparison with its predecessor Annapurna—both the expedition and the book. Anyone who has read both can draw his own conclusions. To those that haven't, Gino Watkins' remark and Armand Charlet's misquote 'C'est magnifique, mais ce n'est pas l'alpinisme' used in another context, make perhaps fair comments. It is an irony of history to think that in fifty years' time the Makalu expedition will have sunk into almost complete oblivion when contrasted with Annapurna. One cannot help remembering Scott and Amundsen.

Lucien Devies, who seemed to occupy a sort of *éminence grise* position in relation to the expedition, contributes a useful summary, in the form of a foreword, of Himalayan expeditions to

the eight-thousanders. His concluding remark that Makalu is probably at the time of writing the most difficult one climbed is perhaps arguable, but it is fair to point out that the time of writing seems to have been before Kangchenjunga, for it is only mentioned afterwards almost by way of an addendum. There are thirty illustrations of which seven are in particularly glossy colour. Some of these latter would undoubtedly have been more restful in black and white. The black and whites are of normal competence and, rare for a French production, they are from half-tone blocks.

R. R. E. CHORLEY

THE SIEGE OF NANGA PARBAT, 1856–1953. By PAUL BAUER. *Pp.* 211. *Illus. Rupert Hart-Davis, London.* 1956. *Translated by* R. W. RICKMERS.

There is always a certain financial relief attached to the climbing of a big mountain after repeated endeavours. No longer will we have to buy an expensive new book every two years in the foredoomed knowledge that it will soon be out of date. The whole thing can now be summed up and purchased in one nutshell.

This is the function of Dr. Bauer's book, which bears the same relation to the story of Nanga Parbat as Mr. Murray's book did to Everest.

Here is the entire story of muddling, vainglory, sentimentalism, waste, cowardice, determination and courage: those who saved their skins and those who were faithful unto death, those who never got a chance and those who had a demon under their skins, those to whom luck was very good and those to whom it was cruelly bad. All climbers know the whole story already. It is repellent and fascinating. We can all be thankful that it is now over and that we had nothing to do with it.

A book to sum it all up was certainly needed, and Dr. Bauer was probably best qualified to write it. He makes no attempt to cover up unsavoury details and does not hesitate to apportion praise or blame according to his own point of view; indeed there is almost a lack of historical objectivity. He rightly spares us those approach-march chapters that pad out so many weedy Himalayan tales into the semblance of books, and sticks mainly to the details of action. Indeed at the end he leaves us sitting at Camp V rather wondering how we are going to get down. It is curious that in spite of this the book reads a bit flat (as books do about other men's adventures) except where the writer was involved. Bechtold's section on the 1933 expedition, already well known and

re-printed here, has never seemed to the reviewer entirely clean of treacle. The photographic plates are not good. But it is a necessary book for any mountain library with any pretence to completeness.

It is interesting how attractively the character of Rand Herron comes through. Bauer is objective about nationalities.

Mummery, Welzenbach and Buhl were the ones with the devils, the unpredictable ones. The fate of any one of them might have overtaken either of the other two. Buhl's fantastic run of luck had to run out sometime for all his superb will and control but, although never more tightly-stretched, it held out for Nanga Parbat. And let nobody be deceived, it was luck. It is easy to sympathize with the much-maligned Dr. Herligkoffer, despite all the oddities of his expedition, for anyone knowing something of the inside story of its aftermath. Luck might just as well have helped one of the other two or killed Buhl. It is a pity that the only well-organized and properly-led expedition to the mountain, Dr. Bauer's in 1938, never had a chance with the weather, for in any other terms but those of altitude it was by far the most successful. Is any peak worth all those lives? Only to the devil under the skin.

'Too great a sacrifice
Can make a stone of the heart'.

G. J. SUTTON

NANGA PARBAT PILGRIMAGE. By HERMANN BUHL. *Pp.* 360. *Illus. Hodder and Stoughton, London.* 1956. *Translated by* HUGH MERRICK. 25*s*.

Hermann Buhl was killed in the Karakoram in June 1957. When one has read this book, the English translation of his autobiography '8,000 *meter Druber und Drunter*', one cannot be surprised. Buhl devoted himself to mountaineering in all its forms with an intensity equalled by few, an intensity which can only be regarded as fanatical. I suppose many people who climb do so, amongst other reasons, to test themselves: how far they can push their skill, their endurance, their will-power. But the degree which they are prepared to push themselves depends on their personal safety margin and Buhl seems to have reduced his beyond most people's. But no doubt the intensity of his pleasure and living was greater than most people's. If, for instance, one frequently indulges in the solo climbing of difficult rocks then the potentialities resulting from mistakes—which, being human, we all make—are much greater. And the more

frequently we do it, the shorter the odds. The Buhls of this world would I am sure agree with this; the question is really an ethical one of the extent to which one's own actions should be governed by responsibility to others.

To the ordinary mountaineer, Buhl's brinkmanship may be disconcerting but it certainly results in a book with never a dull moment: there is scarcely a chapter in which pegs don't come out, holds break, storms rage, people fall off—every textbook danger that we seek to avoid. And mixed up with all these alarums and excursions, Buhl's enthusiasm for a climbing life bursts through. In particular, his descriptions of the pleasures and penalties of solo climbing are very vivid and true. Anyone who has climbed solo will live with him intensely in his accounts of such climbs as the N.E. face of the Piz Badile—a route which is as difficult for its free climbing as for its artificial—and the silence of a moonlit winter's night ascent of the east face of the Watzmann, the longest face in the Eastern Alps. One would also single out his account of a stormy ascent of the Eigerwand at the head of a party which eventually totalled nine. It is instructive to compare his account with Rébuffat's, who was also one of the nine, and incidentally Rébuffat's approach to mountains and the big north faces, as exemplified by his *Starlight and Storm*, with this book.

Buhl's extraordinary performance on Nanga Parbat in 1953 forms only a short part of the book—two chapters. The first, 'Below 26,000 feet', gives a good impression of the tedium and the way trivialities loom so large in a Himalayan expedition—in this case a particularly unhappy one. The details of Buhl's extraordinary 41-hour performance, 'Above 26,000 feet', will be known to most readers. Here they have an epic vividness that I haven't come across since Herzog's *Annapurna*.

The enthusiasm of this book is conveyed by a simple style, at times somewhat naïve with gaucheries and clichés that make it all the more effective. Also touches of self-conceit and outspokenness over difficulties encountered and overcome which are a refreshing change from overstatement by way of understatement that is so common. All this, Hugh Merrick has caught well. But where technicalities, in particular of artificial climbing, are involved, the result is confusing and one senses that the translator has not understood the original. This is not helped by the use of several different words to translate such words as *karabiner* and *mauerhaken*. Perhaps a glossary would have helped.

R. R. E. CHORLEY

EAST OF EVEREST. By Sir Edmund Hillary and George Lowe. *Pp.* 70. *Illustrations* 48. *Hodder and Stoughton, London.* 1956. 21*s.*

This book tells of the 1954 New Zealand expedition to the valleys of the Barun and Hongu south-east of Everest. It was a sizeable expedition, and, apart from much survey work, it collected a bag of nineteen peaks over 20,000 feet, and explored the southern approach to Makalu. But the New Zealanders have determined that it shall not be long-winded; the whole is squeezed into 70 pages of text, illustrated by 48 pages of excellent photographs.

This arrangement has its advantages. The possible tediosities of plans, preparations and build-ups are avoided, and the story moves swiftly forward, with the help of good maps which seem to appear just when they are needed. The disadvantage is that the reader becomes afflicted with rather the same breathlessness as afflicts many who climb with Hillary and Lowe. There is not much time to stop and look around before—hey presto! and he is whisked off to the next 22,000-ft. summit. Peaks climbed with that rapidity have a way of all looking very much like one another.

For the non-geographer the highlights of the book are the chapter of accidents recounted by Hillary, and the ascent of Baruntse (23,570 ft.) in Lowe's section. Hillary describes vividly the accident in a crevasse to Macfarlane, frostbite and its later complications, and cracked ribs for the leader. Then came his illness on Makalu, which compelled the party to give up its route and make the difficult journey down.

