

# HARVARD MOUNTAINEERING



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*Copies of this and previous issues of Harvard Mountaineering are available on request at \$2.00 each from the Harvard Mountaineering Club, Lowell House, Harvard University, Cambridge 38, Massachusetts, U.S.A.*



*John Humphreys*

To The  
H.M.C. Spur Cabin, Deceased  
1932 - 1963

# The Walls Speak

by WILLIAM L. CLARKE

MANY are the friends of the "Harvard Hut". To them the "Harvard Hut" forms part of the tradition of Mount Washington — the tradition of spring skiing in Tuckerman's, of ice-climbing in Huntington's, of the Sherburne Trail, of "Windy Corner", of ascents in the night, of howling blizzards, of "The Mayor of Porky Gulch", of solitude, of friendship, and of more.

They will remember the Dog House where retire those who wish a quiet sleep or some private hooch — the front loft where one sleeps without being awakened by the "Smokey Black Monster" or retires in privacy with one's girl — the vestibule where, during the skiing season, unable to work their way further into the overcrowded cabin, the latecomers sleep (I can remember a night when the cabin was so full that one person slept on the counter, and another, having removed the pots and pans, slept on the shelf below) — the main sleeping loft, scene of many a rough-house in the night — the Head, in its present location perched on the edge of a cliff with a view into Porky Gulch, and built so that the cold winter winds blow up through the hole — and the main salon where many a feast has been had and many a tale has been told.

The walls of Spur Cabin, rich with secrets, hide tales of skibums congregated in the late spring when elsewhere the snow has long since melted, tales of blizzarding romances and honeymooning mountaineers, tales of the start of life-long friendships among those to whom mountains are a way of life, tales of goofers uninitiated in the ways of the hills. Most of the secrets the foot-thick walls hold can never be tapped. Fortunately, some are recorded in the pages of the Spur Cabin Log. . . .

\* \* \* \* \*

31 Dec. 1935. Noggin of eggnog in evening. Hurray for 1935 (or '36 if you want). Carter Dall and Bridgeman sick if no snow. Off tonight on that neggog!

\* \* \* \* \*

9 Sept. 1936. Boy! Oh Boy! Women! Hail and well met. They will be here for five days. Wonderful! Words fail me. Temp. 56° tonight. Clear but no moon. Stuck without a moon, first time I've seen a Babe for almost three weeks. Well, I'll wear trousers now.

And I'll stop swearing at the damn mice, but I'm doggoned if I'll shave off this beard. — *Keith Bowen '39*

\* \* \* \* \*

21 Dec. 1937. . . . had trouble with the fireproof brand of wood that now prevails in the woodshed. — *A. Durant, H.M.C.*  
*S. Geist, H.M.C.*

\* \* \* \* \*

4 Aug. 1938. We all slept well until a skunk chased us out of the Cabin. He had no opposition and we spent the rest of the night out under the stars. Got our clothes and hiked to the Head-wall to watch the sunrise while the skunk guarded the Cabin and kept out all intruders . . . While the skunk was eating potatoes Phil Ross grabbed him by the tail and they both went out bodily!!? *Phil* is going to sleep in the woods tonight. We are airing the Cabin and cleaning it. Thanks to the H.M.C. for a swell shelter. — *Ed Warner, Lancaster, Pa.*

\* \* \* \* \*

16 Aug. 1945. Just an oldtimer revisiting these haunted hallowed spots. Cabin was a mess and this time its going to stay that way. To hell with it. — *Anonymous*

\* \* \* \* \*

5 Nov. 1945. Weather was fine all day. Half inch of snow fell yesterday leaving perfect conditions for tracking animals. Saw lots of rabbit and squirrel tracks, not much else. One snowshoe rabbit had hind paw marks five inches long.

Here I am spending the night all alone — feel a little like Thoreau on Walden Pond and find it very restful to get away from the buzz and whirl of medical school life.

Well, it looks as if people were beginning to get interested in mountains again, now that the war is over — witness these 20 pages of drivel since V-J Day.

Every blessed star is shining for all it's worth out there tonight. Yessir, the stars are giving it all they've got. I guess even if we do blow up this world of ours with Uranium 235 there's still plenty of life left in this old galaxy — some two hundred thousand million stars, and all their planets — and then all the hundreds of thousands of millions of other galaxies.

It would be a damn shame to blow up these mountains. I still can't believe we could do it. We'd better be careful if we can! Enough for tonight. — *Jock Cobb '41*

14 April 1946. Stopped off for a look at the good old Cabin on a one-day ski jaunt. A beautiful day and we're headed up the Cataract onto the summit-cone. Hope to be here with some other H.M.C.ers soon. — *Harrie R. Chamberlin '42*

2 May 1946. Here's one place where you can check up on your brother. — *Sarah E. Chamberlin*

5 May. Got up here just in time to check up on my sister who thought she was checking up on me. Raining, but we're on a one-day trip and are skiing anyway. It shouldn't be bad.  
— *H. R. Chamberlin*

5 May. You're so funny. — *S.E.C.*

\* \* \* \* \*

29 May to 1 June 1947. Plaque placed in Tuckerman's in honor of Lt. Robert F. Bastow, USAAF, attached to 15th Air Force flying a Liberator out of Foggia, Italy, shot down over Adriatic Sea 19 March 1949, and active member of Hochflieger Ski Club, Lowell, Mass.

\* \* \* \* \*

29 Nov. 1947. I came and will return tomorrow.  
— *William L. Putnam, A.A.C.*

30 Nov. I returned. — *William L. Putnam*

\* \* \* \* \*

15 and 16 Oct. 1948. Saturday. Cracked large boulder out of latrine hole; finished excavating same. Present depth: 6 feet. Sunday. Cleared Huntington Ravine trail.

— *J. C. Maxwell '50*  
*W. V. Graham Matthews '43*  
*Andy Griscom '49*

\* \* \* \* \*

22 Dec. 1948. Have had terrific time — wish you were here! Jam-session every night — washboard, pans, jew's-harp, harmonica, and accordion — everything swell but skiing which stank! The Dog House is cold, but Hunt's accordion-playing is worse.

\* \* \* \* \*

20 Feb. 1949. Chow pretty spotty lately. — *Rodney the Rodent*

\* \* \* \* \*

12 April 1949. . . . came down about 1 o'clock. Marsh went

over Headwall in good form. Bob, Harriet, and I were dubious of the descent. I went (too bad, no broken bones yet), Bob skidded and went over O.K. — Harriet waited. We waited, 132 people in the bowl waited, the weather waited. After 14 min. 3 sec. Harriet started over, made half a stem-christie and — — I can't go on — it's too horrible — for a big girl, she sure did bounce! — *L. Cohen*

\* \* \* \* \*

23 May, 1949.

*The Ode to the Load\**

Hear ye! Hear ye! Be it bekownst to all  
that the following is a tribute to  
the most carefully planned drunk  
ever held in the  
Harvard Cabin.

Here's to this mountain  
Here's to this hut  
Here's to the fountain  
With which we'll get cut

Here's to the girls  
As they live in sin  
Making love to the boys  
While swimming in gin

Here's to this party  
Here's to this bunch  
So open your gullet  
And swallow the punch

\**Load*, as in "tying on a load."

— *P. G. Kingsmill*

\* \* \* \* \*

17 March 1950. H.M.C. Cabin so fine, so firm, and (thank god) not so fully packed.

\* \* \* \* \*

8 April 1951. Dere vunce ver fife men und a dame  
Who to dis chateau dey just came;  
After vine, beer, und gin,  
Und some visky trown in,  
Neither hut nor us fife are de same.

— *J.C.P.*

\* \* \* \* \*



29 Dec. 1951. Here it is the 29th, and as yet no member of the H.M.C. has shown up. What is the younger generation coming to? Cabin as usual this time of year — in good shape with lots of wood cut and ready to bum. Last two days we've had the Sherburne to ourselves, wonderful deep light powder with the wind filling the tracks up behind us. Wish we could stay for the New Year's Eve debauch. — *Andrew Griscom*

30 Dec. 1951. You baboon, Griscom, here's an H.M.C.er right now. Why can't you wait? And listen, Putnam and Matthews, why aren't you here? — *Andy and Betty Kauffman*

31 Dec. 1951. We are here! Why can't you wait? — *W.V.G.M. and W.L.P.*

\* \* \* \* \*

23 and 24 Feb. 1952. It was dirty and we cleaned it. — *Di and Jim Maxwell*

8 March 1952. Now, now — the Maxwells must have done *something* else! — *T.S.*

\* \* \* \* \*

16 March 1952. John Hughes and I hereby present the H.M.C. Cabin with a Brand New TOILET SEAT. This should be kept in the Cabin, perhaps in the drying rack above the stove. — *O.C.S.*

\* \* \* \* \*

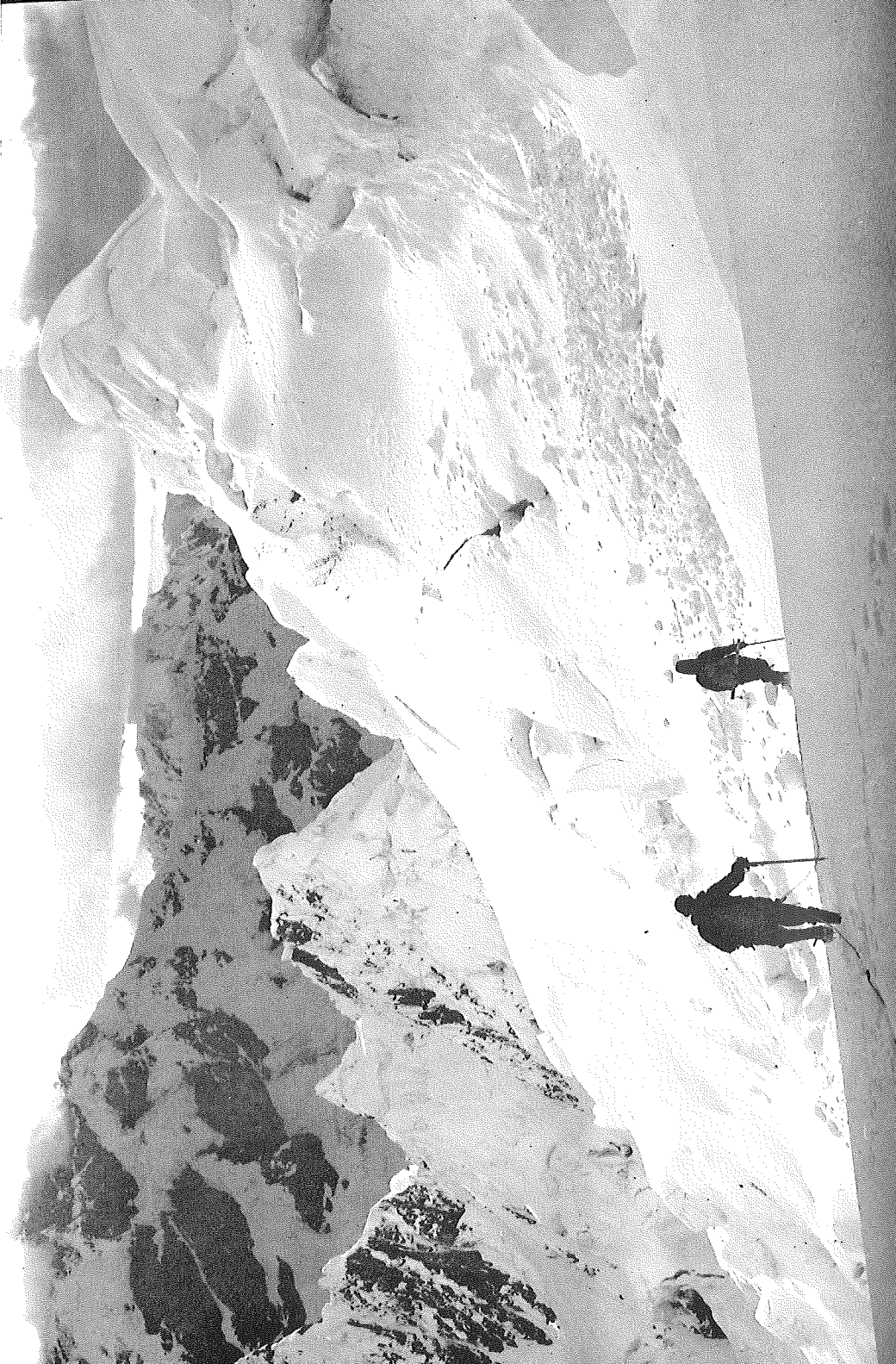
23 June 1952. Some pretty girls hiking on mountain — we go "clouds" later in week.

