PLATE 1

Photo by Richard McCormack

MASHERBRUM'S SOUTHEAST FACE from Serac Peak.

Masherbrum—1960

WILLIAM UNSOELD

THANKS to three previous attempts made upon it, Masherbrum was an extremely well-scouted objective when our party approached it in May of 1960. As early as 1938 a British party led by James Waller had reached a point high on the southeast face before being turned back by bad weather and frostbite. (See *Himalayan Journal,* 1939, pp. 42-56.) In 1955 a New Zealand group had exhausted itself in the pre-season snows before giving up at the foot of the southeast face, while as recently as 1957 a party from Manchester, England, reached a point only about 300 feet short of the summit. Members from each of these parties helpfully contributed all the information they could concerning the route, location of camps, best season of the year, etc., and so before our party even arrived in Pakistan, our schedule of moves was already made out with unaccustomed precision. Indeed, all hands shared the opinion that we really had this peak rigged and that barring a catastrophic accident or a complete breakdown in weather, we should have very little difficulty in pushing a successful rope to the summit.

Of course, long before this level of optimism could be reached, there had to have been the usual uncertainties endured concerning party, permission, and finances. These had been the particular province of our Director and energizing spirit, Nick Clinch. With permission from the Pakistan government safely in hand, he tackled the tougher problem of getting together a party. With infinite insight and delicacy, Nick finally managed to work himself around that perennial Himalayan problem—the Reluctant Wife. His use of enthusiastic propaganda, statistical safety demonstrations, and a downright deafness to repeated refusals finally won over an astonishing percentage of those married climbers whom he solicited as members. The result was an extremely strong and experienced team. Our climbing leader was George Bell, back for a third try at the Himalaya after participating in the 1953 K2 try and the 1955 Lhotse expedition. Nick and Tom McCormack had been together on the successful Hidden Peak trip in 1958, while Dick McGowan had been with George on Lhotse as well as running the Mt. Rainier Guides' Concession for several years.

A summer guide in the Tetons, I was also on my third Himalayan venture. The only two American members of the party without Himalayan experience were Dick Emerson and Tom Hornbein, our doctor. Dick had been an Army climbing instructor in the Tenth Division, the chief climbing ranger in the Tetons for many years, while Tom had climbed extensively in Colorado, the Tetons, and had gone high in Alaska.

Since the expedition was sponsored jointly by the American Alpine Club and the Sports Control Committee of the Pakistan Army, we were glad to welcome three Pakistani Army officers as full-fledged party members. Only Captain Jawed Akhter had had previous mountain experience with the British Armed Forces Expedition of 1959, but Captain Imtiaz Azim and Akram Quereshi proved themselves invaluable as public relations agents during the march in, as well as eager pupils during the actual climb.

With permission and party set, there remained the shipping deadline for food and equipment to meet. Our equipment was selected by Nick on the basis of his Hidden Peak experience and was of the highest quality. Eddie Bauer down jackets, pants, mittens, and bags; reindeer-skin high-altitude boots from Switzerland; high-altitude tents from Gerry Cunningham; and oxygen apparatus from the Swiss Foundation for Alpine Research give some idea of the quality which was achieved. Only two items failed seriously to perform as expected. These were the radios which Brad Washburn had very generously loaned us, and the Budd Davis packs which Dick McGowan had secured for us in Seattle. The radios turned out to have passed their prime as instruments of communication so were not used after the first couple of days above Base Camp. Unfortunately the packs could not be abandoned so easily so they were dragged, rolled, cursed, and kicked clear up to Camp VII. All hands agreed, however, that the trip would have been rather on the dull side if we had not had the Budd Davis packs along to stimulate our conversational flow. Each morning started with "the Budd Davis Hour" in which we moved in teams from pack to pack making repeated mass attacks upon their frozen intricacies, while at night we would often join together to ease our emotional tension with a few rousing choruses of "Hang down your head, Budd Davis" (to the tune of *Tom Dooley*).

Our food was purchased and packaged by the Foundation for Alpine Research in Zürich, Switzerland, and since there was very little time for them to make up the shipment, there could be little or no discussion of the items included. George had time only to send them a list of suggested items such as peanut butter, boned chicken, and concentrated orange juice. It was therefore small wonder that parts of our menu did not come out

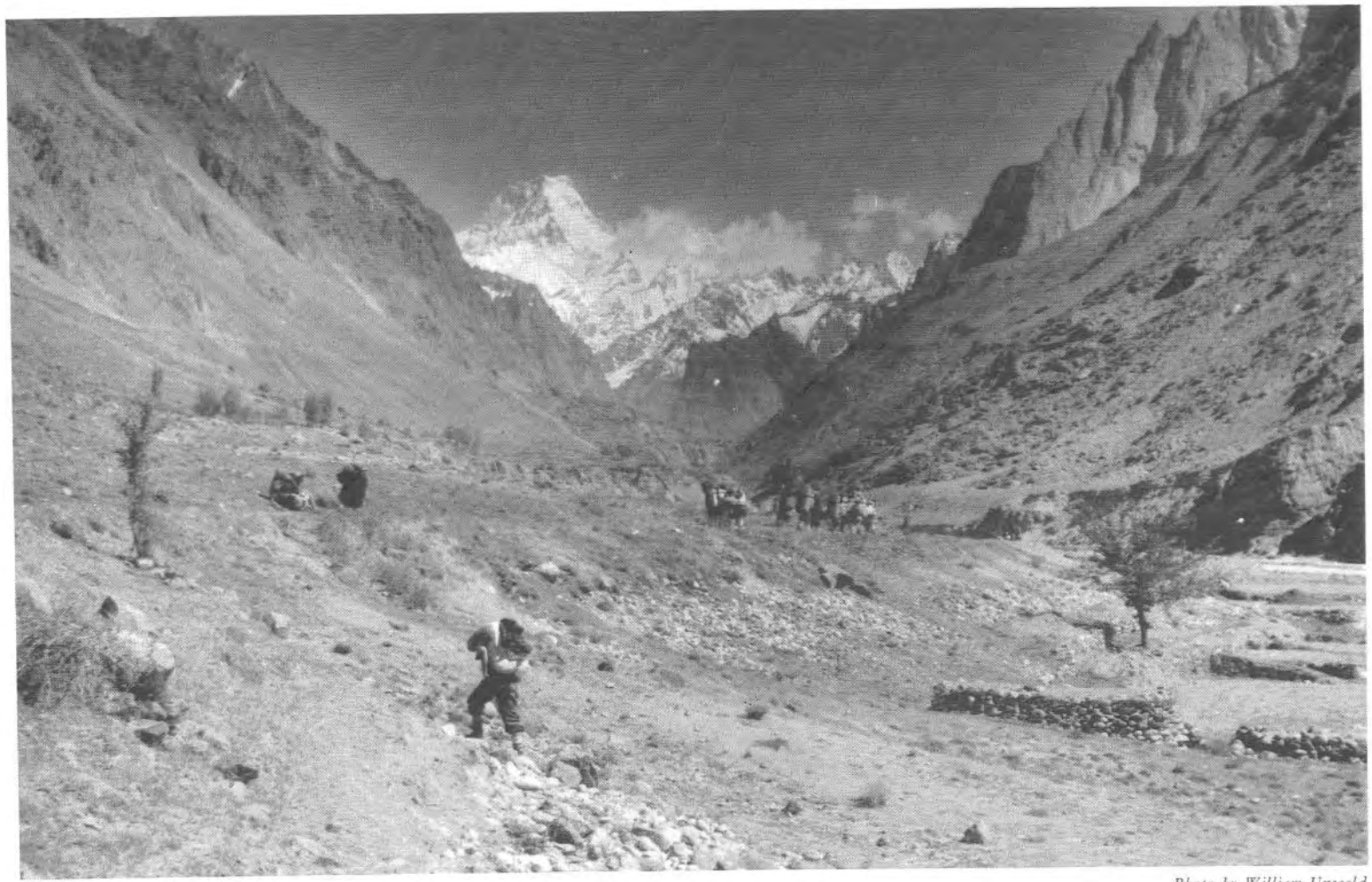

PLATE 2

Photo by William Unsoeld

MASHERBRUM FROM THE HUSHE VALLEY near Kande.