It is of interest that the writing styles of these two come curiously close to one another: rather like their climbing styles, the long stride, the long ice-axe and the fast pace. It would be difficult to tell which was which from the writing. Lowe's most exciting passages concern the upper part of Baruntse. The break-through of the cornice is a dramatic moment, and the corner above must have been a fine lead by Todd. He ends in an atmosphere of delightful jollity at the five-day festival of Dumji in Sola Khumbu.

A book attractive to handle and to look at. Straight and engagingly honest as an account, with a pleasing openness about it. Important in the story of Himalayan exploration for the filling in of gaps, and possessing some impressive pictures.

Wilfrid Noyce

IN HIGHEST NEPAL. By NORMAN HARDIE. *George Allen and Unwin Ltd., London.* 1957. 21*s.*

Norman Hardie will be remembered as a member of Sir Edmund Hillary's expedition to the Barun in 1954 and of Charles Evans' Kangchenjunga expedition.

This book recounts his travels in E. Nepal after the Kangchenjunga climb of May 26th, 1955, when Tony Streather and he reached the near-summit. With three Sherpas he walked over to Khumjung and spent the monsoon months living with the Sherpas in Sola Khumbu. In the autumn he was joined by his wife and another New Zealander A. J. Macdonald who helped him to complete the photo-theodolite survey work in the region of Chamlang (24,012 ft.) which was begun in 1954. On their way out towards Katmandu they met Dawa Tenzing and Changjup returning from their trip to England.

One of Hardie's ambitions had been to take up residence in a Sherpa village, and so the book is of particular interest in that Sherpa life, festivals and customs are described in much greater detail than is possible in books recording mere mountaineering adventures. At last we are able to discover the real difference between yaks, nacks, dzums and dzubjocks and we learn what a female yeti does before she looks into a tent.

He mentions an unexplored valley two miles from Chamlang with a 'fine array of climbable peaks in the 21,000-22,000 ft. class'. Chamlang itself is still unclimbed and perhaps the book may serve to point the way.

G. C. BAND

TENTS IN THE CLOUDS. By M. JACKSON and E. STARK. *Pp.* 255. *Illus. Collins, London.* 1956. 18*s.*

This is an account of a journey to the Jugal Himal in eastern Nepal which was highly successful and—more to the point—keenly enjoyed. In about a month the party traversed two glaciers, climbed to a col on the frontier ridge, and bagged a peak; which is more than this reviewer did in the four months spent in the Langtang before ever setting eyes on the Jugal Himal. As with many other Himalayan peaks the only difficulty of this one lay in the approach up the icefall. Its height is elastic, the figure on one page of 22,000 ft. is later cut to 21,000 ft. But to go to the hitherto unvisited Jugal Himal was bold and enterprising and they had their reward in recapturing the freshness of bygone days, treading new ground and unravelling topographical puzzles.

Too much, perhaps, is made of the inaccuracy of the map, a matter of little interest to the general reader who will not understand it without a look at the map in question. Maps of the Nepal Himalaya do not pretend to accuracy (except for the major peaks above glacier level, and although it would help hardy explorers who visit unknown regions to have a proper map, it is unusual unless the region happens to have been surveyed from the air. We meet with one or two 'perpendicular' ice couloirs, which is not quite the same thing as steep or even very steep; and on p. 143 a new doctrine of only 'roping up on all climbs when a fall would have proved fatal' is enunciated. Surely if one of their Sherpas had fallen and broken every bone in his body, they would hardly expect to be exonerated from blame on the grounds that the unfortunate man had not succumbed to his injuries?

Although Mrs. Jackson disclaims having considered the 'first-ever' aspect, her publishers do not—'their modest expedition made head-line news' runs their blurb. Must we now look for an endless repetition of Himalayan ascents by parties 'composed only of women'? And the bold conjecture in the book that 'the first woman to climb Everest will be small-boned and petite' seems to promise that we must.

The book, which is good value at 18*s*., is divided into two unequally written parts, but I found it all interesting and enjoyable. One part is in the run of the mill style of Himalayan climbing books, the other is fresh, racy, and has, what I thought, some charmingly written descriptive passages. There is a little too much about 'retiring behind boulders' and a strong Gaelic flavour pervades the whole. Brose is brewed daily at 5 a.m., while howffs and lochans abound. The Sherpas are well and amusingly drawn. They seem to have run the party with their usual efficiency, and to have got rather out of hand on the way back—which also is customary.

Some of the pictures are very fine, but it should always be remembered that mountains are more beautiful than those who climb them. 'Human interest' is all very well in mountain scenes, but the less intelligent readers who want a lot of it turn to the *National Geographical Magazine* which likes to decorate its mountain pictures with bevies of beauties in bikinis. The top picture facing p. 160 surely deserved a full plate, while that facing p. 176 should have been burnt. It reminded me of the 'Ascent of F6' and what the man saw when he reached the summit and died.

H. W. TILMAN

WHITE FURY. By RAYMOND LAMBERT and CLAUDE KOGAN. *Translated from the French* by SHOWELL STYLES. *Pp.* 176, 47 *photos*, 1 *map*. *Hurst and Blackett, London*. 1956. *Price* 18*s*.

In the autumn of 1954, Lambert reconnoitred Gaurisankar with a Franco-Swiss team of five. He approached eastwards from Katmandu, north by the Bhote Kosi, and so to Beding in the Rolwaling Khola, whence he crossed an 18,000-ft. pass to the Menlung Chu. In late September, two long-distance reconnaissances were made of Gaurisankar's South, East, and North ridges. These were seen to be either long thin blades bearing double cornices, or, where broader, cleft by enormous gaps and studded with ice-towers. The faces between were reckoned unclimbable. Decision was therefore taken to attempt Cho Oyu, despite the known presence there of Dr. Tichy's Austrian party. To this end, Lambert crossed the Menlung La and the Nangpa La. His attempt on Cho Oyu went by the West face, the easiest on any eight-thousander. He and Mme. Kogan were stopped at 26,500 ft. by bad weather—hence the book's title. Since they had carried with them from Katmandu no less than thirty-five quarts of whisky, the storm must have been terrible indeed—or the whisky not Scotch?

The book as a literary work reveals a most successful experiment in padding. The authors lack material for a book-length work, for they are not in possession of the creative imagination or perception to draw out and develop the boundless possibilities latent within their brief adventure. Instead, they write two or three chapters turn and turn about, overlapping the narrative, so that each tells again part of the preceding writer's story. Since each succeeds in presenting different aspects of the joint enterprise, the repetition, far from palling, adds to our interest. The transfer of pen from one to another is done with a dexterity well worthy of study by authors likely to find themselves in a similar predicament.

Several features of the story call for adverse comment, first and foremost the deliberate gate-crashing of Cho Oyu by the very face on which Dr. Tichy was climbing. Lambert's defeat does not (in the reviewer's opinion) mitigate his offence to human relationships. The intervention drew from Pasang Dawa Lama—Tichy's sirdar—one of the most remarkable physical feats ever recorded in the Himalaya—the ascent of Cho Oyu (26,750 ft.) in three days from Namche Bazar. He was powered by anger. Had the

intervention occurred in 1952, perhaps the mountain's history might have been different.

Mme. Kogan claims for herself the second crossing of the Menlung La. The second crossing was in fact made by the reviewer with Tom Bourdillon in 1951, and further crossings followed in 1952. For this and other errors, Mme. Kogan makes recompense by offering, on p. 84, a most excellent thumb-nail sketch of true love in action.