\* \* \* \* \*

16 and 17 March 1956. H.M.C. ice-climbing trip arrived 24 hours late due to faulty transportation and "The Worst Winter Storm Since 1940" — Route 16 from N. Conway was closed until mid-morning — expedition spent the night in sleeping bags in an Oldsmobile dealer's showroom, dozing with a blue-gray two-tone tudor (\$3126) on one side and a cream-colored convertible (\$3540) on the other. The quarters were in some ways better than the H.M.C. Hut, except for the uncommonly noisy garage adjoining. . . . — *Craig Merrihue*

\* \* \* \* \*

2 July 1956. . . . like the proper Bostonian, why should I go anywhere when I am already here. — *Vic*



# Climbs in the Cordillera Blanca

by JOHN S. HUMPHREYS

THE trip was Ad Carter's idea from the start, and was completely organized and directed by him, with assists from wife Ann and sons Larry (13) and Peter (14). Somewhere along the line it acquired the title "1962 Milton Andean Expedition", but it never had the feeling of formality that this might imply. In the course of much correspondence as editor of the *American Alpine Journal*, Ad had found an attractive possibility for a group with limited time and modest objectives, and he collected such a group from his wide circle of climbing friends. Besides the family and myself were Prof. Richard Goody of Harvard, Dr. Harry McDade from Littleton, N.H., Chuck Staples from Orlando, Florida, and Don Anderson and Jim Richardson from the Northwest.

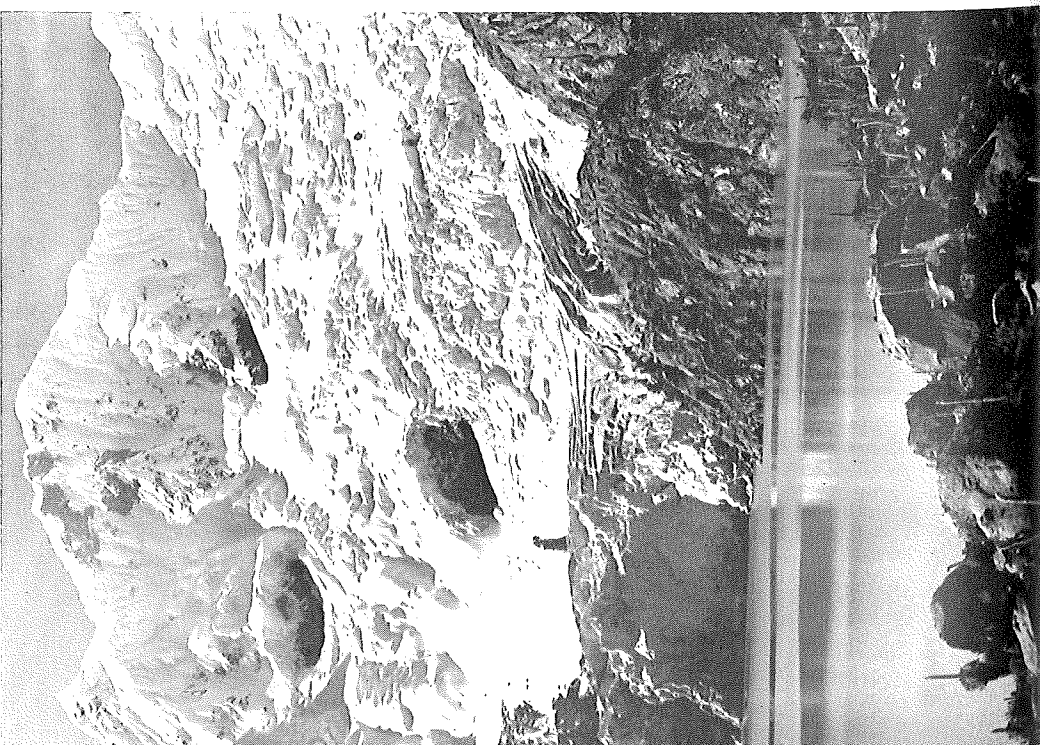
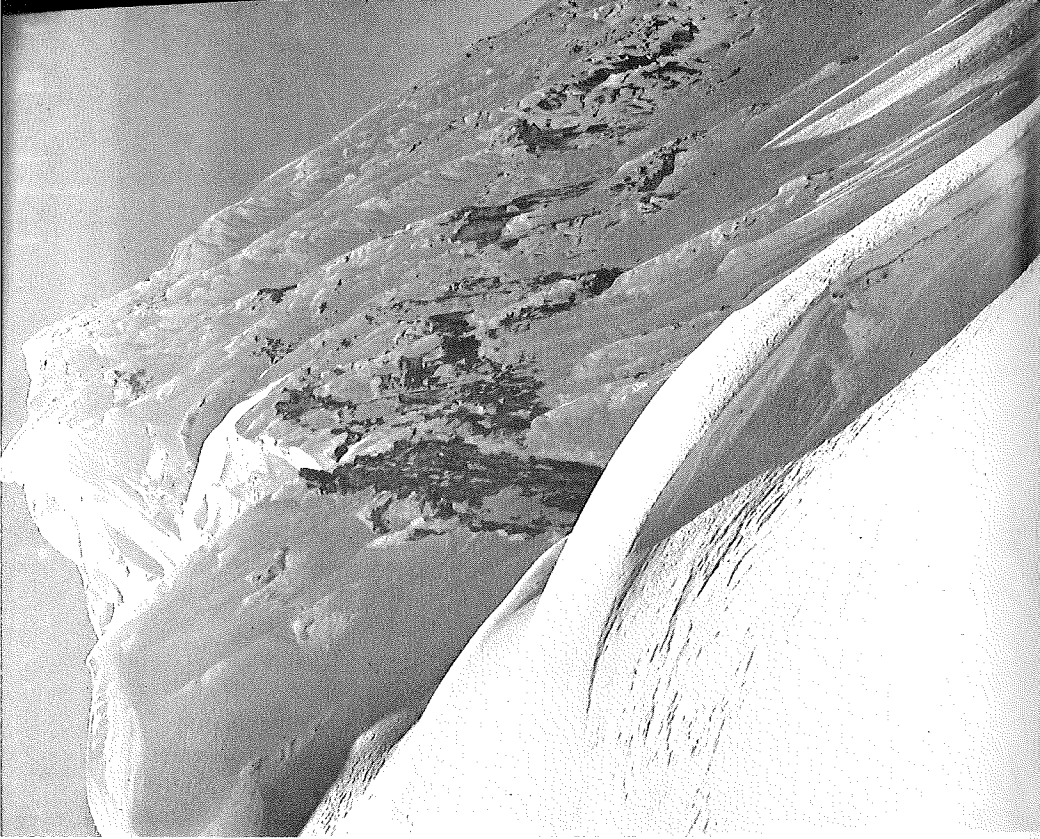
The Quebrada Paccharuri was our goal, a small side valley feeding into the Quebrada Honda, one of the longest and deepest glacial cuts through the Cordillera Blanca of north central Peru, and very close to Huascarán, the summit and center of the range. No climbing party had bothered to enter this valley before, and more or less unknown possibilities of first ascents beckoned.

Ann Carter shepherded considerable baggage by boat several weeks ahead of time, and the rest of us met variously in Miami or Lima or Huaraz, but all made use of Aerolíneas Peruanas, the cut rate (but reliable) Peruvian airline. The usual mad scramble of on-the-spot re-organization, buying of food, hiring and fitting out of porters, etc., was immeasurably assisted by Cesar Morales and various members of his family in Lima and Huaraz, friends of Ad's who had been alerted ahead of time. A fine vehicle known as an International Travelall was hired in Lima, giving the expedition great mobility at fair expense, compared with using long-range taxi service (which is very good to Huaraz) and trucks. By the time Chuck Staples and I arrived two days late, all was in readiness and one trip had already been made up to Huaraz at the foot of the peaks. After some fuss obtaining a bottle of oxygen for emergency use, we piled everything that was left into the Travelall, and with Don Anderson's expert hand on the wheel, whisked in eight hours up the coast and over the bone-jarring and nerve-wracking mountain road across the Cordillera Negra and into Ancash Province. All the others were ensconced at the "28th of July" Hotel in Huaraz, a noble establishment

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photographs by H. A. Carter

ICHIC CHURIHUAUQUI (r.) AND PEAK 5460 (below)  
from the upper Paccharaju Glacier.



featuring roast guinea pig on the menu, but I rarely saw the place, for we were on the move again the next day as soon as it was light. The machine took us up to Hacienda Vicos, about 10,000 feet high and the end of the road.

A few hours walk from Vicos, up through potato fields and rough pastures, and we entered the great trench of the Quebrada Honda, right among the high peaks. We camped here, under the enormous valley walls dotted with brush fires for the Festival of Don Juan, at a little over 12,000 feet. I was still less than 48 hours from Miami, and the transition seemed abrupt. Pushing on up our special valley, the Paccharuri, during the next two days, it was evident that the track was well frequented by shepherds and in good enough shape for pack animals, and the scenery was all we could have hoped for. The first view of high ice ridges close at hand; an inspiring sight indeed. Close above a moraine-dammed glacial lake at the head of the valley, with peaks on three sides, investigation disclosed a good campsite terrace still below the vegetation line, and we waited here for the pack train.