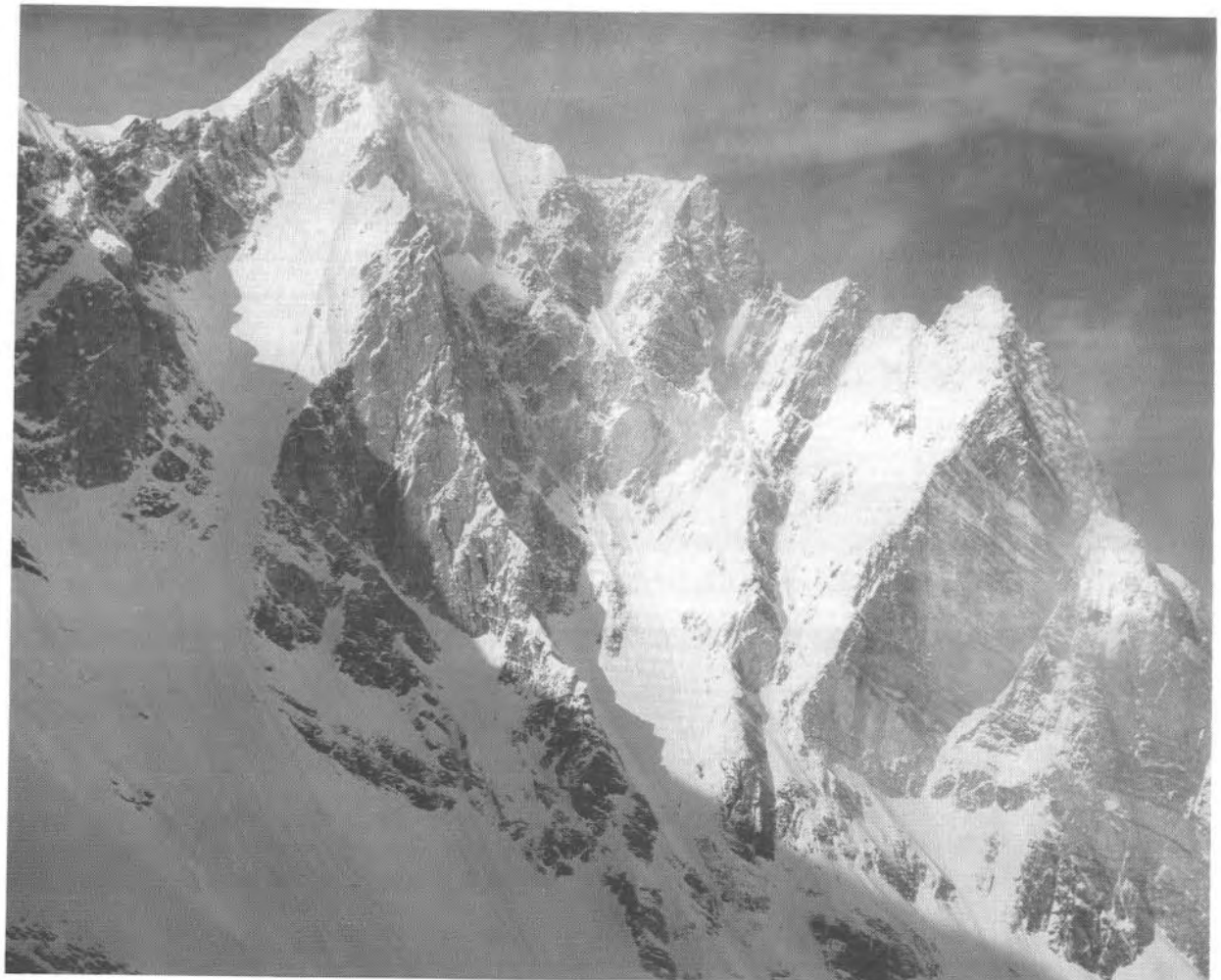

PLATE 3

Photo by William Unsoeld

SERAC PEAK FROM CAMP II. Climbed by McCormack and Abdul Rahim.

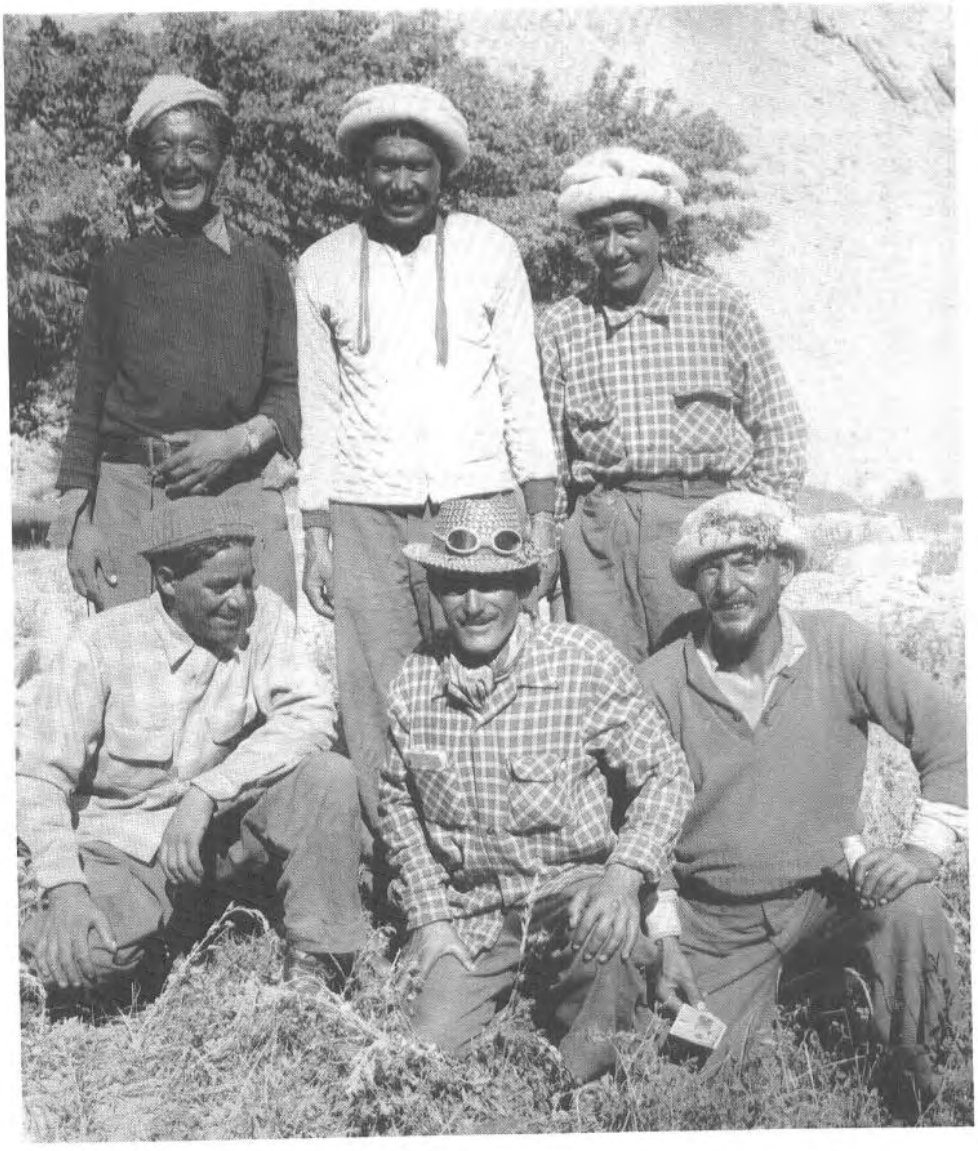

PLATE 4

HIGH ALTITUDE PORTERS. Rear row: Abdul Rahim, Mohammed Hussain, Hussain; front row: Qasim, Ghulam Rasul (Sirdar), Rahim Khan.