The writing is marred by inconsistencies of thought and feeling. In Chapters 22 and 23, when Lambert denigrates his companions, his uncharitable feelings compare ill with his generous words in Chapter 1: 'We were one entity, a team, and from the date of our starting out our individualities were merged to form a collective soul—the soul of the expedition.' Denigration may be viewed by some as commendable openness, but in light of it the collective-soul declaration appears too gross an insincerity. Likewise, Mme. Kogan on Cho Oyu quotes, 'Keep me, O Lord, from happiness too easily attained.' But when the Lord a week later takes her at her word, she is resentful. They go down, she says, bruised in pride, and, referring to the lost summit, speaks of the 'bitterness of our failure to conquer it'. On the next page she declares, 'We have lived as intensely as man can live'. That is a very great claim indeed—cause surely for deep and abiding satisfaction. But almost in the next breath she says with more truth than perspicacity, 'The best and most valuable gift this attempt had brought us was the feeling of dissatisfaction, the desire for revenge . . .'

The translation is well done, but is sometimes too literal for ease of understanding. One sentence reads, 'Our eyes were so much bigger than our stomachs that we sometimes mistook the latter for marmots!'

Our ears seem to catch, from that distant valley, the bark of a shaggy dog.

W. H. MURRAY

ON CLIMBING. By CHARLES EVANS. *Pp.* 191. *Illus. Museum Press, London.* 1956. *Price* 30*s.*

There are three kinds of books on mountaineering technique: the straight textbook; the book which is a mixture of technique and personal descriptions of climbs to illustrate and provide

backgrounds to the techniques; and mountaincraft. The last is concerned more with the psychological approach and in so far as it deals with this it is never likely to be dated. The first, which is done so well by the French and Americans with their wealth of technical jargon, is suited to the enthusiast, but as techniques change they become dated. The middle category is concerned in the main with the approach to mountains and mountaineering and therefore the techniques involved are the basic techniques. Such books carry a great responsibility because their greatest influence is on the beginner and it is fundamentally important that his approach should be correct, with a clear appreciation of the dangers and the techniques used to minimize them. Nor should they lose sight of the pleasures of climbing—and of good technique. An excellent example of such a book is Colin Kirkus's *Let's Go Climbing*, and Charles Evans' new book is a worthy successor.

The layout of the book follows the normal pattern: beginnings, equipment, rock climbing, snow, ice and glaciers, and illustrative chapters on climbs in Wales, the Alps and the Himalayas. There is a separate chapter on the rope. It is an excellent chapter, not so much for the simple techniques which are clearly described but because of the way in which it emphasizes the fundamental importance of the rope and of good rope technique. (But I was rather alarmed to notice the author in one of the illustrations using a duralumin karabiner as a waist attachment.) Artificial climbing is only mentioned in a general way, as is proper in a book of this nature. The few words he has to say are wise, although I would insert the word 'should', for accuracy's sake, in his last sentence that artificial climbing only starts when the hardest of free climbing has failed to force a way!

The chapter on rock climbing is straightforward and starts the beginner off on the correct lines.

The first of the chapters on snow and ice begins with crampons and not the axe. This is unusual but, with modern rubber-soled boots, I think, correct, for it is most important to emphasize that the good snow and ice climber does very little step-cutting today and that while the axe and crampons are both essential, the former is the accessory. But as he says, crampons demand a special skill and their use must be thoroughly mastered. I wonder how many beginners spend a morning or two practising crampon technique on a glacier snout, and, indeed, there are many otherwise competent mountaineers who would gain considerably by a few hours of thoughtful practice. There is a tendency in textbooks for the

reader to get the impression that an ice step is fashioned as a work of art, clean and regular and sloping in; in the Himalayas, where steps are to be used several times, or in the Alps where slopes are very steep, this is correct, but for normal purposes this kind of step is far too time-consuming to produce; all that one should aim to do is to produce a rough gouge which one can stand in comfortably in crampons. But the author does emphasize one small but important point: 'cut as if you meant it'.

In the last three chapters on Climbs and Walks in Wales, a traverse of the Täschhorn-Dom, and some Himalayan travel, Evans is at his best. These accounts, whether of small or big mountains, transmit his enthusiasm, and the pleasures, drudgeries and trivia of a trip in the hills which in total gives a fine impression of what climbing is really like and which is therefore of much value to the beginner. This, indeed, is how I would summarize the book: it will set the beginner off with the right techniques and attitudes. Where one disagrees it is mainly on small points of technique (e.g. figure 64 shows a climber belaying with his axe in snow, with the axe several feet to one side of him); and contrarily, there are many points that I found myself underlying with complete agreement. If the book has a weak patch it is in relation to the Alps. I would have liked to have seen a chapter devoted to the special problems the Alps presents to the guideless novice (in the Alps) who is already experienced in Britain; on the importance of speed in the Alps and how to attain it (something in which British climbers tend to be deficient in mixed routes), and on route-finding, perhaps like the famous chapter on the Beispielspitz in Badminton. For in some ways, the jump from Britain to the Alps is bigger and more serious than that of either starting to climb or on going to the Himalayas. The Alpine discipline and dangers are in many ways quite different from those of British climbing and the differences are not always obvious.

Charles Evans' sketches are for the most part clear and concise, supplemented by some thirty-two photographs in which Douglas Milner's hand is unmistakable. The blocks are good, the illustrative ones *are* illustrative and some of the general ones are very fine—many even combine both qualities. *On Climbing* costs thirty shillings: this is unfortunate because it will tend to put it out of the reach of the people who will gain most from it, but even at this price they should try to acquire it, because it will start them off climbing with the right approach.

R. R. E. CHORLEY

THE MOUNTAIN WORLD, 1956-57. English Version edited by MALCOLM BARNES. *Published by Allen and Unwin Ltd., for The Swiss Foundation for Alpine Research. Pp.* 200. *Illus.* 25*s.*

It is a truism to say that this annual is now established as incomparably the leading mountaineering review in the world. This issue is well up to the superlative standard set by its predecessors in quality both of production (the plates are first-class) and of subject matter. Indeed one feels, setting the book down, that it renders a great many other climbing annuals unnecessary.

The fare is varied. Everest, Makalu, Lhotse and Kangchenjunga jostle Mount McKinley and the African Virungas in its pages. Sporting accounts follow scientific records of the greatest interest and most varied kind, all readily comprehensible to the profane: Othmar Gurtner's paper on glacier ice is a masterpiece of clarity and concision. Nor are the Alps forgotten—we read of high-standard climbing there both on ice and on rock, written with that admirably sane balance which seems widespread among Swiss mountaineers.

It would be presumptuous in the reviewer to praise the great expeditions, French, Swiss and British, described in this volume, for all were models of what high-altitude expeditions should be. But one is struck by their smoothness and assurance even in the face of initial setbacks. The formula evolved in 1953 by Sir John Hunt has now been perfected, and the ascent of 8,000 m. mountains is quickly becoming technically as commonplace (though vastly more costly) as the climbing of classic 4,000 m. peaks in the Alps.

The editorial states the position with perspicuity. The golden age of Himalayan climbing will soon be over; indeed Herr Gurtner suggests that it is over already, although that seems to be going rather far. But certainly with the 'Big Five' climbed the dreams of future boyhood can never be quite the same. Let us hope that our children may still be reading in *The Mountain World* of climbing on the deserted summits of the moon, though by then it may be appropriate to change its title.

G. J. SUTTON

A CENTURY OF MOUNTAINEERING. By SIR ARNOLD LUNN. *Pp.* 263. *Illus. Allen and Unwin, London.* 1957. 30*s.*

This is a superbly produced book, commissioned by the Swiss Foundation for Alpine Research as a tribute to the Alpine Club on

the occasion of its Centenary. Othmar Gurtner, in dedicating the book to 'the doyen of the mountain brotherhood', expresses gracefully and sincerely the strong feelings of friendship that have long existed between Swiss and British mountaineers.

The author, chosen by the Swiss with characteristic insight, deals ably with his subject both as an historian and as an essayist, analysing the personalities and philosophies of great mountaineers of the past. During Sir Arnold Lunn's lifetime, the sport of mountaineering has undergone fundamental and revolutionary changes, and his personal reminiscences, interwoven throughout the latter part of this history, span a period from Whymper and Freshfield to Joe Brown and leading exponents of modern artificial techniques.