This Base Camp at about 15,000 feet is a fine spot, but its nobler qualities were obscured at first, both by the debilitating effects of altitude and by the massive quantities of cow dung carelessly strewn about. Frequent rests, overbreathing, aspirin and time fixed the former, while coping with the latter was an Augean task left to the porters. We had hired four Quechuas with some previous expedition experience in Huaraz, and this was one day on which they certainly earned their 50 soles (\$1.83) apiece. After a few hours enough space was cleared to raise Ad's several "McKinley" tents and enjoy the splendid sight of the southeast wall of Nevado Copa (20,350 ft.) across the valley. From the blue-green lake, fed directly from glacial ice cliffs, the eye rose straight to the fantastic ice towers of Copa's east ridge, leading up to the tiny summit on the huge bulky mountain.

First days were spent in reconnaissance trips in different directions, with some early and impressive looks at Paccharaju (18,800 ft.), the highest unclimbed peak in the valley and our primary objective. The south ridge of the mountain, directly behind Base Camp, was reached at its low point, but the upper parts looked dramatic and difficult in the extreme, and it was immediately clear that the great glacier cascading from top to bottom of the southwest face offered the best route possibilities. Even here, initial reconnaissance through binoculars was not too encouraging,

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THE SOUTH FACE AND SUMMIT OF PACCHARAJU.

PEAK 5460  
from the head of the Quebrada Paccharuri;  
ascent route on right.

for active icefalls appeared to be everywhere, and giant bergschrunds split the face. We soon realized, however, that the remarkably fine and stable weather also meant very stable snow and ice conditions, rendering safe routes that in the Alps would be almost suicidal. The morning sky was normally clear, with clouds developing during the day but almost never depositing any new snow. In three weeks there were only two days when the weather was bad enough to make thoughts of climbing unattractive and to keep people inside.

The whole thundering herd of nine, plus the four porters, moved up to Camp I at about 16,500 feet on the Paccharaju Glacier on June 28, leaving Ann Carter, armed with a large library of pocket books, to guard Base Camp. Communication with the porters, who slept mainly at Base Camp, was very good since the whole Carter family speaks fluent Spanish, and Augusto, the most voluble by far, regaled Ann with many stories of local doings. Above, routes were prospected higher on Paccharaju through the seracs, and a subsidiary peak, the expedition's first, was climbed. This dramatic little mountain closes the head of the Quebrada Paccharuri and is the first ice ridge seen coming up the valley, and it was approached by a traverse from Camp I across ground that in a sketch from below and far away I had labelled "no safe route". Jim and Don were more optimistic, however, and along with Chuck, with Richard Goody and myself following behind, they weaved a route among the seracs and beneath the hanging (but apparently stable) icefalls. In pockets, sheltered from the wind, the snow was loose and deep and making the track was heavy work, mostly performed by Jim. A steep, loose slope led to the ridge crest, which was then followed west with some care due to the large cornices, which appear to be the chief objective danger of the area. After Goody and I had turned back due to lateness and poor acclimatization, the others blasted on up a rather airy section of ridge to the summit of "peak 5460" (its metric height on the German map and still its only name), returning to camp just at dark.

Dark, of course, occurs in the Cordillera Blanca at about 6:30, independent of time of year, and the twilight is very short. The twelve-hour night can seem interminable, particularly with an altitude headache, and Harry McDade had many calls for sleeping pills as we went to higher camps. A headlamp becomes a highly essential item, both for long climbs and late hands of bridge in the tent. One simply cannot spend eleven hours in the sack every night.

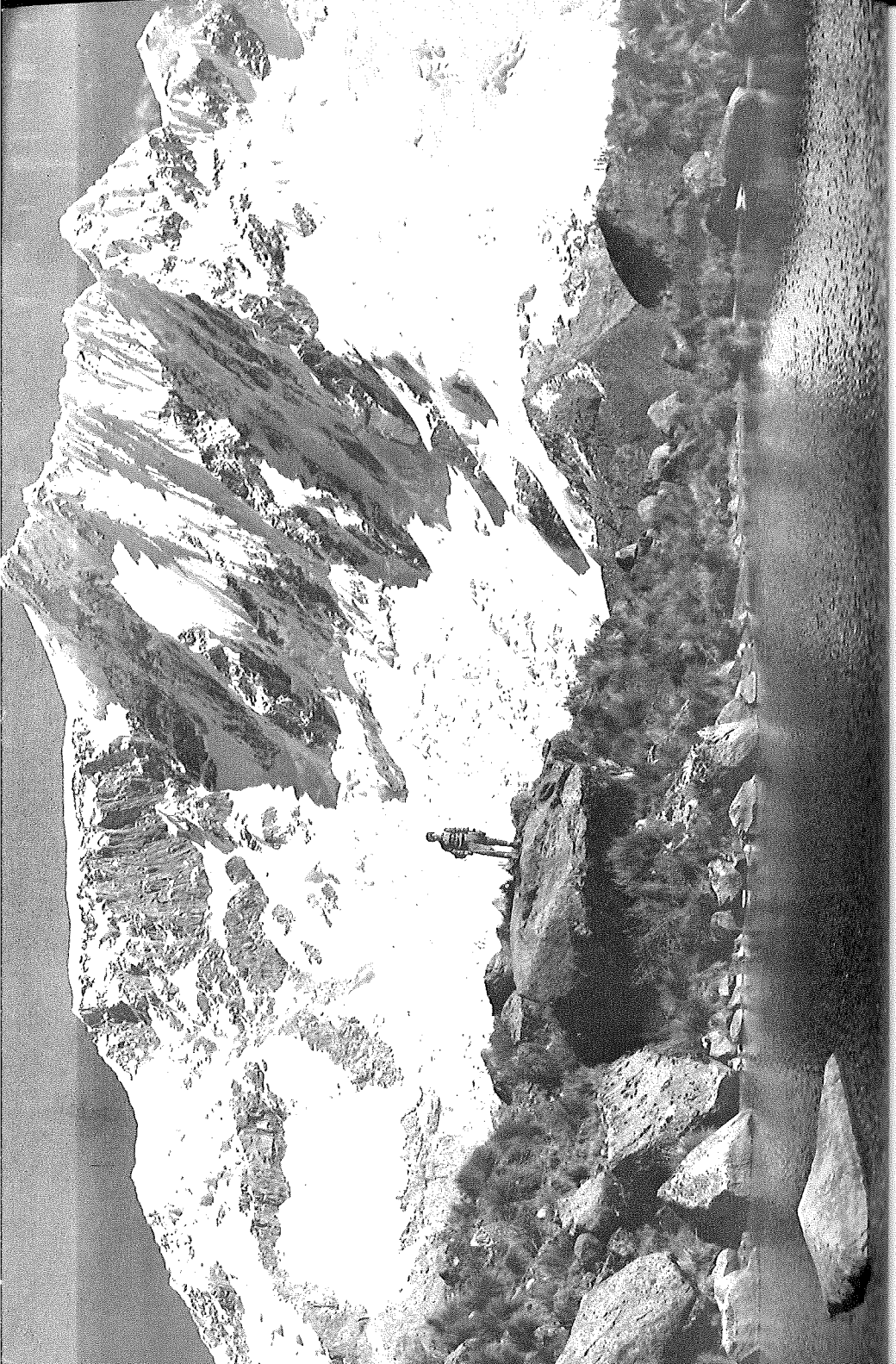
On July 2 the porters arrived from below, and the following sparkling morning everyone packed up to a second camp at around 18,000 feet. The porters outdid themselves by making *two* round trips to get everything up in one day and return right down to Base Camp. They did not quite make it all the way with all the loads at the end of the day, and those of us who hauled the loads the last quarter mile up into camp gained a deeper insight into the magnitude of their effort.

The final Paccharaju summit-climb the next day featured dramatic mist and the only really strenuous technical climbing of the trip. This was an enormous bergschrund cutting the entire mountain a few hundred feet above Camp II. There were no bridges in evidence, and the final optimal route boiled down to climbing directly about ten feet of overhanging ice. Don Anderson did a fine job on this pitch, using tension and ice screws and placing a fixed rope as he went, and in one way or another several hours saw the whole crew above it. A fortunate combination of bridges across two higher 'schrunds, finally ending on the southeast ridge for the last few hundred feet, put everyone on the summit in fairly short order. Luckily the summit was rather broad and easily accomodated nine people milling about, tangling ropes, eating, and taking pictures of each other. Larry and Peter were pleased just to be there (feeling as well and strong as anyone), and Ad was particularly pleased at their having set some sort of altitude record for boys their age.

Don, Jim and Larry were ahead on the way down and went off, full of extra energy, to climb the highest of the two "Brothers" ("Suri Huauqui" in Quechua), subsidiary peaks along the ridge from Paccharaju to Copa. Both it and the lesser Brother, ascended the next day, were short climbs involving some very soft, steep snow up which a trough had to be plowed by the leader. No amount of kicking could produce a firm step. Fortunately such conditions were the exception.

The whole group was back together in Base Camp by evening of the day following the Paccharaju ascent, and someone then realized that that had also been the 4th of July, so a real celebration was in order. Several bottles of Pisco hidden away for the occasion were unveiled, one was presented to the porters and another consumed in short order by the expedition, with predictable biochemical effects. The porters responded with one of their favorite sports; lighting the whole mountainside of dry, clumpy grass on fire. It was the Festival of Don Juan all over again, and for a while we feared for the tents, but energetic beat-







ing with more clumps of grass by Pedro and Justiniano finally put the fire out in the right places.

A rest-day basking in the sun and gazing at Copa inevitably produced plans to climb it. Jim and Don (the self-styled "forever and ever boys") felt that the direct southeast face would be, to put it mildly, a challenge, and might be worth a try. They began to ready themselves for sixth-class work, complete with bivouacs. Richard Goody and I, on the other hand, felt that a route across easier ground to the south ridge and up it to the broad plateau below the summit would not be unexciting and would be fun to try. No climb of Copa anywhere on this side had been made before, though the top had been reached several times directly up easy snow slopes from the Santa valley to the west. By this time Chuck Staples' two week vacation was over, he had departed, and Harry and the Carter family thought they would rather explore further up the Quebrada Honda, so we split up. Justiniano and Miguel, carrying 80 pound loads of a week's supplies, came with our group of four, while the rest stayed at Base Camp to organize for departure from the Quebrada Paccharuri. They also made one final climb of "Paccharaju Sur", a small peak on the southwest ridge of Paccharaju, to complete all available significant first ascents in the valley. The departure, when it occurred was a comedy of errors, with mules getting lost, mules falling down waterfalls, etc., and in the end they did no further climbing, though they did make an enjoyable sightseeing trip up the Honda valley.

On July 8 our Copa party set off from the valley floor, crossed the end of the main glacier draining this side of the mountain, and climbed for several hours up the prominent lateral moraine of this glacier to a pleasant campsite at about 16,500 feet. From here, directly below a band of cliffs, the two projected routes diverged. Unfortunately, bad food from some mysterious source laid the southeast face party low that evening, and they remained in camp while Goody and I investigated the route to the ridge on the morning of the 9th. There was only one reasonable line to follow. This involved an ascending traverse left to right through a central hanging glacier, a short gully climb, and then a very steeply-climbing traverse across an upper glacier on hard snow, around an exposed corner to a broad campsite terrace at 18,500 feet, a hundred yards or so below the main ridge. A fixed rope was placed on the descent back to camp.