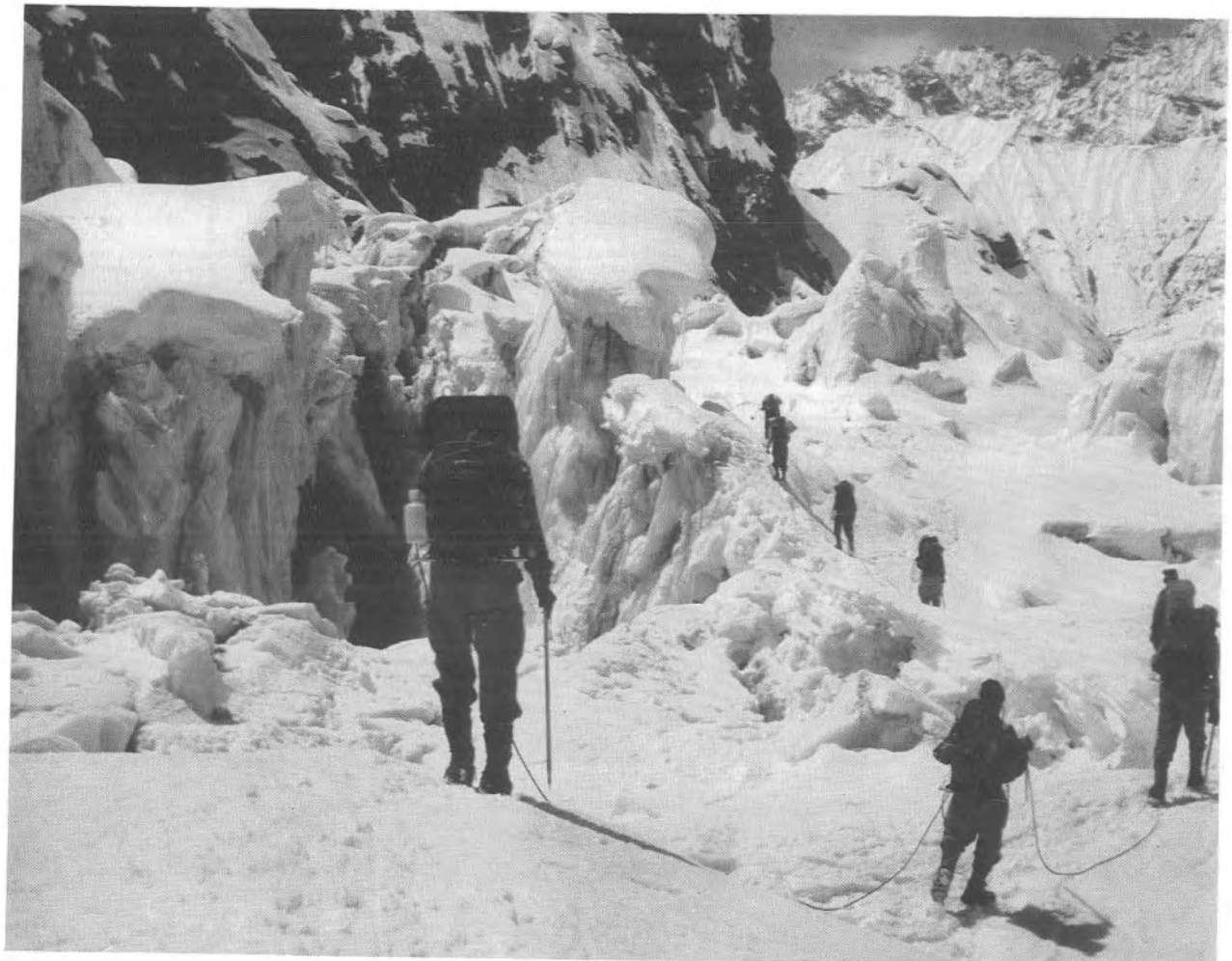

PLATE 5

Photo by George Bell

DESCENDING FIRST ICEFALL between Camp I and Base Camp.

PLATE 6

Photo by George Bell

SUMMIT PYRAMID, Unsoeld belaying.

VIEW FROM CAMP VI. From left to right: Masherbrum IV, III, II and Hidden Peak.

PLATE 7

Photo by Richard Emerson

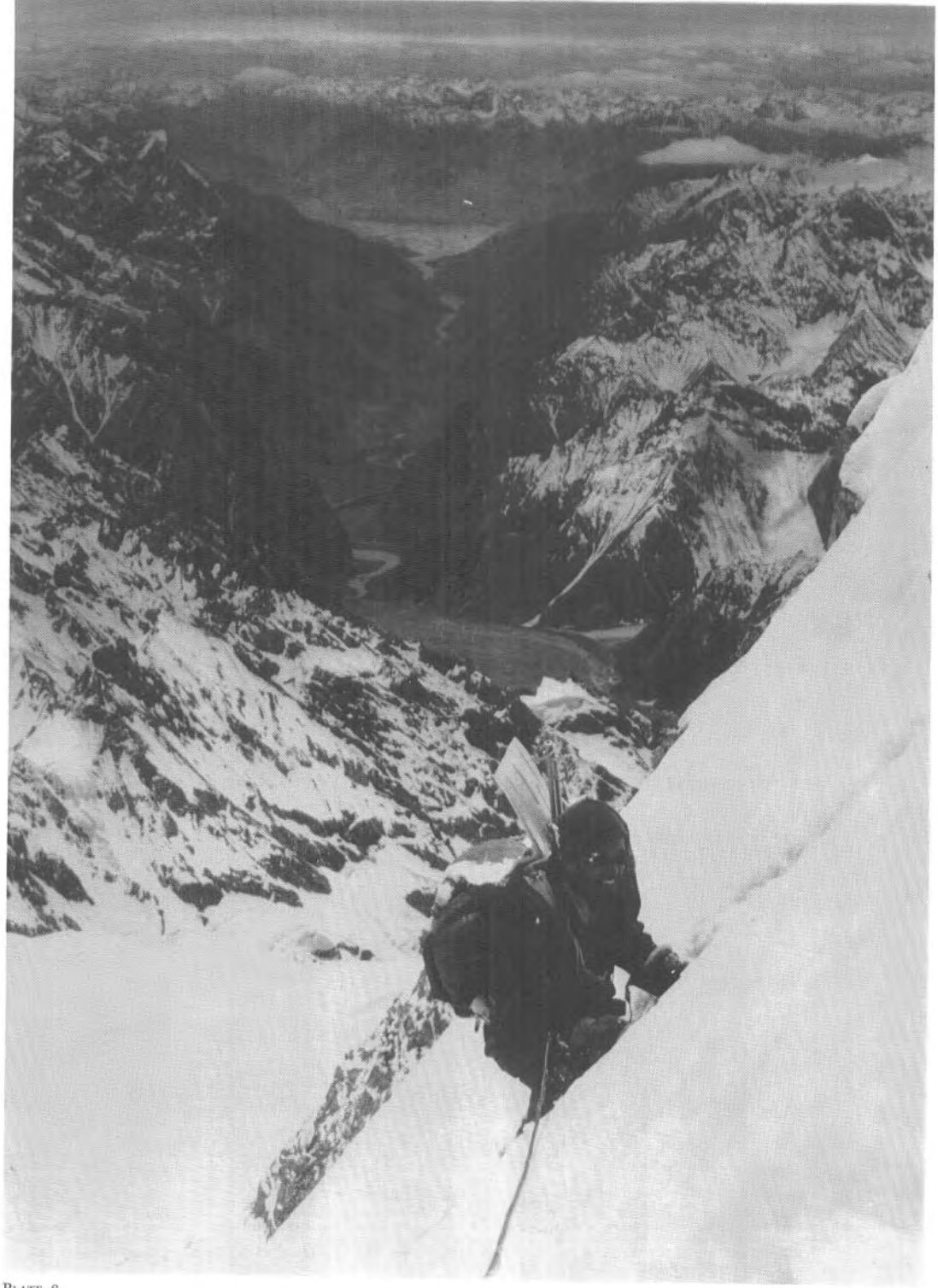

PLATE 8

Photo by William Unsoeld

BELL IN GULLY LEADING TO SUMMIT RIDGE.

Photo by William Unsoeld

PLATE 9

BELL ON SUMMIT RIDGE. West Peak in background.

PLATE 10

Photo by William Unsoeld

BELL ON SUMMIT OF MASHERBRUM. K2 on left.

quite as expected. The boned chicken, for example, turned out to include upwards of 30 per cent bones per can. Doubtless a semantic mix-up in which "boned" was understood as describing a desirable quality rather than a process. The concentrated orange juice proved to be unconcentrated, leaving us with but six fluid ounces for six man-days. We did find it handy for flavoring our tea. The tea itself came from an amazing number of exotic species. "Lindenblüten" was clearly made from the blossoms of the linden tree, while "Hagebutten" was just as obviously made from hag's blood. Flavors unfortunately agreed for the most part with etymologies, and great was the rejoicing when a rare packet of ordinary Ceylon tea was unearthed. In general, however, our diet was quite satisfactory, as was evidenced by our strong appetites even at the highest camps.