The history opens with the earliest recorded attitudes towards the mountains, and the gradual changes that led to man's appreciation of their beauty. There follows a brief survey of the British Pioneers in the Alps, which is succeeded by the founding of the Alpine Club and the birth of 'The Golden Age of Mountaineering'. Edward Whymper and Leslie Stephen are given a chapter on their own, also some of the great guides of this period, notably Michel Croz, Christian Almer and J. A. Carrel. The 'Silver Age' follows, and with it the beginnings of guideless climbing. Mummery and Coolidge are rightfully given pride of place in this section, which, however, is slightly marred by the unnecessary revival of personal rivalries and quarrels amongst Alpine Club members of this period. The Age of Exploration beyond the Alps had arrived and special mention is made of Freshfield, Conway, the Duke of Abruzzi and that greatest of all mountain photographers, Vittorio Sella. Alpine development during the period 1882–1914, with records of the leading climbers of the day, brings mention of Geoffrey Winthrop Young and V. J. E. Ryan. Ski and winter mountaineering, with the author traversing familiar ground, are given special treatment.

We come, inevitably, to the 'Iron Age', with notes on some great climbers, Swiss, French, Italian, German, British; and descriptions of some unique modern feats such as W. Bonatti's solitary first ascent of the S.W. buttress of the Dru from August 17th–22nd, 1955. Exploration in the Himalayas between the wars calls forth the familiar names of Smythe, Shipton, Tilman. Everest is accorded a full chapter, culminating in Hillary and Tenzing's ascent in 1953; whilst 1946–1956, described as The Great Decade, covers all the important achievements in the Himalaya.

In the closing chapters, Sir Arnold Lunn discusses mountaineering literature and the tendency of modern climbers to record their climbs in prose which reads like an engineer's report and to condemn any writing which deviates from the purely technical and impersonal. Lunn's explanation for this is that it is either a curious shyness to express mystical thoughts, the impact of which every true mountain-lover has felt at some time; or that the high standards of the classical mountain writers are beyond the literary powers of the technically more efficient moderns. His own views on this theme, which has been beautifully developed by Geoffrey Winthrop Young in his Preface to *The Mountain World, 1955*, are well known. With the evolution of mountain techniques, new approaches and instincts have developed. Thoughts cannot be expressed unless aroused; and it can be argued that fundamentally it would seem to be the attitude to the mountains that has changed.

Sir Arnold Lunn has given us a valuable book; he has taken together and fitted into shape virtually the major part of the whole recorded history of mountain climbing. And he has shown us, besides, the gradual evolution of the relationship between men and mountains. He has given full recognition to the position the Alpine Club has represented in preserving traditional standards which have influenced leading mountaineers throughout the past century.

Apart from a fine collection of photographs immaculately reproduced, there are reproductions of eight paintings of outstanding quality. Although it would seem invidious to single out any particular one for special praise, the Gepatsch Glacier by E. T. Compton seems to have captured the beauty, character and grandeur of the mountain scene better than the most expertly exposed Kodachrome aided by a Sonnar 1·5 lens with or without a wide-angle extension.

T. H. BRAHAM

WHERE MOUNTAINS ARE GODS. By RÉNÉ VON NEBESKY-WOJKOWITZ. *Pp.* 254. *Illus. Eidenfeld and Nicolson, London.* 21*s.*

The object of the author, a distinguished Austrian anthropologist, in visiting Sikkim was to investigate the religious ideas and ceremonies of those 'ancient Tibetan sects whose holy places lie in the secrecy of the Himalaya'. During his three years in and about that State, not only did the revolution in Nepal take place

but Tibet was over-run by Red China. And while in Kalimpong, he saw something of the exodus from Lhasa. In Gangtok, the Durbar granted him exceptional facilities to study the form of Buddhism which obtains in Sikkim. Perhaps the most interesting chapter is that entitled 'Brothers of the Bamboo' which deals with the Lepchas, one-time rulers of Sikkim. As he observes, this 'little Himalayan people is doomed, despite recent measures to preserve it and its way of life, to perish in the not distant future'. He has written of Bhutan, but it is not clear how or whether he actually got there. The publishers say he did, but permission to enter the State is very seldom given to Europeans. He had three teachers, Tibetan saints,—reincarnations of great figures of Lamaism. From them he acquired much wisdom, and from his many friends he learnt about oracles, demons, magicians, bards and weather-makers. Of the last named he tells the tale of an unlucky slip in ritual which brought torrential rain instead of the promised sunshine at a royal wedding. This intriguing book has been ably translated by Michael Bullock.

H. W. TOBIN

MEDICINE, MY PASSPORT. By DR. DONALD STAFFORD MATTHEWS. *Harrap, London.* 1957. 18*s*.

Although this book contains but a single chapter on the Himalayas, it is the autobiography of a former member of the Club and therefore earns mention.

Don Matthews was no ordinary person. After one meeting, someone said: 'He's the biggest line-shooter I've ever met in my life'. His companion replied: 'Yes, but even so, I'm going back for more'.

As I learnt during our expedition to Peru in 1956, Don was a most wonderful companion and friend—one of the most likeable and unforgettable characters I have ever met. It was a severe shock to us when he died suddenly from a heart attack in Lima at the end of the trip. So he never saw his book. He had completed the draft manuscript in England before leaving for South America. This has now been edited and Jack Tucker—his closest expedition friend—has contributed a delightful epilogue covering the last six months in London and Peru.

Although he was only 39 when he died, Don had packed more into those years than most people would in five times as long. He was an extrovert and loved life with a capital L. He had to go everywhere, know everybody, and do everything. He was born in

New Zealand, took his medical degree in Edinburgh, and after serving in the Navy during the War in the Mediterranean and Pacific he returned to England to study gynaecology. Medicine brought him into contact with the flesh and blood realities of everyday life. It became his passport to world travel—to Nigeria, India, Nepal, Assam, Kangchenjunga and South America.

It is not possible to distinguish, of course, exactly what came from Don's pen and what from his editor's, but the book reads easily enough. It has the piquant quality of a William Hickey column giving that continual impression of rubbing-shoulders-with-the-great. As a keen lifeman myself, I can only bow to a superior technique. Where I might have been forced to deplore my ignorance of botany, the author can write: 'I always regret that Kingdon-Ward or some accomplished naturalist had not been with us to describe the flora'.

When we were sorting out our Peruvian pictures, those containing full portraits of Don in various poses were usually his own. The photographs in this book display the same characteristic.

G. C. BAND

THE LONG WALK. By SLAVOMIR RAWICZ. *Pp.* 240. *Maps. Constable and Co., London.* 1956. 15*s.*

This book tells the story of an escape on foot across Central Asia from a prison camp in Siberia as far as India. Almost all its value lies in its claim to be a true account of great endurance and extreme hardship. That claim has been questioned on several counts. It appears there is no record of the party ever having been in India. That is a valid objection. Control over foreigners entering and leaving India during the war was strict and there should be several officers, both British and Indian, from a number of branches and departments of the Indian Services who could testify to the arrival of the author and his companions if it actually occurred.

Doubts have been expressed whether the party could have gone for periods up to twelve days without water. Whatever the scientists may have to say about that and whatever may be thought of the veracity of detail by persons acquainted with Siberia, Mongolia and the Gobi, no one who has lived in Tibet is likely to find the picture of that country either familiar or convincing.