A decision to combine efforts of everyone on the ridge route was reached the following morning, based on the still questionable

state of certain digestive tracts and the promise of some excitement on the steep and corniced ridge itself. Accordingly all six spent the rest of the day packing a three-day camp to the higher level. In the process several hundred feet more of fixed rope was installed for the porters on the steeper sections, and Justiniano generally distinguished himself at these spots.

A pre-dawn start was attempted on the 11th, but it was 7:30 before we were finally under way. Justiniano declared himself eager to climb and tied on at the end, but Miguel stayed behind with "dolor en cabeza". The sky was completely cloudless, but as the crest of the ridge was approached it became clear that part of the reason for this photogenic state of affairs was a steady, brisk upper-level wind, averaging perhaps 30 m.p.h. on the ridge, with gusts to 40 or 50. Although the temperature was not particularly low (maybe 20° F.), the constant lashing by this wind began to be somewhat trying by the time several hundred feet of steps had been kicked up the crest. Justiniano was not properly equipped for this sort of thing, and Goody also lacked wind pants and was getting unhappy, so they turned back at about 10 a.m., while I roped on with Jim and Don in the lead. Several hours of steep climbing followed, with one of us on belay nearly all the time. Just below one prominent gendarme a sizable cornice fell away down the nearly vertical western slope towards Vicos as all three of us were standing in the cornice-crack to partially escape the ever-present wind. Fortunately, our tie-ins were secure.

The end of the narrow ridge at about 19,500 feet was reached in the early afternoon, and the remaining climb was simply a long walk, for the most part on beautifully hard snow. The doubly-corniced summit was trod upon at 3 p.m., with the entire Cordillera Blanca spread out to view, from Alpamayo to Huantsan. The wind had abated somewhat, but the sky was still unusually clear and brilliant. Darkness overtook the party 500 feet above camp, and this final steep descent was slowed considerably by the possession of only two headlamps for three people.

The following day, with porters and climbers carrying comparable loads for once, both Copa camps were removed to the valley floor, and on the 13th, in the continuing fine weather that we had come to accept as the norm, we trudged down to Vicos and out to beer, Pisco sours, and lengthy soaks in the hot springs at Monterrey. A splendid three weeks was over.

# Tullparaju

by DAVID J. BERNAYS

Excerpted from an article to appear in the *American Alpine Journal*, 1963

ON July 24th, 1963, Leif-Norman Patterson and David Bernays, Corresponding Members of the Club, and Charles Sawyer of M.I.T. reached the summit of Tullparaju. This was the first ascent of one of the finest prizes in the Andes. The 18,986 foot ice peak stands on the continental divide in central Peru, 35 miles east of Huaraz.

Bernays writes, "Fifteen miles from Huaraz we entered the mouth of the Quebrada Quilcayhuanca. This canyon is one of the most beautiful in the whole range. Polished granite walls rise thousands of feet on either side above a narrow green floor which reaches back towards the heart of the mountains. Great white peaks cluster around the head of the valley, their glaciers dazzling under the tropic sun. Tullparaju rose among them, distant and aloof with corniced ridges and avalanche-scarred slopes. . . , a fantastic wedge towering high above the scattered afternoon clouds."

By July 1st, the expedition was installed in Camp I at 16,000 feet on the glacier beside Tullparaju's west ridge. "Above camp the mountain's basic shape was that of a three-sided pyramid. The faces were impossible, being without holds and frequently swept by avalanches. The ridge crests remained our only possible routes. The west ridge was closest to camp. It appeared climbable but had the disadvantage of being extremely long. The north ridge, which we had not seen before, was shorter, though reaching its base at the saddle below Nevada Chinchey would require scaling a difficult thousand-foot ice wall."

After spending nine days assaulting the north ridge, they were halted by treacherous cornices — ". . . giant 20 to 40 foot awnings peculiar to the Andes." On July 10th, they returned to the west ridge. "The lower slopes went easily, as expected, and by the middle of the afternoon [July 11th] we were 500 feet above the previous high point, though the difficulty of climbing was increasing steadily. One nasty place in particular, a 70° ice slab that funnelled down to the edge of a cliff, made us feel like the proverbial cat on a hot tin roof. We jokingly named the spot the 'Liz Taylor traverse'." At dark, finding themselves 600 feet below

the Western Summit, Bernays and Patterson waited for the moon to appear and continued upward. At 18,300 feet, 300 feet below the Western Summit, they dug a snow cave and bivouaced. The next morning, after climbing two rope-lengths further, the effects of a sleepless bivouac and unaccustomed altitude caught up with them. Bernays suddenly became dizzy and sick, and they started back down. "I realized my fingers had been tingling during the descent, a sign of returning circulation. Exhaustion, which I then recognized as the cause of my trouble, had depressed it. It came to me with a sudden shock — lost circulation in the bitter cold of 18,000 feet — frostbite! I knew before I tried to move my toes that there would be no feeling. There was none." Back in the snow cave ". . . I pressed first one foot and then the other between my hands to restore warmth, taking care not to rub them lest my evaluation was wrong. Almost miraculously the color came back, first in splotches, then all over, and with it, feeling. It had been very close."

During the following days, they relayed supplies from Camp I to the snow cave, and on July 19th Bernays and Patterson finally reached the Western Summit. "The mists of the dying storm created a world of fantasy with light and shadow on the snow shapes around us. Then, at the top of the third lead, we turned a corner and saw the final ridge. It was like nothing that either of us had ever seen before. The long ridge was capped with great angular ice towers rising from almost vertical fluted slopes. At the far end, standing high above everything before it, rose a final square tower that appeared to be the summit. The whole scene was swept by swirling mists, with only the great tower standing clear and serene above. We both just stood and looked, awed at what we had come to climb. After a while we started climbing again, and as we continued upward our thoughts were each our own."

The three climbers spent three days working across the ice towers, securing their gains with fixed ropes. The following day a blizzard kept them in the snow cave. On July 24th, with food remaining for only one day, they retraced their steps. "An hour later I stopped a few feet below what we thought to be the summit. Here I called Leif to come up and take the lead. We all thought of Tullparaju as his mountain, and it seemed only appropriate that he should be the first to stand upon the summit. Leif came up and covered the last few feet quickly. Instead of a whoop of triumph, however, there was only silence. When Charles and I

joined him we saw the reason why. Ahead of us the ridge dropped down a bit and then rose up to what had to be the real summit. It was only a shadow in the fog, but even so there was no mistaking the fact that it was a giant cornice. The ends, about 50 feet apart, were the highest points. Between them the great roll of snow curled over the vertical southern face. The entire structure seemed to be resting atop a broad tower rising 50 feet above our ridge. As we approached it we could see that it would not yield easily. When we reached the base it proved to be overhanging, and there was considerable discussion as to who should have the honor of leading it. Charles and I, as a unanimous majority, pointed out that this was Leif's mountain and neither of us could imagine taking this ultimate pleasure away from him. Leif accepted the verdict with a very skeptical expression, and while Charles belayed he started to work his way onto the southern face. I sat back with the movie camera to film the proceedings. It was ticklish going. Everything seemed to be frost feathers and powder snow with few decent holds. Leif disappeared around a corner and then began a long wait. The rope would move out around the corner for a few feet and then back up. We could see chunks of snow and ice fall free into the mists below. Finally the rope began to move out steadily again and soon Leif's shadowy form reappeared above the overhang. He tried to tell us something, but in the wind and storm his words were lost. Finally, as I watched through viewfinder of the movie camera, he gingerly climbed the last few steps and stood atop the crest at our end of the cornice. Slowly, like a person who is not too sure of what he is standing on, he raised both his hands over his head in a gesture of triumph."

# The Southeast Spur of Mount McKinley

by HENRY L. ABRONS

THE clouds parted momentarily and exposed a sight which started my adrenal gland working at full speed. I needed to shout, to jump, to bombard someone with questions. Look, isn't that McKinley, whose top is still hidden — and there, in shadowy profile, can that be the Southeast Spur? Fifty miles away, and it fills the Leica's viewfinder! I turned and saw Don Sheldon coming toward the hangar. As I gestured at the mountain, he guessed my thoughts. "Over at the hotel," he chuckled, "they're betting 3 to 1 against you." Reluctantly, I admitted that the natives of Talkeetna were probably men of great foresight. Under the circumstances of the moment I could scarcely contradict them.

I had arrived in Talkeetna that morning and was delighted to discover my five companions still there. Poor weather had already forced them to delay their flight to Basecamp for five days. Our leader, businesslike Boyd Everett, Jr. (called "Pete"), demure in clean pressed mountain pants and clutching a briefcase as befits a Wall Street banker, introduced me to the other members of the expedition who had never met me before, since I had been invited to join as a sudden replacement only six days previously. Charley Hollister, a marine geologist from Columbia University, took my hand with the benevolent air of a father; he was the only married man, and amiably filled the role of family-counselor for the expedition. On deck was "150 pounds of rompin' stompin' airborne hell" from Madison Avenue: Chris Wren had been a parachutist in the Army Special Forces; he is an editor of *Look Magazine* and undertook an account of the climb for their readers, an occupation which was compared to that of a visiting anthropologist.<sup>1</sup> "Hollywood Sam" Cochrane, looking like a fugitive from a Gerry catalog, shook hands with impressive vigor; he exuded strength except when he remembered that his employer, Bell Telephone, was unsympathetic to the hazards of mountain storms and expected him home in three weeks. The climactic greeting was from "Doctor Sam" Silverstein from Albert Einstein Medical College who ingenuously pricked my finger; his training was to be auspiciously useless in the ensuing weeks, for we contracted no ailments.

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<sup>1</sup> Christopher Wren, "We Climbed Our Highest Mountain," *Look Magazine*, Oct. 9, 1962.