With the food, equipment, and party secured, Nick flew on ahead to line up customs clearance and porters in Pakistan. The bulk of the rest of the party rendezvoused in Zürich where we were royally entertained by members of the Alpine Foundation. One night in particular will long be remembered for our encounter with *der Balkon*. This was a climbing problem popular with Swiss students frequenting the Gottfried Keller wine cellar. After an excellent dinner as guests of the Foundation, we were invited to try our climbing skills on this historical rafter. The object was to wiggle up and over the rafter through the ten-inch space between it and the ceiling. After Emerson, Bell, and Unsoeld had been thoroughly humiliated through their ludicrous struggles, two of the Swiss students present easily negotiated the course and were rewarded with a free glass of wine which had to be drunk while hanging upside-down from the rafter. Things looked black for the future of the expedition until Hans von Gunten, member of the successful Swiss summit party on Everest, also tried and failed. We all agreed that if failure on *der Balkon* was a criterion for success on Everest, then our chances must be excellent on Masherbrum. However, we were still somewhat relieved when Hornbein and McCormack managed to master the pitch and salvage some remnants of our prestige.

From the cool efficiency of Zürich we jetted into the blistering confusion of Karachi. Nick had lined up customs clearance for us there and gone on to Rawalpindi, and so we were able to clear all our gear through to Pindi in the respectable time of four days. Another week was spent there waiting for the weather to clear for a flight into Skardu. This flight must surely be one of the most hazardous regularly scheduled runs in the world. It was the first time any of us had had to climb on the freight scales in person before being allowed aboard the aircraft. When the weather finally did

clear enough to allow a group of us to depart, it was with some reluctance that we took leave of Colonel Eric Goodwin, with whom most of us stayed while in Pindi. Colonel Goodwin's beautiful home has been the headquarters for a majority of the Karakoram expeditions as they wait for the Skardu flight, and the quality of hospitality dispensed by Eric and his brother, Bill, now has an international reputation.

On May 22, our entire party was assembled together for the first time, along with our five and a half tons of food and equipment. After the customary repacking orgy at the Skardu rest house, we were ready on the 23rd to begin the 100-mile hike into Base Camp. Nick had been most fortunate in securing the services of the best high altitude porters who had been with him on Hidden Peak in 1958. Since they were not *Sherpas,* we followed Nick's nomenclature in referring to them collectively as "HAPs". For Sirdar there was Ghulam Rasul, a slightly built man with a sporty moustache and an overwhelming sense of humor. His complete lack of authoritative display led some of us to question his ability to handle our 180 porters, while his build seemed to preclude his usefulness as a load carrier on the peak itself. Suffice it to say that without any apparent loss of humor, Rasul held the entire line of porters together in a compact column during the whole seven-day approach march, and that on the mountain he not only handled the HAPs with consummate ease and efficiency, but also proved himself an outstanding load carrier.

Of the other five HAPs, Abdul Rahim was the stand-out. He was very nearly left behind because of a heart condition which showed up in his physical, but was included at the last minute because of his fine showing on Hidden Peak. Of all the HAPs, Abdul most resembled the Sherpas in his anxious concern over the welfare of the Sahibs. He eventually became our cook in addition to his other duties and proved himself one of the best carriers in the group. Mohammed Hussein was the strongest of the lot—indeed, he had been the chief means of evacuating George Bell from K2 in 1953 when George was suffering from frostbitten feet. Although older, Rahim Khan could keep up with anyone when it came to load carrying while Qasim had an independent flair which enabled him to take over command easily if Rasul was absent. Only Hussein might have been classed as somewhat lacking in spirit and even he performed extremely well at high altitude and never refused a task which was set him. By the end of the trip, those of us who had experience with the famed Sherpas were willing to admit that our crew of Balti HAPs easily equalled the best of their more famous counterparts in nearly all departments of expeditionary mountaineering.

On the 23rd of May we started the trek to Base Camp, and a more than usually ghastly one it turned out to be. The route led first along the bank of the Indus—flat, dry, sandy, and blazing hot. For most of us—fresh from sedentary jobs—the 40-pound packs for the first day's march of eighteen miles proved just about our physical limit. The party as a whole raised the most sensational crop of blisters that any of us had ever witnessed. Standard marching gear came to include a needle stuck in the hat band for draining one's feet during the occasional breaks in the day's march. The brand-new Bally Himalayan boots we were wearing came in for some unkind comment that first day, but on the second day's march of 20 miles, it was generally hips and shoulders which generated the complaints. Camp the second night resembled nothing so much as a hypochondriacs' convention as we all did the "Sobbin' Sahib Shuffle" along the bank of the Shyok River into Gwari. There was really some question in our minds at this point as to whether or not we would recover in time to field a team capable of leaving (or even reaching) Base Camp. However, the next two days into Khapalu were relatively short ones, allowing us a partial recovery.

At Khapalu we had a welcome rest day while the loads were put across the Shyok in readiness for the trip up the Hushe to Base Camp. The morning was spent anticipating the lunch to which we had been invited by the Rajah of Khapalu—while the afternoon and evening were spent recovering from it. The Rajah himself was the seventy-second in the line of hereditary rulers who had inherited this little section of Baltistan and we listened with fascination to his tales of the past history of his domain. Among other interesting items of local lore, he informed us that the nearest translation of "Masherbrum" would have to be "Doomsday Mountain."* Though this lugubrious bit of information had some effect on the spirits of the party, it had none at all upon our appetites. We still indulged so immoderately in the curried chicken, pâtisserie, and tea which were spread before us that it was with some discomfort that we mounted the bouncy little ponies with which the Rajah had equipped us for the trip back to the camp.

The next morning the ferrymen huffed and puffed us safely across the Shyok on their goatskin *zakhs* and we started on the last three days' march into Base Camp. The huffing and puffing didn't go directly into the paddling as much as it did into the inflated goatskins which exhibited a distressing tendency to deflate in the middle of the stream. One ferryman of unusual

* Major General M. Hayaud Din states, "In the local dialect 'Masher' means 'Queen' and 'Brum' means 'Peak'. Therefore the meaning is 'Queen of Peaks'."—*Editor.*

lung-power seemed to do nothing during the crossing except crawl from skin to skin giving each a judicious injection of air. At the end of our first day's march up the Hushe, we had our first view of Masherbrum. Beautifully framed at the head of the valley, it completely fulfilled our highest anticipations of grandeur and austerity. Even at a distance of two days' march, we were properly impressed by the apparent angle of the final snow couloir leading to the summit ridge. The photographs taken by the British expedition of 1957 were closely examined and one great alteration could clearly be seen to have taken place in the intervening years. The great band of ice cliffs, which had blocked the eastern edge of the upper part of the southeast face in 1957, had clearly extended themselves a much greater distance across the face to the south. Even from this distance it appeared likely that we would have to make a major detour in order to circumvent this unexpected obstacle.

An easy day's march into the last village in the valley (the village of Hushe itself) and we were ready for the final day's march into Base Camp. Previous parties had warned of the ruggedness of this stage, so we planned on a very early start. We even decided with great reluctance to pass up the performance by the dancing girls of Hushe who are famous throughout Baltistan for their artistic gracefulness. Bell, McGowan, and I set off before six A.M. with Rahim Khan to select the site for Base while the main party started some two hours later. Rahim Khan had been with the British party and led us easily through the beautiful cedar forest at the head of the Hushe valley. A wicked scramble across the loose surface debris of the Masherbrum Glacier brought us onto a faint track running along the crest of the lateral moraine. This we followed easily until it disappeared under the snow fields while we were still some hours short of the site for Base Camp. The brilliant sun was sapping our energy and the altitude was making us thankful for our light packs when, at about three P.M., we finally dragged up to the junction with the Serac Glacier where Base Camp was to be located at about 13,500 feet. The deep snow and rough going of the last few miles led to grave doubts as to whether the porters would be able to make it clear to camp. Many of them were barefooted, they all carried between 60 and 70 pounds (with several carrying 100-pound sacks of *ata* [coarse flour—*Editor*]), and the march from Hushe was at least 12 miles over some very rugged terrain. To add to our concern, we knew we would have to pay off all the porters in time for them to get safely back over the snow before nightfall—and this paying off process itself was always time consuming. It was, therefore, with the utmost relief (not to mention astonishment) that we suddenly spotted the first of the

coolies coming into sight below camp only about *thirty* minutes after we had arrived! This was truly a fantastically fast carry over very difficult ground and it enabled us to pay off all the men and bid them farewell by 5:30 P.M. With our tents up, supper started, and our mountain of supplies and equipment safely dumped at the very foot of the peak, we could finally relax with a sigh of relief as we looked forward to the start of real mountaineering.