The party's route as indicated roughly on the sketch-map in the book took them past the western end of the Tsaidam marshes, down to the east shore of the Ziling Tso, across the Brahmaputra somewhere west of Shigatse and into north Sikkim by or about the Kongra La. The party had no maps or compasses and the estimate of the route might be astray by a considerable number of miles; nevertheless from many indications in the book the route described can hardly be placed very far away from that I have mentioned above. Apart from Lhasa—which was 'bypassed'—there are no place-names; there is also rather scanty detail of scenery, local customs, etc., and what there is is quite uncharacteristic of Tibet. For example: Tibetans do not *bake* barley cakes as is suggested on p. 190. Houses roofed with sloping, overlapping boards (p. 192) are quite untypical. It is quite un-Tibetan to have tea-bowls washed by a third party (p. 196); each person licks his own and polishes it on the cloth in which it is carried. Roses in late October at an altitude of perhaps 16,000 ft. are improbable (p. 199). No Tibetan town or village, in my experience, has anything like a village hall used for public purposes such as a school (p. 208). The Brahmaputra, which must be the river intended on p. 213, does not freeze over in winter—at least not east of lat. 85 east, so far as I can learn. The boats described on p. 213 are of a sort totally unheard of in Tibet. The Brahmaputra is crossed in skin coracles which need no rollers to move them as they are carried on a man's back; at low water in winter, huge flat wooden barges are used also; these are not taken out of the water. Wooden benches are not found in Tibetan houses (p. 215) nor is the spinning wheel used in Tibet (p. 215).

In addition to unconvincing detail, of which the above is a selection, there is a surprising absence of the most characteristic aspects of the country. Although it is said that the party stayed in many villages, they never saw a monastery, not a Buddhist image, nor yet a single monk. Mr. Rawicz mentions an inscribed stone over the doorway of a house—presumably the mantra *Om Mani Padme Hum*—but nothing is said of the inscriptions on stones by the roadside, on boulders and cliffs or in prayer-walls which are found wherever Tibetans live. There is no mention of *chortens*, or of prayer flags either on masts or fluttering abundantly from the stone cairns which mark the summit of every frequented pass in Tibet. Nothing is said about the head-dresses, ornaments and striped aprons of the women of the settled parts of Tibet; nor of the men's turquoise earrings, nor about the differences in dress and in the manner of wearing the hair between the nomadic

and the settled Tibetans. The abundant wild life on the greater part of the route through Tibet is unnoticed. North Tibet is the home of the wild yak and the antelope, also of other animals which occur further south as well: gazelle, *barhal*, *ovis poli*, wolves, foxes, lynxes, hares, marmots, innumerable mouse-hares and herds of the beautiful wild ass (*kyang*). Of birds only the raven and magpie get a mention; but there are also lammergeiers, vultures, falcons, buzzards, clouds of choughs and many small birds such as larks and finches; and between the Ziling Tso and Brahmaputra in winter there would be many black-necked cranes, gulls, countless ruddy sheldrake, bar-headed geese and some duck.

Among the greatest hardships of winter travel in Tibet are the wind and dust. Travellers often move by night, when it is calm, to avoid the discomfort and the danger of losing their way. Mr. Rawicz and his party were headed directly into the prevailing wind and it is surprising that they never mention it.

It may be said that the book has been written fifteen years after the event and details have become hazy on account of the hardships endured and through the passage of time. But even if one ignores the points quoted above, which make the story unconvincing to one who knows something of Tibet, there remains the difficulty that the topographical characteristics of the country have been completely inverted in Mr. Rawicz's account. Assuming that the party skirted the west end of the Tsaidam (although this formidable feature is not mentioned) they would be travelling, so far as the neighbourhood of Shentsa south of the Ziling Tso, through about 500 miles of country which has been described by the few travellers from A.K. onwards who have crossed it, as uninhabited for the first half and sparsely scattered with nomadic herdsmen for the second. The country is high undulating land mainly over 16,000 feet, well provided with water, much of it covered in summer with fine grass but with no tree or shrub. The nomads live in black tents and have no regular settlements. Yet Mr. Rawicz describes, in this area, 'a succession of unremarkable villages and hamlets, alike in their simple architecture . . .' The party had no supplies, equipment or transport and for survival they had to find food and shelter; but this 'succession of villages' is entirely at odds with all previous accounts and it is hard to credit.

Within a week of leaving the area of the Tibetan outpost at Shentsa (app. 31° N. 89° E.) the region of the Brahmaputra valley and its tributaries would be reached. The contrast with the desert plateau of the north could hardly be missed. The new country

is one of well-marked tracks connecting large villages set in cultivated land and surrounded by trees; there are many substantial mansions and here and there the fortress of a district governor; there are also many conspicuous monasteries. Even in January this would be a noticeable and pleasant change from what had gone before.

The party did not try to avoid habitations or the beaten track and assuming they crossed the Brahmaputra between Shigatse and Lhatse Dzong they could have followed well-used paths, for not more than 15 days at a generous estimate, through villages up to 10 or 15 miles of the Himalayan passes. From the Brahmaputra valley to the regularly used Himalayan passes, the country is by no means difficult and snow is not usually encountered except occasionally on the last 1,000 ft. or so of a high pass. Once across the pass, there might be snow for perhaps 10 to 15 miles if one was unlucky, and thereafter some rough descent through scrubby birchwoods, rhododendrons, deciduous forest and finally dense rain forest. The tracks in Sikkim run through enclosed valleys with no possibility of diversion; and pass considerable villages to guarded frontier-posts between Sikkim and India. The change from Tibet is in every way striking; and these differences become more and more noticeable as one goes further south. In contrast with this, the story describes a journey of at least a month and a half from the 'last village' south of the Brahmaputra to the summit of the Himalayan pass. Most of this was through snow and involved 'clawing' a way up a series of appalling ranges of snow and ice. The 'final effort' in crossing the range took some ten days. After crossing the mountains we are told of some 'warmer days' and 'rivers, streams and birds in trees' but there is nothing about the many changes in vegetation, climate, humidity, temperature, and general surroundings. Only one human being is said to have been encountered in a period which seems to cover some two months between the 'last village' in Tibet and the Indian foothills where an Indian army patrol was met. These conditions do not seem to be reconcilable with any part of the Himalaya, certainly not with the region of Darjeeling and Sikkim.

Mr. Rawicz tells of 'a succession of villages' in the deserts of North Tibet and of great stretches of uninhabited country in South Tibet and in the Indian Himalayas which are known to be populated. That must create grave doubts. There may also be doubts whether a party of obvious foreigners, making no attempt at concealment and speaking no local language, could pass through Tibet, Sikkim (or Nepal or Bhutan) and parts of India without

meeting any official, or without any official apparently having heard of them.

One thing is puzzling: whether the story is a muddled and hazy reconstruction of an actual occurrence, or mere fiction. It would have been possible, by referring to a number of authoritative works, to produce a much less unrealistic picture of Tibet and the Himalaya. But whatever the reason, a great deal more explanation and substantiation is needed before the claim that this book is true can be accepted.

H. RICHARDSON

THE GODS ARE ANGRY. A novel by WILFRID NOYCE. *Pp.* 198. *Heinemann, London.* 1957. 15*s.*

The theme of this book is an inquiry into the morality of climbing, and it is on its handling of this theme that serious criticism must be based. The device of an expedition to an unclimbed peak is well chosen for an inquiry by psychology.

For a psychological novel handling such a large number of characters 'interiorly', the book is very short. The result is that many of the characters can more fairly be described as characterizations, particularly the working-class ones, Mr. and Mrs. Joe Herriman, Harry Hallowes and his mother, the Bonningtons. They (like Synge's Aran islanders) are their own words taken down in shorthand and honestly, if not always convincingly, reproduced: but the blood somehow never starts to flow in them (dialogue is a trap unless we have grown up with it) as it does in the middle-class people the author has fully known. The workers are humours or types. The middle classes are by contrast well portrayed. All climbers know Mervyn Hurley and Jim Catteridge (if the Catteridges of this world can ever be known: not in this case an edifying experience), and most men have met a version of the appalling Pamela. John Kennedy and Ali Mohan carry conviction, but best of all is the relationship between Bill and Brenda Simmons. Because Hallowes, one of the book's central characters, is thus a bit of a zombie, the book is only partly successful as a psychological novel. Structurally there is an economy praiseworthy except in the context discussed above, and one therefore doubts the relevancy of the flirtation with the Mystery Of The East, sympathetically as it is done, unless more were made of the clash between the devils (or gods) in the Englishmen and those of the elements.

Once the party is on the mountain the narrative of the action is, as one would expect, very good. No less true and gripping is the interplay of the elements and the men. The prolonged meanness of expedition existence is faithfully recorded.