*Bradford Washburn*

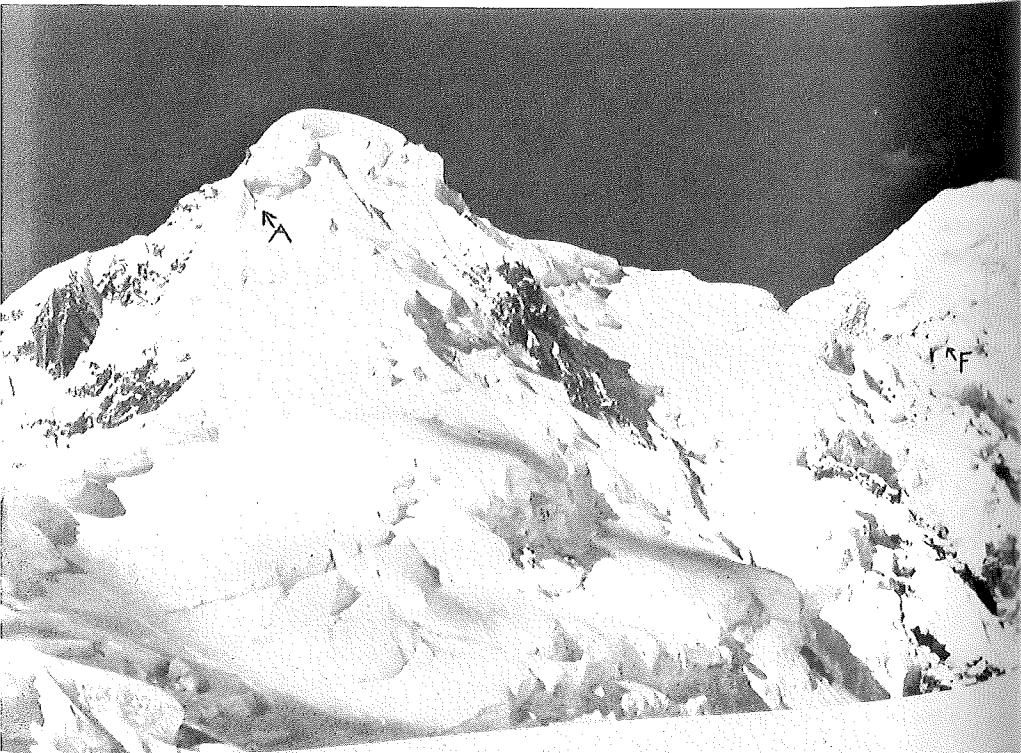
MOUNT MCKINLEY FROM THE SOUTHEAST

showing camps on the Southeast Spur;

B indicates Basecamp;

Ruth Amphitheatre in foreground.

These, then, were the five New Yorkers who had left their desks and laboratories and loved ones to come rushing by jetliner to Alaska, where the sourdoughs promptly named them the *Boyd Everett, Jr. Expedition* (with strong emphasis on *Junior*), and where their spirit was broken by five days of rain in Talkeetna. After I had been there for one day I saw that the situation was becoming desperate, for the time passed something like this: eat breakfast of cereal, fritters, hamburgers, eggs, sausage, stewed tomatoes, pigs' knuckles, and toast (\$1.50 at the Fairview Inn); stroll down to the Susitna River for exercise; return to Sheldon's hangar to have fingers pricked by Doctor Sam; go to the railway station to meet the morning train from Anchorage to see if by chance Chris's "mail-order bride" has arrived; return to the Fairview for light lunch; confer with Sheldon about the weather





("It's a waitin' country," says he); nap; meet the afternoon train from Fairbanks to see if Chris's mail-order bride has come yet; meet for cocktails and dinner at the Fairview; read Robert Service's poems at bedtime.

While it rained we continued to soak up the good life in Talkeetna and perplex the sourdoughs; meanwhile the delay grew more serious, for three of us had very limited vacations. One evening the sky cleared and Sheldon flew Pete, Charley, and Sam Cochrane to Ruth Amphitheatre, eight miles from the base of the Southeast Spur. The three of us who were left behind watched the ski-equipped Cessna take off, climb, and shrink against the backdrop of the McKinley Range; for a long time we gazed wistfully at the silver speck of the plane until it was swallowed up by the icy face of the mountain.

The following day was overcast, and in Talkeetna we consoled ourselves with double portions of pigs' knuckles, thinking we'd never get another look at the mountain we had come so far to climb. The next morning, June 8th, Sheldon flew off to a construction camp north of McKinley, and we scratched another day from the calendar. But two hours later he returned unexpectedly and announced that from above the clouds he had observed the features of McKinley poking through the cloud-cover. Breathlessly, Chris, Sam Silverstein, and I rounded up our gear.

The flight from Talkeetna to Mt. McKinley was a memorable experience. The forests and lakes fell beneath us and soon gave way to tundra. Then the river-plain heaved up brown hills. Unforeseen black rock cliffs confronted us; between them flowed a desolate stony thoroughfare — the Ruth Glacier. As we passed over the *nèvé* line of the glacier the sheer cliffs pinched closer and closer, forming a straight narrow trough which squeezed shut every crack in the confluent icefalls which tumbled off the serried walls on both sides. This was The Great Gorge of the Ruth Glacier, seven miles long and one mile wide, the unique corridor draining an icefield of one hundred square miles. At the head of The Great Gorge the plane entered Ruth Amphitheatre, a large basin at the foot of the granite peaks to the southeast of Mt. McKinley. As we circled the Amphitheatre, we surveyed the faces of these remarkable peaks: The Moose's Tooth

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*photographs by members of the Expedition*

MOUNT MCKINLEY FROM RUTH AMPHITHEATRE.

THE SOUTHEAST SPUR FROM BASECAMP;

*Arrow and Flutings indicated.*

(unclimbed) — buttresses soaring in Gothic magnificence; Mt. Dan Beard — scowling with three heads; Mt. Huntington (unclimbed) — a symmetrical white arrowtip; The Rooster Comb (unclimbed) — its crest foaming with cornices.

Sheldon landed beside the tent of our companions. Then, waving, he turned and roared off, and the sound of his motors lingered for many minutes in The Great Gorge. Overcome by the sense of isolation, we silently prepared dinner and retired early, anticipating Sheldon's return at four o'clock the next morning to ferry us in his Super Cub to the narrow bumpy glacier at Basecamp.

The sun baking through the walls of the tent awakened us before 4 a.m. The sky was cloudless and perfect for flying. Repeatedly, we were aroused by a sound we thought to be Sheldon's approaching plane, but it was only the roar of avalanches crashing on the glistening peaks which had startled us. As the day wore on, we assumed that Sheldon had forgotten us, and we decided to relax in the sun. I took a pair of binoculars and raised them toward the heights of Mt. McKinley whose summit stood almost three vertical miles above us. To the right of the summit the gullied walls of Thayer Basin reminded me of Huntington Ravine; to the left the upper South Face stood in profile. Between them was a pink granite face which had never been climbed. Several long snow couloirs plunged down among the rocks. We hoped to climb one of them in the coming weeks.

To our relief, Sheldon came in the late afternoon and moved us one by one to Basecamp at 7,700 feet on the Northwest Fork of the Ruth Glacier. He wished us luck and arranged to meet us again on June 29th in Ruth Amphitheatre. Then he left, and we organized our equipment for the first night of climbing.

Across the glacier, one mile away, the foot of the Southeast Spur rose in a frosty ramp. A shelf at 9,200 feet presented a likely site for Camp I. A thousand feet above it, glimpsed through gaps in the clouds, was a prominent wedge of blue ice which appeared to be the only weakness in the broken wall of cornices which banded the spur. We called this ice face the "Arrow." At 11,280 feet the spur culminated in the first of two peaks which were joined by a sweeping ridge pinched at its mid-section into a thin corniced saddle. Below this part of the ridge the north face of the spur appeared to be very steep, and the snow on the face was cut by vertical furrows formed by the sun. This section, 600 feet long and sloping up 300 feet, was called the "Flutings." Above

it stood the top of the second peak, at 13,100 feet. Then the spur swept up gently to join the South Buttrass at 14,000 feet.

By the time we had set up Basecamp and cooked dinner, the avalanches had grown still. We tied cans of kerosene or boxes of food containing two expedition-days of supplies to our Kelties and roped together. At 9 p.m., June 9th, we started for the Southeast Spur. The glacier was soft, and our steps broke the surface. Moaning that we had become dissolute in Talkeetna, we staggered under our fifty pound loads. On the lower slope of the spur the powder snow was fresh and soft, and we advanced slowly. At 1 a.m. we reached a large crevasse 300 feet above the glacier floor, dumped our loads, and plodded back to Basecamp.

During the night of June 10th we repeated this process and pushed on past avalanche debris and leaning seracs to the shelf at 9,200 feet. Pete and Sam Cochrane set up Camp I and remained there in order to advance the route the next night. The rest of us descended, comically lurching and staggering with fatigue toward Basecamp.

When we came up to Camp I the following night warm snow was falling. We arrived at 4 a.m. and found that Pete and Sam had been confined to camp by poor visibility. But our spirits were high, for at last we were all on the mountain to stay.

We awoke in the evening, and the patter on our tents told us that it was still snowing. There was nothing to do but lie reading or sleeping fitfully in our Bauer down bags. It continued to snow all day June 13th, and the temperature hovered around 30° F. The seams of our two Gerry Alaskan tents dripped water onto our sleeping bags, and wherever we moved it was impossible to avoid the wet. Fresh reading matter grew scarce, so Pete tore his copy of *Gone with the Wind* into quarters and distributed it. Chris lightened our mood with dirty jokes, and Sam Silverstein recited the stanza by Conrad Kain which goes:

Damn Alaska, damn the track,  
Damn the journey there and back,  
Damn the mountains, damn the weather —  
Damn Alaska altogether!

This was to be our theme-song for the next six days.

Throughout the night the snow continued to pile up; during three days, one and a half feet had fallen. In the morning the north wind began to blow and constantly grew more violent. The large tents swayed and shuddered, and we lowered the center-poles notch after notch. By 8:30 a.m. the gale was smacking the tents at 40 m.p.h. We had to shout to be heard, and it was difficult



AFTER THE TENT RIPPED  
at Camp I.

to concentrate on *Gone with the Wind*. As dire thoughts froze on our lips, there was a horrifying *Rip!* The wall of the tent vanished, and we found ourselves staring out at the summit cone of McKinley which resembled a volcano with its long white streamer of blowing snow. We desperately threw our equipment into the other tent and crawled in after it. We took down the pole entirely, and the six of us sprawled on top of each other clutching at the flapping cloth which beat on our heads. After untangling legs and arms and hunting for the proper socks and boots among the bodies, Chris and I dressed and went outside. The ex-tent lay in irreparable tatters; luckily, we had brought an extra two-man tent, but it was too windy to set it up, so we began to dig a snow cave.

The wind which lacerated our tent also shredded the clouds, and by evening the majority of the sky was blue. Pete and Sam Cochrane took ice hardware and coils of rope and started for the Arrow. We followed in their tracks with boxes of food. At 9,700 feet their steps traversed to the right under a rotten icewall and crossed a frail snowbridge. Coming near, we saw that the middle of the bridge was missing, and we conjectured that Sam, who was heavier, had been second on the rope and had fallen through.