As we peered up at the slopes of Masherbrum from Base Camp, the route did not appear particularly difficult. Foreshortening cunningly concealed the full 12,000-foot sweep of the peak before us. The Serac Glacier rose steeply towards Serac Peak, but to our optimistic eyes there appeared to be plenty of route possibilities up its smooth, white surface. Above Serac Glacier rose the great, white flank of the Dome, on top of which we planned to place our Advance Base Camp at about 21,000 feet. Behind the Dome lay a large upper basin stretching away to the foot of the southeast face which swept up the last 4,000 feet to the summit. From the pictures and descriptions of previous parties, the route and terrain were quite definite in our minds, but this very familiarity led us to seriously underestimate the labor that would be required to translate our theoretical route into actuality.

In one day the organization of Base Camp was completed. Food boxes were sorted, personal gear packed, radios tested, and lectures on the oxygen apparatus and on high altitude first aid delivered. The weather had been so consistently hot and cloudless that all haste was made to take full advantage of it. At 5:30 A.M. on the first of June, Emerson, McGowan, Hornbein, and Jawed headed up the first icefall of the Serac Glacier in search of a route to Camp I. At eight A.M. we got a weak radio signal from them from high in the icefall. The message was unreadable, but by prearrangement they reinforced it with flashes from their signal mirror which meant that they had found a route and that we could start up with the first carry. By ten A.M. the remaining six sahibs and five of the HAPs were packed and set out to follow the trail of flagged wands which the scout party had left behind them.

As we trudged up the center of the icefall, its smooth-seeming surface revealed itself as a horribly chopped-up maze of seracs, ice walls, and crevasses. The HAPs, who had been here before, continually urged us to swing to the right into the great gully which bordered the glacier, but the threat of avalanches from the walls above this "Scaly Alley" (as it had been christened in 1938 by the British) led us to disregard their advice. As the blazing sun softened the snow and evaporated our energy the pace

grew slower and slower. The route was also forced higher and higher on the steep left wall of the central groove until finally the soft snow made it nearly impossible to proceed with our heavy packs. At this point Hornbein and Jawed appeared above us on their descent and warned us that the route was even steeper above. They advised us to swing back over to Scaly Alley where Emerson and McGowan were exploring for a route down. By the time our party of eleven had unwound a track over to the Alley, our energy was at an end, so loads were dumped and we mushed back to Base Camp by the middle of the afternoon. Although we had argued strenuously with the HAPs against the advisability of using Scaly Alley, it was the only route used throughout the rest of the expedition. We did notice a few signs of fresh avalanches in it later in the season, but luckily none of them arrived while the Alley was in use.

The next day fifteen of us made a strong carry to the excellent site which had been selected for Camp I. The Serac Glacier itself was broken into three distinct icefalls. Camp I was located at the top of the second icefall at about 15,500 feet. Here McCormack and I were established to put in the route to Camp II, while the rest of the party returned to Base for another carry. On the 3rd of June we unwound an extremely devious route through the upper icefall, along the edge of Serac Basin, and finally onto the lower slopes of the Dome itself, where Camp II was placed at about 19,000 feet. Great care had to be exercised in crossing some very fragile snow bridges and it was clear that this route would be subject to major changes as the season progressed, but the greatest obstacle along this part of the route was the heat. With the icefall acting as a great reflector, the snow quickly softened until progress became extremely laborious. Any portion of the body that was exposed to the sun ran the risk of serious burn despite continual application of various sun creams and ointments. Hornbein was finally so badly affected that he devised a bandana mask which covered his entire face with the exception of two eyeholes. Truly a fearsome sight was the "Red Raider" as he dodged in and out of sight among the séracs.

In the next three days loads were relayed to II while a group of sixteen Hushe men completed several mass carries from Base to I. So effective was this Hushe force that within a week of reaching Base Camp, it was possible to evacuate it and move everyone on up to the higher camps. By the 5th of June, Jawed, Emerson, McGowan, and I were established in Camp II ready to tackle the route to the top of the Dome. The altitude hit Emerson so hard here that he had to retreat to a lower camp, and a dose of oversalted mush put Jawed temporarily out of action, but on June 8, McGowan

and I slogged out a track up the steep, unconsolidated face of the Dome and into Camp III at 21,000 feet. Behind Camp III (which was to be our Advance Base) the large upper basin stretched off towards the foot of the final southeast face with the cliffs of the south ridge resting on the left and the precipices of Fanny Peak on the right. Hovering over the crest of the south ridge appeared the summit itself—still nearly a vertical mile above us.

For two more days the weather continued clear and warm. Then, on June 11, the clouds finally arrived and it began to snow. We did not know it at the time, of course, but this spell of intermittent cloud and snow was to last a full 24 days. Despite the poor visibility, Bell, McCormack, Emerson, and Hornbein made repeated sorties from Camp III, flagging in a little more of the route towards IV each time. The rest of us made carries from II to III as well as two quick trips to Base Camp to pick up certain food items which proved to be scarce in the high altitude rations. The continual fall of fresh snow made the trip between Camps II and III a real nightmare as each day saw the necessity of breaking in the track anew. It was with great relief that we dragged ourselves up the interminable white slopes on June 16 with the last critical items from Camp II on our backs. McCormack and Emerson were both suffering from the altitude and various internal complaints and had to drop back down to Base for a rest. Jawed was just recovering from a four-day siege of snow blindness, but as a whole the party was in remarkably good shape at this time.

June 17 saw McGowan and me moving out with three HAPs to establish Camp IV. The entire mountain was covered by a light mist through which the sun burned with a fierce intensity. Only occasionally could we catch a glimpse of the peak which was now beginning to come into view above us, while underfoot the soft, powdery snow reached to our knees. Laboring across the plateau behind Camp III with frequent lead changes, by midmorning we reached the steep ice incline leading up to the upper basin at the foot of the southeast face. Here we fixed a rope across an icy patch and by one P.M. we arrived at the cache of supplies which had been dumped by the previous reconnaissance parties. Since the weather now turned extremely cold with the visibility getting worse and worse, we finally pitched Camp IV on a bench in the snow ridge edging the glacier at the foot of Fanny Peak at around 22,000 feet. The HAPs set off quickly for Camp III after dropping their loads while Dick and I attacked the problem of frozen gaiters. After a long wrestle, we managed to wrench off boots and gaiters together in a single great chunk of iced leather and fabric. The next morning we broiled each boot an average of

fifteen minutes over the butane stove before the gaiter could be removed. More toasting enabled us to get into our boots, and a final touch of heat allowed us to scrape back into the gaiters.

The search for a site for Camp V was greatly hampered by the visibility which had deteriorated in the night. Traveling partly by compass and partly by instinct, and carefully wanding the route every 40 to 50 feet, we pushed slowly up along the foot of the southeast face and finally up onto the flank of the east ridge. In between partial white-outs we caught occasional glimpses of the route ahead, but became increasingly worried about the absence of any apparent camp site. By eleven A.M. the lack of visibility had discouraged us to the point of turning back when one last burst of energy carried us up a steep slope to a perfect camp site atop a level snow crest on the side of the east ridge at about 23,000 feet. Directly opposite the camp was the obvious start of the route up the southeast face and so we marked the site with wands and schussed back down to Camp IV in forty minutes. There we met Bell, Clinch, and Hornbein who had come up from III with the HAPs. As we sat talking, the peak suddenly cleared and we had a discouragingly clear view of the route above. It was enough to evaporate instantly our earlier optimism of an easy trip to the top. The route to Camp VI seemed to offer only a certain objective danger from some huge ice-cliffs which overhung the route, but above VI we could see the difficulties forced upon us by the great extension of the ice cliffs. We would undoubtedly be forced out onto very steep slopes of snow or ice and would have to traverse back horizontally for at least 1000 feet before we would be able to enter the final couloir leading to the summit ridge. This couloir was the biggest question of the climb. Don Whillans and Joe Walmsley, of the 1957 British party, had reached the bottom of it and found the snow to be too soft to be negotiated. They had then turned to the easy-looking rocks on the left edge of the gully and spent seven hours while gaining about 300 feet. Here they drove a large piton to which they fixed a 300-foot nylon rappel rope which had been left in place. They suggested that if the couloir again refused to go we should make use of their fixed rope to gain quickly the first 300 feet of the couloir. This would still leave us about another 200 feet of very difficult rock climbing before reaching the summit ridge. With this rock work in mind, we were heavily equipped with the pitons, bolts, and stirrups that make up the technical rock climber's paraphernalia, but the mountain had other plans for us.