Somme toute, one is intended to admire Catteridge. But the howling hypocrisy of his thought (see the last page of the book): Is this a record? Is it intentional? Whether or not, it is a very good portrayal of something very nasty.

> ' "Is my friend hearty,
> Now I am thin and pine,
> And has he found to sleep in
> A better bed than mine?"
>
> Yes, lad, I lie easy,
> I lie as lads would choose;
> I cheer a dead man's sweetheart,
> Never ask me whose.'

If you can't leave Gwen alone, Jim Catteridge, then admit it and lay off this talk of decency.

But the main theme, the morality. The proper questions are posed. Is this venture an escape from or to reality? Are the climbers knights in shining armour or shirkers from the day to day adventure of their jobs and family responsibilities? The author, although he can put the other point of view, is not disinterested and has made up his mind beforehand: the question is not posed impartially. Those against: up goes the hand of the most unsympathetic person in the book (at least to the author's mind) Mrs. Bonnington, plus the loam-laden Herrimans and the small-souled Pamela. Those for: and the educated, the eager, the sensitive and brave, arise in a body. Surely the question cannot be answered in such absolute terms. It is a modern disease to find interest and enchantment everywhere but in our constructive work. Why should this be commended? Hallowes 'lived but by his being's law', and one can see no reason why he should (or could) have done other than he did. Hurley and Catteridge, full-grown adolescents, likewise. Barton Melville needs no discussion: he goes for his ego's sake in an even more simple sense than the others. Kennedy: this issue is confused by the good luck of his escape from Pamela, but on the whole *ça va.* But Simmons, an adult of understanding, with a charming child and a wife his just complement who does not in the first instance approve: when he gives in to the temptation proffered by Catteridge he begins a

series of events that reveal the falsity of his position—and for what? To prove himself? To be a knight in shining armour? To escape from the boredom of a good wife and job? Grow up. At the top camp he is faced with the result of his muddling. If he goes summitwards with the eternally committed Hallowes he does right to Hallowes and wrong to his family. If he does not go he does right to the family but wrong to Hallowes. There is no such thing as mountaineering right or wrong: in climbing the morality can only be individual and related to private circumstances—to people. Between the two rights and the two wrongs only he can make the tragic decision. In the reviewer's opinion he chooses right—but he is morally responsible for Hallowes' death: he must know it: one does not envy him. Not a comfortable situation for a knight in shining armour. His subsequent courage is irrelevant to the fact that since such a decision might have to be taken he had no right to put himself where he might have to choose between one life and another. We may violate these, as other, moral standards; but only a moral cretin has excuse from recognizing them. Certainly laziness or reluctance won't do. Had Hurley been with Hallowes (no chosen loyalties but to himself and the mountain) there would have been no conflict and there could have been no crime but cowardice. 'Settle you in what the deed has made you . . . you are the deed's creature'.

Whatever one's view of the answers, the important thing about this book is that it recognizes that there are problems. It is entirely good that they should be aired for once instead of ignored until too late. It is an intelligent book (rare therefore in climbing fiction) and merits purchase, enjoyment and serious reflection by every mountaineer.

G. J. SUTTON

FAR, FAR THE MOUNTAIN PEAK. A novel by JOHN MASTERS. *Michael Joseph, London.* 1957. 15*s*.

The theme of Masters' latest novel has some similarities with that of Meredith's *Egoist*. But the setting is very different. A young man, Peter Savage, impressed by an ascent of King's College Chapel (in 1902, historically well before the first known ascent), takes up mountaineering because it appeals to that part of his nature which must drive itself to the limit, as well as seek to dominate others and even the elements around. Everybody who comes in contact with him, in the I.C.S., in his family, or on the attempt to climb Meru, an imaginary twenty-seven-thousander, is either destroyed or subdued.

It is during the 1914–18 war, when he has caused the death of his best friend and alienated his own wife, that he is made to realize what is wrong. Thence comes a spiritual progress towards service and salvation. His second expedition to Meru in 1921 is undertaken to redeem Harry Walsh, a friend who had turned enemy but who had now lost confidence in himself through an act of cowardice. Walsh finds, half-way up, that it is wrong for him personally to climb Meru; Savage and a young companion give up near the top, and the mountain remains unclimbed.

The theme is a good one: the man who subordinates friends and family, mountains and mountaineers, to his career, until the moment comes when he cracks, and realizes that career is not enough. The early scenes, in Cambridge and Wales, may sound too modern a note, but they certainly reveal the essential Savage, as they reveal something that lurks in most of us. The Indian scenes have the authentic touch of *Bhowani Junction*, and Emily, the wife, stands out as a real person.

It is a pity that the Himalaya have to come in as an integral part of the story. I do not mean because of technical inaccuracies or improbabilities. Some are inevitable. The author has read up his subject; but, to take just one instance, would an expedition of only four members, in 1913, be likely to try for a summit of over 27,000 ft. from a Camp II at 23,600 ft., up a severe rock ridge necessitating pitons—and very nearly get there? My criticism lies more, I think, in the essential unreality of the mountain, which becomes a testing ground for theories and ways of life rather than a great mass of snow and rock which men climb slowly, with not much thought to spare beyond the next camp and meal. Perhaps I am unduly up in arms for my mountain; and I know only too well from personal experience the difficulty of constructing an imaginary peak. But this one seems essentially artificial, a gymnasium for moral acrobatics, as it were, which force the whole problem of climbing a real giant to be drastically simplified. I do not, either, find the conduct of any of the climbers natural upon it; they are too wide awake and self-questioning. No leader, surely, could have thought so cruelly about his party in 1913; nor would the same man, in a high camp eight years later, be likely to accept his deputy's reasoned *volte-face* so reasonably.

If the book stands or falls by Meru, then it must fall, for all the excitement of the climb. But I think that there is no need for so sharp a verdict.

WILFRID NOYCE

CLUB PROCEEDINGS, 1956.

The Twenty-eighth Annual General Meeting of the Himalayan Club was held at the Little Theatre, Lighthouse Cinema, Calcutta, on Friday, July 27th, 1956. The President, Mr. J. Latimer, took the chair.

The Minutes of the Twenty-seventh Annual General Meeting held in Calcutta on June 22nd, 1955, were confirmed. The Annual Report and Audited Accounts for the year ended December 31st, 1955, copies of which had been circulated to members, were accepted and approved. Messrs. Price, Waterhouse, Peat & Co., Ltd., were reappointed auditors for the year ending December 31st, 1956.

Officers, Elective Members of Committee, and Additional Members of Balloting Committee were duly elected as follows:

Officers

President ..	.. V. S. Risoe, Esq.
Vice-Presidents	.. Lt.-Col. H. W. Tobin, D.S.O., O.B.E.
	C. E. J. Crawford, Esq.
Honorary Treasurer	.. Capt. W. B. Bakewell
Honorary Secretary	.. P. F. Cumberlege, Esq.

Honorary Local Secretaries

Delhi ..	.. R. E. Hotz, Esq.
Darjeeling ..	.. Capt. A. M. Jenkins
Bombay ..	.. A. R. Leyden, Esq.
Kulu ..	.. H. M. Banon, Esq.
Dehra Dun	.. Gurdial Singh, Esq.
Karachi ..	.. Major F. P. A. Goodwin
Great Britain	.. Lt.-Col. H. W. Tobin, D.S.O., O.B.E.
Honorary Editor	.. Lt.-Col. H. W. Tobin, D.S.O., O.B.E.

Elective Members of Committee

F. C. Badhwar, Esq., O.B.E.
T. H. Braham, Esq.
R. E. Hotz, Esq.

G. R. Iredale, Esq.
Maj. N. D. Jayal
J. Latimer, Esq.
A. R. Leyden, Esq.
P. J. Webster, Esq.
A. Wood, Esq.
Maj.-Gen. Sir Harold Williams, K.B.E., C.B.