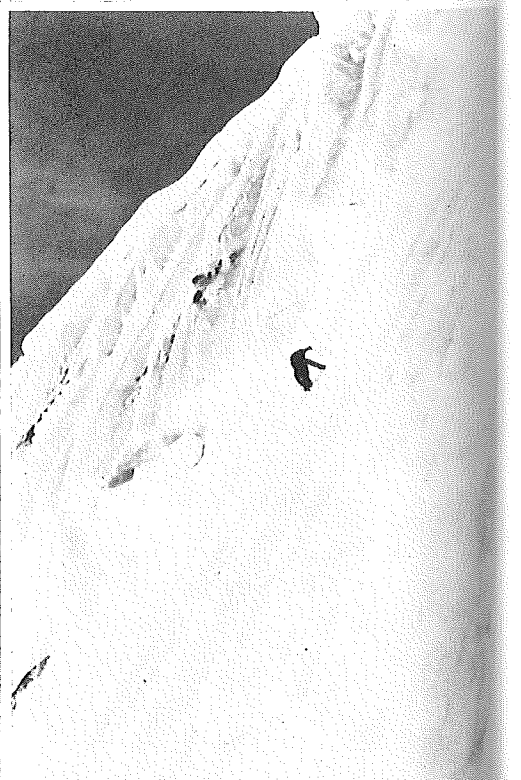
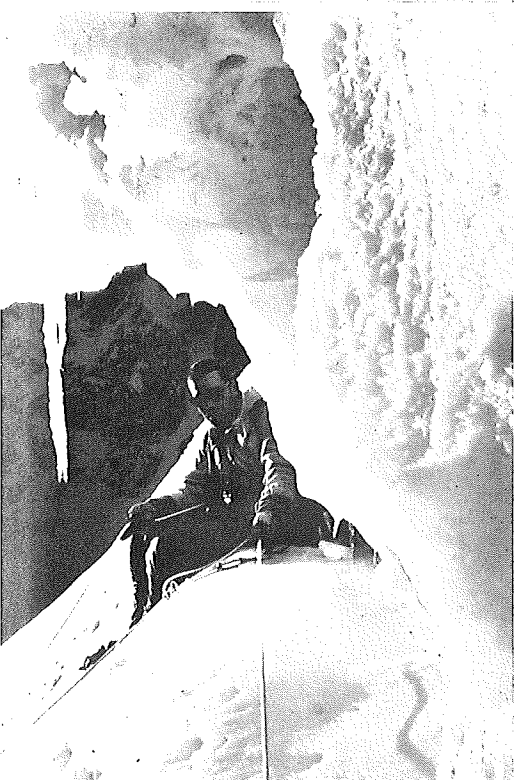
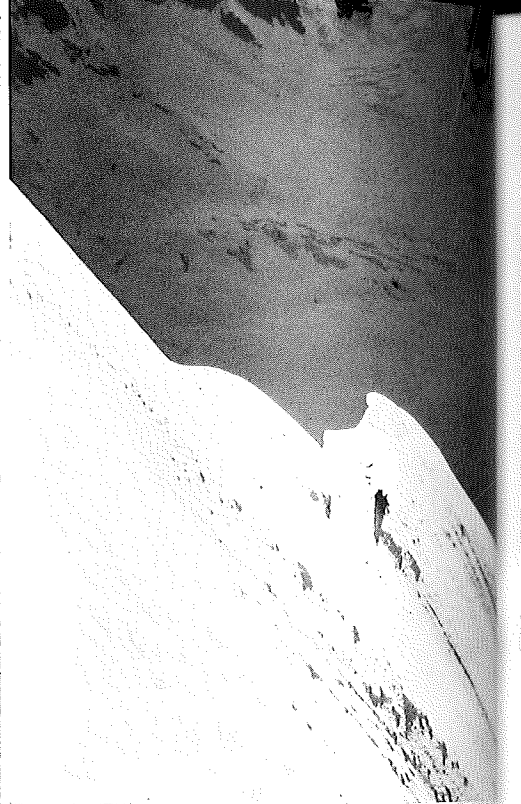
We left our loads under the icewall and returned to Camp I for more.

Pete and Sam came down at sunrise. They were fatigued and frustrated. The Arrow had not yielded. They reported that the ice was 70° steep and 200 feet high; they had chopped steps 20 feet up and placed three pitons when wind forced them to abandon that night's attempt.

Determined to sleep underneath the Arrow if not above it, we left camp at 5 p.m., June 15th, with our tents and personal gear. We discovered a new crossing to replace the broken snowbridge and proceeded up unstable windslab which we protected with a fixed rope. At the base of the Arrow, Sam Cochrane and I sat down to study the problem. The wedge-shaped face was on our left; above and to the right the way was barred by a sloping wall of cornices whose brown and white strata told the history of a half-century's snowfall. Under the cornices and adjacent to the wedge of ice was a smaller ice face 75 feet high. We decided to attack there.

At 2 a.m., at the top to a stairway of bucket-sized steps festooned with hardware and fixed ropes, Sam performed a delicate operation with shovel and ice-saw. Minutes later he disappeared through the hole that he had cut in the cornice. Exultant that the first major problem of the route was solved, I scrambled after him. But the prospect on the other side gave us a shocking blow. The backside of the spur was a chute which spiraled below us to the glacier and which swept upward to our left in a steepening crescent; the higher edge, on our right, was the top of the sloping line of cornices which had blocked us below; the head of the chute, 500 feet above us, was completely overhung by the ultimate cornice — a beetling thirty-footer. We camped that day and the next beneath the Arrow, after convincing ourselves that the cornices directly above looked solid and obviously hadn't collapsed in fifty years.

Attempting to reach the top of the chute during the nights of June 16th and 17th, we encountered continuous difficulties. At 10,300 feet the slope was undercut by hidden crevasses which ran in the fall-line and blocked a traverse. A hundred feet higher, the snow became as solid as a pile of ball bearings. Below us, to the left, the gradient increased, forcing us higher onto the tops of the cornices on our right. When Pete tested with his axe to find the fracture line, a piece of the cornice 15 feet wide and 100 feet long broke off, and the whole slope recoiled with a shudder. At



10,500 feet a rotten wall of porous ice 20 feet high required three hours of chopping. When we reached the top of the chute at 10,700 feet, we were overjoyed to find a narrow ledge behind the icicles which jutted like teeth from the lip of the overhanging cornice. The overhang seemed surmountable on the left side, so we inched along the ledge. Halfway across the chute the ledge disappeared and we were forced to descend onto the face beneath the overhang. Three feet of crumbly snow loosely adhering to the  $65^\circ$  face made the traverse exceedingly ticklish. Before we could complete it the sun rose and softened the snow, forcing us to retire for the day.

We dejectedly debated abandoning the Southeast Spur. It was more difficult than anticipated and more hazardous. We had only gained 500 feet in four days. But the top of the first peak of the spur was just above the overhanging cornice, and we were so close. . . . We decided to wait one more night. In the meantime, prudence demanded that we remove our camp from beneath the cornices to the right of the Arrow. Therefore, we brought the tents up through the hole at the top of the Arrow and pitched them on the other side — on top of the cornices.

At sundown Pete and Sam Cochrane climbed up the chute for one last try. From our tents, we could see Sam crouching behind the icicles beneath the overhanging cornice. Lashed to pitons driven into the ice ledge, he played out rope as Pete, 20 feet below him, forming each step delicately with his toe, sidled closer to the left corner of the overhang. When he had traversed 50 feet, Pete used a shovel, as well as his axe, to carve a footing in a preposterous three-dimensional cobweb. Gnarled filaments of ice composed one quarter of its volume; the rest was air. Tensely we watched Pete dig a three foot trench up the  $55^\circ$  wall. At 11 p.m. he had mastered the crux and stood above the overhanging cornice.

Racing against the sun, we relayed loads up the chute, across the traverse, and around "Pete's Corner," and pitched Camp III in a filled-in crevasse at 10,800 feet. While we fixed a steaming "glop" for breakfast, Charley and Sam Silverstein reconnoitered

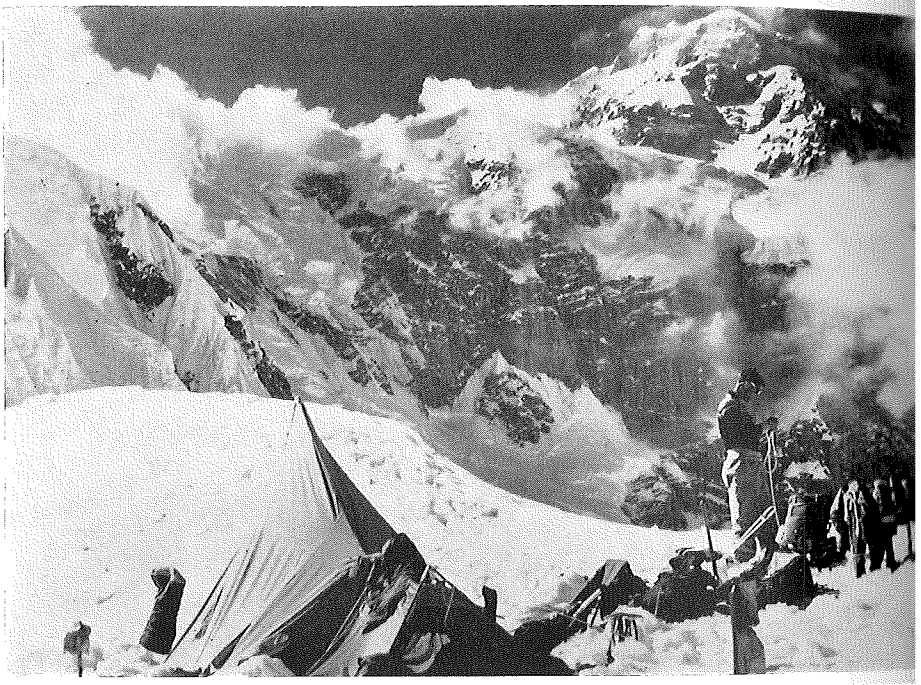
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AT THE TOP OF THE ARROW,  
approaching the hole  
cut in the cornice.

IN THE CHUTE,  
climber stands next to  
the fractured cornice.

BELAYING FROM THE SHELF  
beneath the cornice  
at the top of the chute.

CLIMBING THE FLUTINGS;  
angle of face is  $60^\circ$



CAMP IV,  
Southeast Face in background.

the undulating ridge to the Flutings a half-mile ahead. Dawn brought the fourth consecutive clear day, and we felt elated. As a gesture of confidence we put on fresh underwear before going to bed.

During the night of June 19th, while our companions brought supplies to the edge of the corniced saddle above the Flutings, Sam Cochrane and I tried to get across by traversing on the backs of the cornices. Kicking steps was touchy, for the granular ice was hollow in places and exceedingly steep. After crossing 400 feet, we decided to withdraw to review our plan of attack. Sam favored continuing, and Pete agreed with him. I wanted to study the Flutings on the north face of the spur. In the hour between the rising of the sun and the softening of the snow, Chris and I swung off the ridge and walked along the bergschrund at the base of the Flutings. When we had passed under most of the cornices, we crossed the 'schrund and looked for a way to regain the ridge. The Flutings soared 500 feet above us. But



we would have to wait until evening; in the day's heat, the cornices were beginning to melt.