By June 21 Camp V was consolidated and occupied by three Sahibs and four HAPs ready to make the lift to Camp VI. Up until now we had

abided strictly by the rule "Climb high and sleep low." The reconnaissance of each new camp had been carried out by a team sleeping in a lower camp. After the route had been established, the same team would move up to occupy the new camp while the other teams began the supply carries. This procedure we believed to help in our acclimatization since it prevented a long stay at a new altitude the first time it was attained. The weather had never completely cleared since June 11, but now a period of slight improvement led us to depart from our previous procedure in order to speed up our progress.

Early on June 22 McGowan and I, who had been chosen as the first assault team because of our physical condition, left Camp V to locate Camp VI. Clinch and the four HAPs at V were to carry up the camp behind us that same day so that the first summit try could be made the following day. The accumulation of soft snow on the southeast face made progress extremely difficult, some places requiring a veritable trench to be shoveled out. Along the edge of an ice rib firmer footing was found, but here the slope steepened until it became necessary to rig fixed lines for the sake of the loaded team which followed. We had earlier picked a large sérac jutting from the face as a likely place for Camp VI, but the visibility was so poor that from a distance we could not tell whether there was a suitable site there or not. Since it was getting late in the afternoon and the weather was steadily deteriorating, we made a desperate push for the sérac and were really overjoyed to find a tiny platform at its base. This ledge was restricted on both sides by partially concealed crevasses, but the great bulk of the sérac towering between us and the possible avalanches from above gave it a most cozy appearance. Nick soon appeared out of the icy mist with the HAPs, making the carry a complete success. This was a notable feat for our four Baltis. Ghulam Rasul, Rahim Khan, Abdul Rahim, and Qasim had all carried heavy loads to 24,000 feet in miserable weather with never a murmur of reluctance. High altitude porters just do not come any better than these four—even in the ranks of the redoubtable Sherpas.

The plan now was for Dick and me to move out above Camp VI to prepare the steep slopes leading over to the foot of the couloir. We were to work without oxygen, but if all went well we were to turn our route preparation into a summit try. At the same time Bell and Hornbein were to move up to Camp VI in support of the first team and to help in any further preparation of the route. As soon as the way to the couloir was secured, Dick and I would make an all-out summit attempt using oxygen.

As it turned out, the extreme angle of some of the slopes above VI,

coupled with the lack of acclimatization, limited the first day's attempt to about 400 feet! However, we did get in several fixed ropes over the steepest spots and succeeded in locating a route around the end of the barrier ice cliff. Ahead of us stretched smooth, steep slopes clear to the bottom of the couloir. The angle of these slopes and the softness of the snow led to some worry about possible avalanches, however, and so it was agreed that as much of the route as possible should be secured by fixed ropes before being used by a summit party.

Back in Camp VI the support party of Bell and Hornbein arrived, but through some mix-up no extra rope was available as far down as Camp IV. George and Tom solved the difficulty by retrieving the ropes which had been fixed between V and VI, and on June 25 we were all set for the first serious summit attempt. Dick and I were to use oxygen in an all-out bid for the top, with George and Tom following behind to put in the fixed ropes to safeguard our descent.

By getting up at one A.M. we were able to get started by about 2:45. Breakfast of grape-nuts doused with hot cocoa went very quickly, but the job of dressing and equipment adjustment seemed to take forever. The fantastic agglomeration of ropes, cords, straps, tubes, and lanyards stubbornly refused to yield to any attempt at comfortable arrangement. Mitten cords tangled with piton-hammer lanyards, rope slings pinched oxygen tubes, and camera straps fouled pack straps. Finally all was adjusted, the oxygen masks were snapped in place, and the valves opened on the first of the two bottles that we each carried. The fixed ropes helped greatly and the previous high point was reached easily in about an hour and a half.

Although progress had been quite rapid up to this point, there was already some question as to the effectiveness of the oxygen apparatus. There appeared to be no serious malfunction aside from an occasional frozen valve, which was quickly cleared with the pick of an ice axe, but the benefits of a 4-litre flow seemed to be far less than expected. Dick noticed that he was occasionally taking off his mask in order to breathe more easily which was certainly not the designed effect of the set. I became so fascinated with the faint clicking of the various valves in the mask that I found myself hyperventilating in order to synchronize some of the off-beat clicks. Neither of us noted any discernible difference in fatigue or speed while the oxygen was in use so we were naturally glad when a bottle had been expended and we could free ourselves of the extra eleven pounds. The empty bottles were left in the snow and later proved very useful as anchoring points for fixed ropes. However, they were surely the heaviest pickets which had ever been carried so far for the purpose.

The slopes leading upwards towards the couloir proved to be predominantly soft, heavy snow which required immense effort to traverse. All possible effort was made to gain altitude, but often the consistency of the snow made any upward progress impossible. On these stretches the best that could be managed was a horizontal traverse. Finally a rib of harder ground was reached where steps could be kicked vertically upwards. About 200 feet below the rocks of the south summit, the traverse to the foot of the couloir was started. Here a network of small schrunds offered easier climbing along their lower lips till we reached a large schrund, which formed a level area large enough to sit on for lunch. Although the strenuous exertions on the slopes below had left both of us tired, it is interesting to note that at this point we were still sure of the summit. Our altimeter read 25,000 feet and the foot of the couloir apparently lay only a few rope-lengths ahead.

After lunch our mood underwent a sudden change. After only two leads we suddenly realized that it was already two P.M. with what was sure to be the most difficult part of the climb still ahead. The weather had also deteriorated rapidly and it was now beginning to snow with vigor. Thinking of the effort required to surmount the long slopes below, we discussed a bivouac, but the bad weather counseled against such a plan. Since it was now clear that an additional camp would be necessary, we leveled out a tent site at our lunch spot and cached all the extra equipment. The trip back to Camp VI was complicated by the heavy snowfall which continued. Several small surface slides slowed progress, and so it was not until six P.M. that we stumbled into camp to be greeted anxiously by Bell and Hornbein.

Since the heavy snow continued, it was decided to retreat to Camp V. Food was ample at VI, but Buta-gas was running low. Conditions for the descent were far from ideal. A complete white-out limited visibility to only a few feet. To complicate matters further, the frequent avalanches had taken out large sections of the wanded trail. It was while we were puzzling over one of these missing sections that disaster very nearly overtook us. Just as we decided to move sharply to the left to avoid the large ice cliffs which started a few hundred feet below, a large surface slide enveloped us. Our whole party was tumbled head-over-heels towards the cliffs below. Fortunately Bell and I managed to get our axes through the slide into the slope, stopping the party a safe distance above the drop-off. Tom Hornbein, who had been last on the rope, was now far below the rest of the party, having slid at least 200 feet.

Although no one seemed seriously injured, it soon appeared that Dick

McGowan was far from well. Acting very queerly, he suddenly spun in his tracks and pitched head-long into the snow. He was stretched out flat on a shelf hastily cut for him where Tom could examine him. No physical damage was visible, but he seemed to have inhaled a quantity of ice crystals which had affected his throat and brought on a wild delirium. A miraculous development in the weather at this point speeded evacuation to Camp V. No sooner had the fall been arrested than the snow suddenly stopped, the clouds blew away, and the sun broke through. With the new visibility, it was an easy task to open a new track down to where Nick Clinch and Jawed were breaking a trail upwards from V. Dick was evacuated under his own power, reaching Camp V about an hour and a half after the avalanche had hit. At that moment it suddenly began to snow again and visibility was reduced to only a few feet. It may be that the day of miracles is past, but this lull in the storm leads one to wonder.

Dick's delirium continued throughout the day despite the administration of liquids, penicillin, and intravenous salt solutions, but luckily he rallied in the night sufficiently to make it down to Camp III the next day. This was an especially tough break for Dick since he had been going so strongly up until the time of the avalanche. His recovery at III was rapid, but he never completely regained his previous form.