Additional Members of Balloting Committee

J. T. M. Gibson, Esq.	B. R. Jennings, Esq.
Gurdial Singh, Esq.	J. N. Mathur, Esq.

Other Appointments

Honorary Librarian ..	G. R. Iredale, Esq.
Honorary Equipment Officer	A. Wood, Esq.

The Annual General Meeting was followed by two interesting films. The first was a colour film shown by Mr. M. Hruska illustrating a journey which he undertook in 1955 to Northern Sikkim and Eastern Nepal, north of Kangchenjunga and Jannu. The second was provided by courtesy of the Alliance Française and showed the evolution of mountaineering in the Alps from the days of the pioneers, through an interesting series of old prints, to the modern development of artificial climbing, illustrated by a skilful display of rock and ice technique by Gaston Rébuffat.

CLUB OFFICERS: There were some important changes in the Committee. Mr. T. H. Braham resigned from the post of Honorary Secretary and was succeeded by Mr. P. F. Cumberlege. Mr. J. T. Ewing resigned on his departure from India, and was succeeded by Mr. W. B. Bakewell as Honorary Treasurer. Mrs. J. C. Henderson, our very active Honorary Local Secretary in Darjeeling, resigned on leaving India in January 1956. Her departure is greatly regretted by both climbers and non-climbers and, not least of all, by the Sherpas.

EXPEDITIONS, 1956: Once again 1956 was a very successful year in the Himalayas. With almost all the major peaks now climbed, it is inevitable that we should gradually see an advance in climbing standards; and this year climbs rated technically difficult by Alpine standards have been successfully accomplished. Of outstanding importance was the double success of the Swiss Expedition led

by Mr. Albert Eggler in achieving the second and third ascents of Everest and the first ascent of Lhotse. The seemingly inaccessible Muztagh Tower was twice climbed by a British party (Hartog, Patey, Brown, McNaught-Davis) on July 7th and 8th; and by a French party (leader Guido Magnone) on July 12th; the former by the north-west ridge and the latter by the south-west ridge. We congratulate the Japanese party, led by Mr. Yuko Maki, on their well-merited success in climbing Manaslu on May 9th. An Austrian party led by Fritz Moravec succeeded in climbing Gasherbrum II, 26,360 ft.

TIGER BADGES: Based on recommendations received from leaders of expeditions in 1955, the Club awarded Tiger Badges to the following Sherpas:

Kangchenjunga	..	Ang Norbu (No. 172), Ang Temba (No. 179), Tashi (No. 178), Ila Tenzing (No. 85), Urkien (No. 232)
Makalu ..	..	Ang Phutar (No. 186), Gundin (No. 167), Gyalzen (No. 163)
Dhaulagiri and Cho Oyu	..	Ang Nyima (No. 132)

MEETINGS: An enjoyable meeting and supper party was held in Calcutta on February 27th, 1956. Mrs. J. C. Henderson, on the eve of her departure from India, was welcomed at the meeting and was presented with a farewell gift by the President on behalf of the Club in appreciation of her invaluable work in Darjeeling. A magnificent set of colour-slides of the Kangchenjunga Expedition, very kindly lent by Mr. Charles Evans, was shown.

On the evening of June 26th the Swiss Consul in Calcutta kindly invited a few members to meet the successful Everest team on their way through Calcutta.

On November 14th a meeting was held to say farewell to the President, Mr. V. S. Risoe, on his departure from India. The Honorary Treasurer thanked Mr. Risoe warmly for the valuable work he had done for the Club in recent years; and latterly for helping to see the *Journal* into print in India. The film of the 1953 Nanga Parbat Expedition was shown by arrangement with the German Consulate in Calcutta.

The Delhi Section as usual was most active. Several meetings were held, and members of visiting expeditions were met and entertained, notably on July 1st when a reception was held at the Roshanara Club for members of the Swiss Expedition.

OBITUARY: We record with regret the deaths of the following members:

Brig. W. H. Evans (Founder Member)
Col. D. G. Lowndes (1929)
G. Wood-Johnson (1929)
M. W. F. Wren (1939)
S. F. Roberts (1945)
D. S. Matthews (1954)
Mrs. M. Wellman (1956)

The Club was greatly grieved to learn of the death of Tom Bourdillon in a climbing accident in the Bernese Oberland on July 29th, 1956. An Obituary Note appears above.

CLUB PROCEEDINGS, 1957.

The Twenty-ninth Annual General Meeting of the Himalayan Club was held at the Little Theatre, Lighthouse Cinema, Calcutta, on Wednesday, August 28th, 1957. Mr. C. E. J. Crawford took the chair.

The Chairman addressed the meeting and briefly reported on the Club's activities during the year, in particular thanking Mr. V. S. Risoe the out-going President for his work during his tenure of office.

The Minutes of the Twenty-eighth Annual General Meeting held in Calcutta on July 27th, 1956, were confirmed.

The Annual Report and Audited Accounts for the year ended December 31st, 1956, copies of which had been circulated to members, were passed. Messrs. Price, Waterhouse, Peat & Co., Ltd., were reappointed auditors for the year ending December 31st, 1957.

Officers, Elective Members of Committee, and Additional Members of Balloting Committee were duly elected as follows:

Officers

President	..	Capt. W. B. Bakewell
Vice-Presidents	..	V. S. Risoe, Esq., M.B.E.
		R. E. Hotz, Esq.
Honorary Treasurer	..	M. R. C. Thomas, Esq.
Honorary Secretary	..	G. R. Iredale, Esq.

Honorary Local Secretaries

Delhi	..	R. E. Hotz, Esq.
Darjeeling	..	P. J. Webster, Esq.
Bombay	..	A. R. Leyden, Esq.
Kulu	..	H. M. Banon, Esq.
Dehra Dun	..	Gurdial Singh, Esq.
Karachi	..	W. A. Brown, Esq.
Great Britain	..	V. S. Risoe, Esq., M.B.E.
Honorary Editors	..	T. H. Braham, and G. C. Band

Elective Members of Committee

F. C. Badhwar, Esq., O.B.E.
T. H. Braham, Esq.
C. E. J. Crawford, Esq.
Maj. N. D. Jayal
A. B. Marshall, Esq.
J. Latimer, Esq.
A. R. Leyden, Esq.
P. J. Webster, Esq.
A. Wood, Esq.
Lt.-Gen. Sir Harold Williams, K.B.E., C.B.

Additional Members of Balloting Committee

J. T. M. Gibson, Esq.	J. N. Mathur, Esq.
Gurdial Singh, Esq.	M. Hruska, Esq.

Other Appointments

Honorary Librarian	..	T. H. Braham, Esq.
Honorary Equipment Officer	..	A. Wood, Esq.

After the meeting two films were shown. The first, provided by courtesy of The British Council, illustrated the work of the Outward Bound Schools in Britain. The second film, shown by Maj. N. D. Jayal, Principal of the Himalayan Mountaineering Institute, Darjeeling, described the expedition organized by the Institute in 1956 to the Karakoram, and the attempt on Saser Kangri.

EXPEDITIONS, 1957 : Although in the past few years many of the physical and psychological barriers associated with Himalayan

climbing seem to have faded, political barriers have assumed far greater importance. The Rules for Expeditions, introduced in 1956 by the Government of Nepal, have been published in full in our Newsletters. There is no doubt that these will deter the smaller lightly equipped expeditions planning a climbing holiday devoid of both the encumbrances and also the financial backing of larger expeditions. There has been an increase in the number of expeditions to the Karakoram, and although the concentration there of major unclimbed peaks is undoubtedly one reason we feel that it is not the only one.

NEPAL: Of exceptional interest was the ascent of Machhapuchhare, 23,000 ft., a striking peak on the southern rim of the Annapurna range by a small British party led by Maj. J. O. M. Roberts. This brilliant success was a model of good planning and judgement. R. R. E. Chorley, a member of the team, was unfortunately stricken with paralysis at Base Camp and had to be flown home.

The Annapurna range was the scene of another ascent in May, when Charles Evans and Dennis Davis made the second ascent of Annapurna IV, 24,600 ft., in the course of what they described as a 'climbing holiday'.