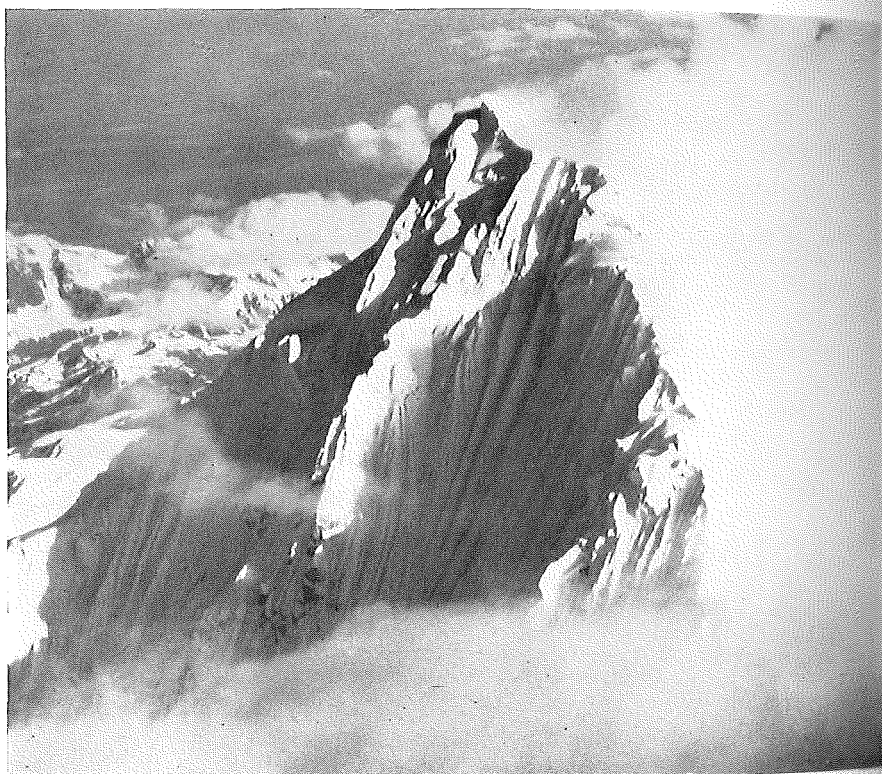
At sundown a friendly race developed between the advocates of the high route, Sam Cochrane and Pete, and the supporters of the low route, Sam Silverstein and myself. We zigzagged up ruts of unconsolidated snow and picked our way among protruding noses of ice. We drove seven aluminum pickets into the face — placing one in a gaping hole which emitted a weird breath of supercooled air from the bowels of the spur — and attached fixed ropes for protection. We attained the crest of the ridge at midnight and shouted back to Sam Cochrane and Pete to abandon the high route. Before daybreak we made two relays up the Flutings. Chris and Charley remained on top, while the rest returned to the lower end of the saddle. Thus Camp IV was split in two sections.

The six-day stretch of good weather came to an end, and June 21st brought a foot and a half of snow. The storm was brief, and at midnight it was clear again. We set out to reascend the Flutings, but crossing beneath them we came upon a pit 400 feet wide where a cornice, tumbling from the saddle above, had recently fractured the slope to a depth of four feet. This provoked remarks impugning the safety of the low route, but I thought the issue confused since a former portion of the high route seemed to have been the cause of the avalanche. We resolved unanimously, however, to wait for the slope to consolidate, so we returned to camp for the day.

We could not afford to delay longer and broke camp at 7 p.m. on June 22nd. The Flutings were covered with powder snow and our old steps were buried. For six arduous hours, using the fixed ropes for guides, we groped upward into whiteness. When we reached the crest, Charley and Chris led on, having scouted the route the day before. We crossed a series of bridges and placed Camp V among seracs at 11,800 feet.

On June 23rd, another foot and a half of snow fell. The next morning visibility improved by spells, allowing Pete and Sam Silverstein to depart at 4 a.m. They surmounted the rotten ice-wall above camp and left a fixed rope. Then, resisting occasional snowslides, they cleared a path through powder snow to the top of the second peak. Benefiting from their route-finding instincts, we packed up to Camp VI at 13,000 feet.

The South Buttress stood a mile and a half away. The intervening ridge only rose a thousand feet, but voracious crevasses,



MOUNT HUNTINGTON;  
telephotograph from Camp VIII.

compact thigh-deep snow, unexpected ice, and wind depressed our morale at every foot and forced us to pitch Camp VII halfway along the ridge and halfway to our goal. Not until June 26th could we reach the juncture of the Southeast Spur and the South Buttress, where we located Camp VIII at 13,800 feet. But the moment we arrived, we felt compensated, for the clouds disintegrated and revealed an astonishing edge-on view of Mt Huntington.

Six days of bad weather following six days of good — we succumbed to superstition. Surely the coming day would be fair. Then we would all climb the long humped slope uniting our spur to the top of the South Buttress at 15,800 feet, from which the couloirs of the Southeast Face would bring us onto the summit ridge. . . . We had nine days of food and as many of fuel. Al

though three days remained before we had to meet Sheldon in Ruth Amphitheatre, he would find us and understand our delay. But the most distant commitments caused the most immediate pressure: Pete, Sam Cochrane, and Chris were already a week late in returning to their jobs in New York, and their uneasiness concerned all of us.

Fortune has two faces, and we saw both. The following morning brought snow and strong winds which threatened to deprive us of success. We needed a plan which could keep our chances open if the next hours should show improvement. So it was that at noon, when the wind died down, the six of us filled our packs with the small tent, warm clothing, and food for two people and climbed onto the South Buttress. We moved quickly with light loads, and when we reached the top, Charley, Chris, Sam Silverstein, and I left our hopes with Pete and Sam Cochrane and returned to Camp VIII.

On June 28th, above the thickening clouds, Pete and Sam left Camp IX at 15,700 feet and climbed easily up the southernmost couloir on the Southeast Face. They pitched Camp X among



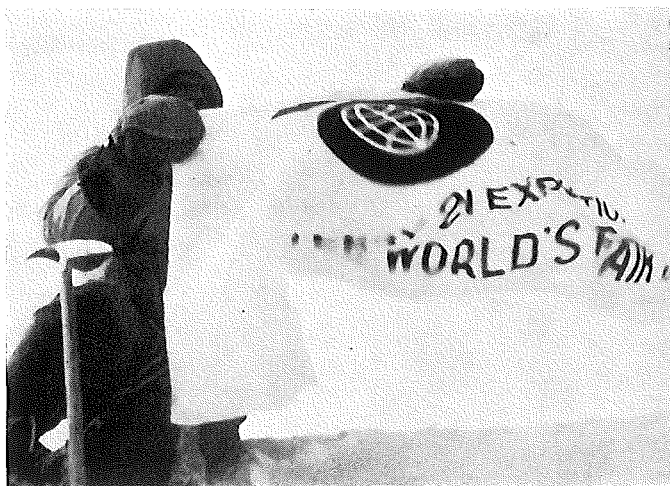
AFTER REACHING THE TOP OF THE SOUTH BUTTRESS,  
l. to r., rear: Everett, Cochrane, Silverstein; front: Abrons, Hollister, Wren.

rocks on the edge of the South Face at 17,000 feet. On the same day, we came back to Camp IX.

On June 29th, we moved up to Camp X to wait. Somewhere above, our assault team approached the summit. Pete described the climb in his log:

Up at 5:00 a.m. — stove malfunctions — one cup cold pea soup and dried fruit for breakfast. Off at 7:40 — route is easy — zigzags to right of couloir, mostly on snow, to 18,200 feet where upper part of the couloir is entered. Snowfield steepens to  $50^{\circ}$  at 18,600 feet — icy section requires steps for 50 feet. Summit plateau, 19,000 feet, reached at 2:30. Southeast Face had been hot and windless — summit plateau requires down jackets and face masks immediately. Poor visibility as clouds cover summit. Carter Horn traversed to right at 19,700 feet with considerable difficulty — north wind is directly into our faces and increases with altitude. Snow hard packed with occasional blue ice. We reach summit together at 7:20 in 50-60 m.p.h. wind. Take Emperin and Dexedrine as we are physically shaking — 7 hours in exhausting wind. Descend end-over-end with precautionary belays. Reach Camp X at 1:30 a.m.

On the summit of Mt. McKinley, they left their names and a bottle of dirt from Central Park in New York City.



THE SUMMIT  
flag was left by a previous expedition.

# Christmas at 14,000 Feet

by DAVID S. ROBERTS

OVER Christmas vacation, 1962, Don Jensen, Burt Redmayne, and I were graced with six days of perfect weather in the Sangre de Cristo range of Colorado. We had chosen to climb in the Crestones, a group of 14,000 foot peaks that circle the headwaters of South Colony Creek.

In the brilliant sunshine of the morning of December 27th we left our car and headed west up the creek. Soon the snow deepened and we were forced to resort to snowshoes. After seven miles of painfully slow going, we pitched our tent in the pines and spent our last twilight hour frenziedly destroying a half-ton of ice which we naively assumed to overlie running water. The next morning, however, we soon broke out of the timber and were rewarded with a first stunning view of the Crestones. We set up a permanent camp at timberline, on the frozen stream-bed a few yards below Lower South Colony Lake. The ice here politely complied with our thirst, and a few blows of the axe created a fresh spring inches from the tent. We spent the afternoon wandering over the patches of meadow blown free of snow, and planning our routes for the days to come.

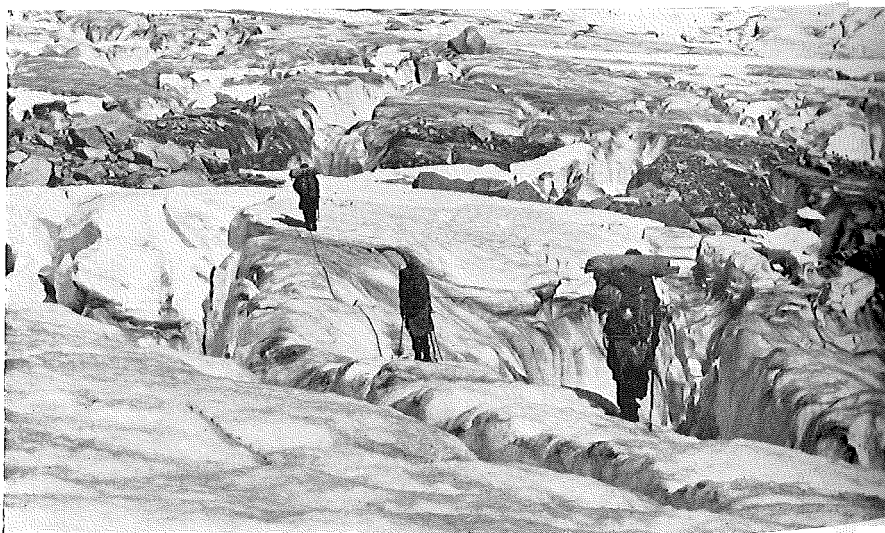
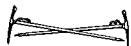
Foremost in our thoughts was Crestone Needle (14,191 feet), looming sharp and proud half a mile above our heads. Thus, it was with a tempered eagerness that we got up in the quiet, bitter cold before dawn and started up a broad snow couloir which led to an intermediate saddle. The sun rose magnificently on the peak, but we still climbed in the perpetual shadow of this north-facing gully. At last, about 10:00 a.m., we came out into wonderful sunshine at 12,800 feet. Climbing along a firm conglomerate ridge, we threaded a route towards the summit. Although the air was cold (not more than 15° F.), it was perfectly still, and the rock felt warm and rough under our hands. Climbing unroped, we took divergent paths, and after a series of tricky knife-edges arrived exuberantly on the summit. On the descent we roped up for a steep snow gully, and late in the afternoon arrived at camp quite weary.