According to plan, six sahibs reoccupied Camp V on June 29. The night was completely clear and the sky startling with its display of brilliant Himalayan stars, but by midnight a blizzard was again raging. This was the wildest weather that we experienced throughout the trip, extremely heavy snow accompanied by high winds and no let-up for four days. By lying quietly together in the pyramid tent and by eating only half-rations, we were able to stretch our food supply till noon of the fourth day. As the storm still showed no signs of letting up, we then decided that four of us would have to retreat to Camps IV and III while Bell and I would hang on at V as long as possible, hoping for a break in the weather. As Clinch, Jawed, Emerson, and Hornbein left for Camp IV, the tips of the four-foot wands were just visible above the drifts.

As we had hoped, the morning of July 4 dawned clear and bright. George and I headed immediately for Camp VI looking forward eagerly to the ample food stores there. The great amount of snow that had been dropped by the storm had resulted in numerous avalanches which swept the southeast face into a relatively stable condition. In fact the snow in the gully below VI was so hard that instead of laborious step-kicking we were forced into equally laborious step-chopping. Both of us noticed the weakening effects of four days of inactivity. Once or twice we were startled

into furious evasive action by the appearance of large powder snow avalanches cascading over the ice cliffs directly about us, but to our relief these slides were completely dissipated by the wind before they reached the lower slopes.

Camp VI was a complete shambles after the storm. Snow had flowed in around the protecting sérac until both tents had been completely covered. Despite the aluminum poles and fiberglass wands which give great rigidity to the Gerry Himalayan tents, these two were crushed flat to the ground. It took two full hours to dig them out and even then several of the wands and poles turned out to have been snapped in two. Around six P.M. Emerson and Jawed came slowly into VI, having made the long haul from IV in one day. Between the lower camps there was great activity, teams moving up with additional supplies according to the plans for continual support. The sight of all this activity between camps III and V did much to increase the confidence of the four who were wrestling with the problems at Camp VI.

The plan now was for the four climbers at VI to establish two of our number (George and me) at VII. This camp would be located in the schrund at the site of the cache we had made during the previous attempt. Emerson and Jawed would then drop back down to VI to go up again the next day in support of the summit try, and also to form the second assault team. No one at Camp VI showed conspicuous energy on the morning of July 5, but after much fussing with packs and considerable time spent in simply sitting in the sun, the leisurely start was reluctantly made. The pull across the slopes towards Camp VII was just as deadly as we had expected, and it was not until late afternoon that we approached the site of the cache at about 25,000 feet. As we neared the site, we were greatly shocked to discover that even the schrund had been buried in the continual slides which had come down during the storm. No trace of the cache was to be found—all the pitons, ropes, stirrups, and spare oxygen bottles had apparently been swept over the edge of the platform and whirled on down the southeast face. After a frantic search for this crucial equipment, it was given up for lost. Dick and Jawed departed for Camp VI while George and I chopped out a new platform and laboriously set up the tent. Supper was cooked on the tiny, high-altitude Buta-stoves. At least four serious spills were recorded during the meal before we realized that with these compact stoves it is necessary for one man to maintain a continual grip on the precariously balanced pot.

Nervous anticipation precluded much sleep that night and by two A.M. we were awake for good, lying there quietly in our bags, talking con-

tentedly for another hour and slowly gathering energy for the day. Breakfast of Ovomaltine on corn flakes was soon over, and by five o'clock we were booted and spurred and ready to slog. In 45 minutes we crossed the schrund and headed up into the throat of the crucial couloir. An obtrusive band of rock barred its lower end, but a thin tongue of snow pierced through to the main gully above. After a few shivers as crampon points grated on the rock beneath the shallow snow cover, we were safely past the rock barrier. Fifteen feet to the left of the gully the fixed rope left by the Manchester expedition was plainly visible. For 300 feet it dropped in graceful curves over the steep rock. From below, this rock looked deceptively easy, but the memory of their seven-hour struggle with this 300 feet kept us on the snow slope.

The slope itself was steep although not excessively so—possibly reaching a maximum angle of from 50° to 60°. However, the uncertain texture of the snow made progress a grueling problem. I carried a snow shovel in addition to my ice axe, and much of the progress was made by hoisting my body on these two handles, then kicking deep footholds to consolidate the gains. The rising sun focused cruelly into the couloir where not a breath of wind stirred to alleviate the heat. Hour after hour the rope slowly paid itself out and as slowly drew itself in as we gasped slowly upwards. Finally, at eleven o'cock I fell happily across the crest of the summit ridge. George soon joined me and here we sat astride our precarious perch munching a chocolate bar. Below us the northwest face fell sheer away to the Baltoro Glacier, while on the other side the southeast face swooped down unbroken to Camp IV. The cutting wind from the southwest soon drove us from the perch, turning us to face the final problems of the summit ridge.

Ahead lay the first rock step which had been clearly visible from the camps far below. The rock proved to be treacherously rotten, but the technical difficulty did not seem to be extreme. Leaving crampons on, we edged cautiously around to the left of the step. Here the bitter wind was keeping all the rocks frozen solidly in place. Just to give the pitch an authentic ring, I succeeded in pounding in one of the ice screws which represented the only available iron. It worked fine in the rotten rock and soon the step was behind us. Ahead, the ridge became a knife-edge of snow forming a teetery tight-rope to the base of the second step. Here a clean-cut chimney split the right edge of the rock. Even in crampons the rock work went pleasantly except for the hoisting of the pack which was too large to fit into the narrow groove. On the lee side of this final rock step we found a tiny platform just large enough for a lunch stop. Nearly an hour was spent here in the warm sun before the final pitch was begun.

An easy rock crack led quickly back to the snow of the summit ridge which angled gently upward to the summit itself. The snow here proved to be ideally firm, though the angle dropping away to the west encouraged continual belaying to the very top. After only a few more rope-lengths, we reached the top of the highest of the three separated summit crests at 3:15 P.M. A quote from my diary records the impressiveness of the scene:

> To the north loomed K2—surely the grandest of all single peaks. Monstrously isolated, it dominated the scene. To the east bulked Broad Peak and further to the right the four Gasherbrums and Chogolisa. At our feet lay the rubbled highway of the Baltoro showing its traditional ice-ship séracs. Beyond it poured in countless tributary glaciers and along them rose the unimaginable mass of the Karakoram peaks. No picture I have seen has begun to do them justice for sheer ruggedness and uncountability. The Mustagh Tower was the only disappointment. Seen in person, it looked like a walk-up without the magic of Sella's camera to lend it sheerness.

Forty-five minutes on the summit were spent in photography and casual conversation. Pictures were taken of Jawed's Pakistani flag, of Dick McGowan's banner signed by his geography class, and of my pennant from the Oregon State College Mountain Club. As a last act before leaving the top, I knelt down and placed in the snow a tiny crucifix, given me by Colonel Eric Goodwin in Pindi. George waited silently until the end of my brief prayer, then said, "Well, Willi, shall we go down—or up?" In spite of the intriguing suggestion, we picked up our coils and began the descent.

The ridge went quickly on the way back. A long rappel dropped us down into the gully from the top of the first step. Here a 140-foot, quarter-inch manila rope came in handy as a pull-down line. Once in the gully, aluminum rappel pickets were fixed in the snow for a succession of let-downs. The manila line was fixed to the final picket near the bottom of the couloir and left in place to aid the ascent of the second summit party. At eight P.M. George and I stumbled into Camp VII, exhausted and seriously dehydrated. In the night George developed an ominous cough. He complained of being cold and soon had some difficulty in breathing. Alarmed at the possibility of high altitude pneumonia, I laboriously melted a pot of water, made up a lot of cocoa, and began the emergency first-aid treatment which had been recommended to Tom Hornbein by Dr. Charles Houston. (See *A.A.J.*, 1960, 12:1, pp. 189-190 and also elsewhere in this present issue.—*Editor.*) This consisted of the administration of antibiotics, a heart stimulant, and a diuretic. George bordered on delirium for several hours, eerily filling the tent with mindless little nonsense hums, but some part of the treatment seemed finally to help and he dropped off into an uneasy

sleep. The rest of the night was filled with interruptions. The snow stripping off the rocks above the camp swished whispering over the roof of the tent while occasionally a chunk of ice would thud against the fabric. As the platform settled, the tent slowly tilted more and more towards the slope of the southeast face until serious concern arose as to the adequacy of its anchorage. During one particularly prolonged flow of snow, it suddenly seemed as if it were the tent which was sliding rather than the snow. The illusion was so perfect that I jerked wildly across the floor of the tent into George's waiting arms. Our frantic embrace was rather sheepishly disengaged some seconds later, but we agreed that the cost of a moment's dignity was a small price to pay for insurance against the chance of dying alone. By morning George was better though desperately weak.