We record with deep regret the deaths on April 18th of Capt. Crosby Fox, leader of the Yorkshire Ramblers Expedition to the Jugal Himal, and two Sherpas, Mingma Tenzing and Lhakpa Norbu, who were killed by an avalanche whilst traversing a glacier at 18,000 ft. Mingma Tenzing was the son of Dawa Tenzing of Everest and Kangchenjunga fame.

GARHWAL: A team from the Himalayan Mountaineering Institute under Maj. N. D. Jayal attempted Nanda Devi. The attempt was foiled by a snowstorm which struck their Camp IV at about 23,500 ft.

KARAKORAM: We have learnt with great regret of the death of Hermann Buhl on June 27th during an attempt on Chogolisa, 25,000 ft. Buhl was killed when a cornice broke away whilst he was ascending the south-east ridge. His body was not recovered. He was a member of a 4-man Austrian team to the Upper Baltoro glacier. The expedition had earlier achieved its main objective by climbing Broad Peak, 26,414 ft., all four climbers reaching the summit. Oxygen was not used and no porters were used beyond Base Camp at 16,000 ft.

Masherbrum, 25,660 ft., was attempted by a team from Manchester, led by Mr. J. Walmsley.

An Anglo-Italian Expedition, including Alfred Gregory, Dennis Davis, and the veteran Italian Alpinist Sig. P. Ghiglione, made an attempt on Distaghil Sar, 25,868 ft.

A British party of five led by Capt. Tony Streather made an attempt on Haramosh, 24,270 ft. The climb was unfortunately abandoned following an accident in which two climbers were killed.

An expedition from the Imperial College Mountaineering Club, led by Mr. Eric Shipton, spent three months in the Saltoro area. The main objectives of the party of eight, which included three scientists, was exploration and scientific work.

It is sad to record a number of accidents in the Himalayas; and to note that in the Alps also an alarming number of accidents have occurred. Of course it is true that mountaineering activity has increased, and that proportionately perhaps the number of accidents remains the same. But one pauses to consider whether, with its advanced technique, the psychology of modern climbing has undergone a fundamental change; and whether judgement and discretion together with traditional standards of safety have been allowed to take second place.

MEETINGS, 1957 : During February and March, meetings were held both in Calcutta and in Delhi for Dr. Jurg Marmet. Dr. Marmet, who was a member of the first summit team, gave talks illustrated by a beautiful set of colour-slides of last year's Swiss Everest Expedition.

In April, members both in Calcutta and Delhi had the opportunity of meeting Gaston Rébuffat who was on a world tour showing his magnificent film 'Starlight and Storm'.

OBITUARY : With deep regret we mourn the death of Lt.-Col. H. W. Tobin, D.S.O., O.B.E., who passed away peacefully at his home in Lymington, Hampshire, on January 8th, 1957. An Obituary Notice appears elsewhere in this volume.

EXPEDITIONS, 1958 :

Swiss to Dhaulagiri, 26,795 ft., under the leadership of Werner Stäuble.

Austrian to Hidden Peak (Gasherbrum I), 26,470 ft., led by Fritz Moravec.

French to Jannu, 25,294 ft.[1] A party of three led by Guido Magnone carried out a reconnaissance in October/November 1957.

[1] At the time of going to press it is understood that this expedition has been postponed until the spring of 1959.

British to Distaghil Sar, 25,868 ft.

Indian to Cho Oyu, 26,750 ft., organized by K. F. Bunshah; the party of four includes Maj. N. D. Jayal and Pasang Dawa Lama.

In addition Mr. P. J. Wallace of Nairobi has received permission from the Nepalese Government to attempt Annapurna I.

We must not forget the Yeti Expedition organized by Mr. Tom Slick of Texas, U.S.A. It is understood that the expedition will be equipped with hounds, rifles, nets and camouflage tents to lure our abominable friend out of his seclusion. The team of five Yeti hunters left for the Barun Valley towards the end of January 1958.

ALPINE CLUB CENTENARY: We offer our heartiest congratulations to the Alpine Club which celebrated the 100th anniversary of its founding in December 1957, the first of any mountaineering clubs to do so. Many special functions were arranged to celebrate the event.

A Meet was organized in North Wales during the week-end May 24th–26th, 1957, and a Dinner attended by 75 members and guests was held in Llanberis on May 28th, 1957.

An Alpine Club Centenary Meet was held in Zermatt, between August 19th–29th, 1957. The Meet opened with a Dinner on August 19th at the Monte Rosa Hotel which has many historical links with the Alpine Club. During the Meet a distinguished caravan of Himalayan dimensions accomplished two fine climbs from the Monte Rosa Hut—the traverse of the East and West peaks of the Lyskamm and the Younggrat or Klein Triftjigrat of the Breithorn. The Lyskamm party included the leaders of three Mount Everest Expeditions, Dr. Wyss-Dunant, Sir John Hunt, and Herr Albert Eggler. On the Breithorn, the two latter were accompanied by Fritz Luchsinger, who reached the summit of Lhotse in 1956, and by John Tyson, John Hobhouse, Chris Brasher and George Band. In the van was a guide and client who had started from the Gandegg Hut. George Band, not realizing that he was addressing a guide, offered to take over the lead whenever the latter felt tired and at one stage even asked him whether he was sure where the route went. And so on this great and very enjoyable climb. Himalayan veterans were able to demonstrate their adaptability to a strenuous Sherpa-free and oxygen-less environment.

A Centenary Dinner was held at the Dorchester Hotel, London, on November 6th, which was attended by a very distinguished company of climbers of the past and present generation, including representatives invited from all the major climbing clubs in the

world. Mr. V. S. Risoe, our Vice-President, attended on behalf of the Himalayan Club.

A Centenary Reception was held in the Great Hall, Lincoln's Inn, London, on December 9th, 1957. Many members of the Club and their ladies were fortunate in being present at the last of the more formal celebrations which was attended by Her Majesty the Queen and His Royal Highness the Prince Philip, Duke of Edinburgh. After being received by the President, Sir John Hunt, the Queen and Prince Philip walked through the Hall and inspected a selection of the photographs, paintings and show-cases from the Centenary Exhibition. They then separated and mingled with the company, conversing informally with those introduced to them. Among those presented were the following who are known for their Himalayan climbs, many being members of the Club: F. Spencer Chapman, Roger Chorley, Mike Banks, David Cox, Eaton Cromwell, G. I. Finch, Eileen Gregory, John Hartog, John Kempe, Peter Lloyd, Terris Moore, Bernard Pierre, N. E. Odell, Howard Somervell, Tony Streather, John Case.

HIMALAYAN JOURNAL, VOL. XXI: It is hoped to publish the next volume early in 1959, and all papers intended for publication should be forwarded to the Honorary Editor, c/o The Himalayan Club, Post Box No. 9049, Calcutta 16, so as to reach him not later than December 1958. It is requested that sketch-maps should be sent to accompany articles; these should be clearly drawn in Indian ink with references given, if possible, to the existing Survey of India sheets. Photographs should be half-plate size or larger, printed on glossy bromide paper and should show as much contrast as possible.

***JOURNAL* BACK NUMBERS:** Unfortunately, these are now very scarce indeed. All the early volumes are virtually unobtainable and we believe that the existence of a complete set in the collection of individual members must be exceedingly rare. The Honorary Editor would be glad to hear from members how many such sets do, in fact, exist. The early volumes available for sale to members at the present time are as follows:—

Vols. XVII, XVIII, XIX, which are priced at Rs.7/50 per copy.

Enquiries should be addressed to the Hon. Librarian, The Himalayan Club, Post Box No. 9049, Calcutta 16.

DESPATCH OF THE *JOURNAL*: Accompanying this volume is a slip which it is hoped all members will return with the necessary corrections, whose addresses are not correctly shown in the Club's

List of Members. Responsibility for non-delivery of the *Journal* cannot be accepted if members do not notify their change of address. Considerable expense is caused to the Club in re-addressing *Journals* returned, and duplicate copies cannot be sent except on payment.

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