During the first assault, a support party composed of Jawed, Tom Hornbein, and Dick McGowan started the move from VI to VII. Upon reaching the fixed rope across the ice traverse, however, Dick had had a bad fit of coughing ending with retching. Jawed had led out a full rope length along the traverse when Tom called him back because of Dick's condition. In making the move to retreat, Jawed suddenly slipped from the steps, missed his grab at the fixed rope, and somersaulted down the slope. Dick had had a premonition that a fall was imminent and had warned Tom to put on a belay. Tom had time only to grasp Jawed's rope with one hand while wrapping his other arm around the fixed line. Luckily the climbing rope cut deeply into the soft snow thus absorbing much of the shock, but the fall was still a matter of about 130 feet. While Jawed was still shooting downwards, Dick asked with some interest, "Are your arms going to be strong enough, Tom?" The reply was, naturally enough, "Well, they'd better be." And they were. This fall, coupled with Dick's poor condition, drove the support party back down. As George and I were unable to progress below Camp VII that day, this was a fortunate move since VII would have been incapable of holding five men. Tom and Dick went clear on down to Camp V that day, leaving Jawed behind at VI with Nick and Dick Emerson. This recurrence of McGowan's illness was a sad blow to Hornbein who was in great shape for a summit try. However, he never let his enthusiasm as a climber interfere with his duties as a doctor.

On July 7 the rearranged support party of Nick, Emerson, and Jawed moved up to meet the summit party. George and I started down rather late in the afternoon after our trying night. We met the support group at the fixed rope traverse, where, in the middle of the touchy ice-slope, we exchanged not only news of the summit success, but also my G.I. rucksack

for Jawed's "Budd Davis." The transference of the contents from one pack to the other was no small feat in this precarious position, but the maneuver was considered well worth it to avoid facing the Davis puzzle-combination during a summit try.

The second summit party repitched the tent at Camp VII when they arrived, but conditions were so crowded and the tent still at such an angle that they were unable to get together any supper. This lack of food after his great exertions reacted so violently on Emerson's stomach that when they awakened the next morning before two, he was too ill and weak to participate in the summit try. In fact, the summit attempt very nearly failed to come off at all. While replacing a gas cartridge on one of the two small Buta-stoves, Jawed got too close to the other stove. Suddenly the cartridge in his hands ignited exploding flaming butane all over the tent. Nick threw a pot of water on the flames, but the inner lining of the tent was now afire and things looked desperate. Nick made a dive for the entrance only to find the zipper frozen solid. At the last minute, Jawed managed to smother the flames with a pair of down pants, thus saving the whole party from certain suffocation. This stirring bit of pre-dawn excitement delayed the start until 7:30. Nick and Jawed finally moved out at that time, leaving Dick behind to renovate the camp.

By two, they had reached the col above the couloir, and by 6:15 they were on top. This successful ascent fulfilled one of the main aims of the expedition—to get a citizen of Pakistan to the summit of a major Himalayan peak. Captain Jawed Akhter Khan became the first native of Pakistan to stand atop one of the giants of his homeland, and the honor could not have gone to a more deserving man. Through his continual good humor and willingness to expend any amount of energy in behalf of the party's interests, Jawed had more than earned his favored position on the second summit team. The entire expedition was overjoyed at his success.

Stopping on the summit only long enough for a few pictures and to swallow a dexidrin tablet, the two climbers started their descent after a short 15-minute stay. The descent itself turned out to be much more of an ordeal than had the climb. The rappel on the upper rock step proved to be a time-consuming affair, making it quite late when the first step was reached. The slings of the first party were still in place for the long drop into the gully, but when Nick and Jawed tried to retrieve their rappel ropes, the very tail end of their second climbing rope jammed in the rock just beneath the sling. They were forced to cut the rope which left them with but one climbing rope plus a 20-foot chunk out of their second rope. Having planned to use the pickets of the first party which were 120 feet apart,

they were in very serious straits. It was now dark, they were without any extra pickets, and their next rappel, of course, left them 60 feet short of the second picket. Here Nick demonstrated the value of his long climbing experience. Although he had never before used the method, he had often read about the technique of cutting snow bollards from which to anchor a rappel. This he proceeded to do under extremely trying circumstances. The extra piece of climbing rope was used as a sling, Jawed was sent down on a belay to test the security of the arrangement, and then Nick followed. Thus in perfect safety they negotiated the treacherous descent, but the precautions they took cost a good deal of time. Because Jawed had unfortunately lost a down mitten while on the summit, his hand was suffering considerably before the descent was complete. It was not until 7:30 on the morning of July 9 that the two utterly weary climbers literally staggered into Camp VII, just 24 hours after having left it.

George and I had joined Hornbein and McGowan at Camp V while the second summit attempt was in progress. Since George and Dick were both far from well, it was decided that they should go on down to Camp III leaving Hornbein and me behind to act as support for the summit party. The total lack of movement at Camp VII caused considerable alarm on the day following the second summit attempt. Finally, at 5:30 P.M., Tom and I were greatly relieved to see three figures creep slowly out of Camp VII headed downwards. Their progress was obviously painful in the extreme with Emerson's shouts of encouragement ringing clearly. It was indeed fortunate that Dick had stayed in camp and regained his strength while Nick and Jawed went to the top. Without his energy, the descent to Camp VI would have been next to impossible. As it was, they just managed to creep into VI before full darkness fell.

While Hornbein and I in Camp V had been keeping an anxious watch for the summit party, we had noticed two figures working their way across from Camp III towards Serac Peak. Making slow but steady progress, these two finally reached the top of this impressive peak. It turned out later to have been Tom McCormack and Abdul Rahim who had completed this fine climb.

On July 10 the stretch of good weather ended with a new blizzard. By noon it was so thick that Hornbein and I decided that we had best dash up to Camp VI in order to help the tired summit party in their retreat. In two hours we were only a hundred yards below VI and could dimly see the summit party preparing to leave. Waiting there in the snow, I cheered their flagging spirits with a few stirring bursts from my harmonica and the reunited party was soon on its way down. Having relieved Nick

and Jawed of their packs, we carefully counted rope lengths downwards in order to know when to turn left across the steep ice slopes of the regular gully. After a soup stop at V, we five climbers trudged on down in the developing storm glad to be through with the upper reaches of the mountain under these inhospitable conditions.

The retreat from the Dome and down Scaly Alley was carried out rapidly despite the great changes in the lower part of the Serac Glacier. By July 12 we were all once more gathered in the Big Base Camp tent just 42 days after first leaving it. That night we had a party celebrating not only the complete success of the expedition, but also Dick McGowan's birthday. As we sat there in the familiar huddle of bodies and equipment, our hilarious celebrations were not unmixed with a gentle regret that the show was over. The struggle had been so intense, it had made such demands upon our bodies and spirits, and we had bent our mutual efforts together in such a fierce concentration on the problems at hand that it came as a cold shock to find our goal suddenly behind us. This tinge of quiet sadness would persist for several days as we marched leisurely down the Hushe, finally to dissipate as the goals and interests of our usual lives reasserted themselves. What remained would be the memory of a remarkably experienced and compatible group, fortunately enjoying an unusually intimate bond of fellowship with one another. When such a bond among the climbers is coupled with a high degree of that peculiar companionship which arises between the climber and the peak upon which he struggles, then surely there remains no higher reward for Himalayan climbing to offer.

Summary of Statistics

AREA: Karakoram Himalaya.

ASCENTS: The first ascent of Masherbrum (25,660 feet), by William Unsoeld and George I. Bell, July 6, 1960 and by Nicholas B. Clinch and Jawed Akhter, July 8, 1960.

The first ascent of Serac Peak (about 22,000 feet), by Thomas McCormack and Abdul Rahim, July 9, 1960.

PERSONNEL: Nicholas B. Clinch (director), George I. Bell (climbing leader), Captain Jawed Akhter, Captain Imtiaz Azim, Richard M. Emerson, Thomas F. Hornbein, M.D., Thomas McCormack, Richard E. McGowan, Captain Akram Quereshi, William Unsoeld.