The fourth day was spent on a pleasant hike up Humboldt Peak (14,044 feet), across the valley opposite Crestone Needle. As is characteristic of dry, sunny Colorado, most of the slope was free of snow, and along the final summit ridge ancient brown

grass stretched out in a beautiful path. From the top we could see the sheer walls of Crestone Peak (14,291 feet), an almost inaccessible summit in the winter.

On our last day of climbing, we followed the stream to its headwall, ascended this, and passed beyond towards the fourth high summit of the group, Kit Carson Peak (14,100 feet). Along the way we came upon a rock with the inscription "1892 carved CSJR"

in it, probably left by a surveyor. After contouring around a large peak, we came to the final slopes of Kit Carson, normally fairly easy but now covered with treacherous wind-slab snow. We carefully worked out a route along its edge, but at a point several hundred feet below the summit were forced to turn back by the late hour. On the return, we stopped on a high plateau in the warm incredible stillness, and took in, a little sadly, our last view of the mountains, nearby and in the distant sky; then we plunged off into the dark valley towards camp. After a pathetic but jolly New Year's celebration in the tent, we packed up the following morning and sped down the valley to civilization.



*R. Hartshorne*

PACKING ON THE LOWER TELLOT GLACIER.

# The 1961 H.M.C. Climbing Camp

## or *Splendor in the Sun*

*This is an account of the most important of 50 ascents of 26 different peaks climbed by 21 people in the Coast Range of British Columbia under the leadership of Steven Jervis and Gordon Benner.<sup>1</sup> They spent 32 days in the mountains; on all but two the weather was fair. No single individual could tell the story of the 1961 Climbing Camp. Instead, let five climbers recount their experiences. . . .*

*Steve Jervis:* The traditional debate about the site of Climbing Camp was resolved by the reminiscences of Henry Hall. The Coast Range, although inaccessible, promised to be challenging. Organization was complicated by the fact that members were spread over the country.

When George Millikan arrived in Berkeley in June, he straightened out details with Craig Merrihue, Sandy — Craig's wife and our Camp Mother, and myself. Of course, each of us thought that crucial matters were being handled by someone else. The menu, including victory caviar (it was not clear just what kind of victory was contemplated) was planned to the nearest teaspoon by the Merrihues. (Later we wished they had planned a few items in terms of tablespoons.) In the Millikan's garage the food was packed for an airdrop. The task was monumental, and many evenings were spent sorting food from parts of old cars which Mark Millikan was taking apart in the garage and righting the confusion wrought by Jeffrey Merrihue (aged 1½).

*Rick Millikan:* In the hangar of B. C. Airlines at Campbell River on July 10th, one would have seen strings of hardware, boxes of food, amused pilots, and tired organizers everywhere. Someone sadly discards a guitar; another madly sprays paint on willow wands. Some worked through the night; others finally toppled on the growing piles.

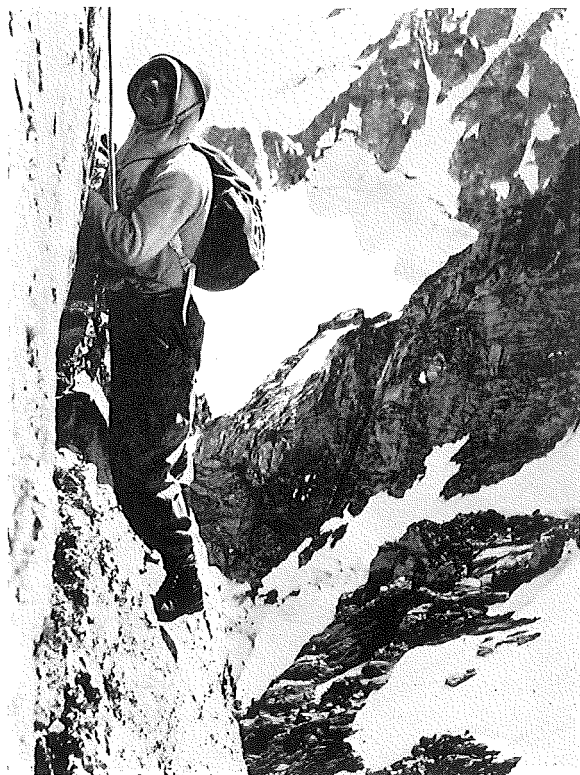
At 6:00 a.m. the roar of Beaver engines brought the expedition to life, and soon we were off. Soaring? Well, no — but gradually the overloaded planes rose over Bute Inlet and climbed toward the high snowy peaks a hundred miles to the north. The closer we got the faster the cameras clicked. Waddington! Even our pilot calmly snapped away as he went into a dive toward Ghost

<sup>1</sup>See also Steven Jervis, "Fifty Climbs Around Waddington", *CAJ*, 1962.



*R. Hartshorne*

PEAKS SOUTHWEST OF BASECAMP;  
r. to l.: Mt. Tiedemann (ascent route on right-hand ridge),  
Mt. Asperity, Serra III, Serra II, Serra I, Stiletto Needle, Stiletto Peak.



*H. L. Abrams*

THE SUMMIT PITCH ON STILETTO NEEDLE;  
Charlie Bickel climbing.



Lake. Just in time he jerked back the stick, and we were down.

Mosquitoes — let's get out of here! On went the Kelties and we were off for Nabob Pass — through slide-alder where Charlie Bickel ripped his pack, over streams where Leo Slaggie demonstrated his superb technique for crossing, and up a long snow-slope to the paradise of Nabob Pass at dusk.

After two days of winding uneventfully among crevasses on the Tellot Glacier, we arrived at the barren nunatak which was Base Camp at 9,500 feet. The next day we received our airdrop at the foot of Dragonback and set up home on the hospitable rock.

Within a few days an assault was started on the Serra Ridge which separates the Tellot and Tiedemann Glaciers. This array of eight sharp rock peaks offered much of our best rock-climbing. On July 17th, Steve, Don Morton, Hank Abrons, and Chris Goetze made the first of five ascents of Serra I by its northeast ridge. Six pitches of moderate and sound rock lead to the summit. From there, it was evident that Serra II would have to be attempted from the other side. Consequently, on July 23rd George, Don, Ted Hallstrom, and I climbed the steep snow to the col between Serra II and Serra III. We did not use the ridge climbed in previous ascents which rises directly from the col; instead, we climbed several pitches of unstable fifth class rock on a subsidiary ridge to the left of the prominent ice-gully on the northeast face. Our feeling was that Serra II does not remain standing because of any innate cohesiveness.

The next goal was the peak of Serra III. Craig and Charlie had made an unsuccessful attempt to traverse its base to the northwest and gain the Serra III-Serra IV col. They spent one day preparing a difficult traverse on mixed ice and rock, and returned the next day with Hank and Leo. Charlie was releading the first steep ice-gully when a slab of rotten ice twenty feet above fell onto his head, knocking him out of his steps. He sprained his ankle in the forty foot fall, but managed to cut steps back up to Craig and hobble back to Base Camp for a week of ligament-growing. Whether from superstition or other reasons, interest in this route deteriorated.

A week and a half later, interest again turned toward Serra III, but this time from the II-III col. Dennis Dunn, Ted, and Charlie completed the route without difficulty, following the ridge from col to summit except to turn several gendarmes. They observed that Serra IV could be reached by traversing over the summit



and descending to the III-IV col.

On August 2nd, Charlie and George left Base Camp at 2:00 a.m. and bivouaced that evening near the summit of Serra IV after making a first ascent of the subsidiary peak between IV and V. The following day they climbed Serra IV (the Black Tower). This climb was repeated by Ted and myself, and we had a chance to reconnoitre the walls of Serra V, the highest unclimbed peak in Canada. The sheer rock indicated extensive use of direct aid, and I surmise that a more feasible route may be found on its other side, although this would entail traversing over Mt. Asperity to the west.

One of the most impressive peaks on the Serra Ridge is Stiletto Needle. Rising six hundred feet above the Tellot Glacier, its steep polished walls made clear why it had only been climbed twice. On July 31, Hank and I put a new route on the north face. We crossed the 'schrund on the right side of the face and ascended five enjoyable pitches of chimney and face, angling toward the col between the Needle and Stiletto Peak to the east. A pendulum back to the right and an easy pitch led to the base of the summit block. The final ten foot crack is difficult. On the summit, we met Dennis, Ted, and Charlie who made the third climb of the west ridge.

*Chris Goetze:* On July 20th, Craig, Leo, Hank, a tent, a week's food, an entourage of well-wishers, and I left Base Camp for an attack on Mt. Waddington, highest peak in the Coast Range (13,260 feet). We trekked to the base of Claw Peak and descended from there to the Tiedemann Glacier 3,500 feet below. The next day we twisted up the lower Bravo Icefall until at noon we reached an impasse. It seemed necessary to reach the rocks on the north side of the Icefall, but an awesome crevasse was in our way. No one was eager to jump it, but Hank finally offered to try. He just made it, and belayed us across. We reached the rocks and traversed to a promising gully. However, after several leads the rock became ominously loose. Craig had almost reached my belay point when a piano-sized boulder pulled loose and filled the gully with flying rock. To our tremendous relief neither Hank nor Leo below was hurt, although Leo's canteen, which he dropped when he saw the rock coming, was smashed flat. Delicately we tip-toed up the gully to the basin below the cliffs of Bravo Peak. The sun had set, and we hastily shovelled a tent-platform.

The obvious route to the saddle between Waddington and the



*H. L. Abrons*

ICARUS;  
crevasse on the Bravo Icefall, Mt. Waddington.



*C. Goetze*

APPROACHING THE SADDLE  
between the Spearman Ridge and Mt. Waddington.

Spearman Ridge was up the rock on the south side of the basin. We spent the next day climbing this rock until it merged with snow leading to the saddle. We moved quickly on easy snow, and pitched camp on the saddle after the sun's rays had vanished.

We elected to try to climb the Rock Tower the following day, even though we might have moved camp 2,000 feet higher. We started at 8:00 a.m. and made excellent time on snow, reaching the base of the Rock Tower at 10:30. Craig led off with a difficult pitch over the bergschrund. Four leads up a loose but easy couloir brought us to the spectacular little col between the summit tower and the neighboring rock "fang". We started up a prominent chimney in the east side of the tower, but after two leads a pair of chockstones which seemed to be supported by levitation scared us out onto the face. Soon we arrived at the ice-gendarmes which guard the summit, and we stewed around for a while discussing the fact that it was 3:00 p.m. and that these gendarmes were shifty customers. At last, we out-foxed them and crowded around the summit which is a precarious cone of ice.

I remember observing on the descent that the temperature had dropped to 22° F. and a cloudcover had formed. When we rappelled onto the snow at the base of the Rock Tower, it was dark, and we soon lost our tracks leading back to camp. After milling around, we sat down to await the moon. After several hours of patience, the clouds sank below us, and we set out toward visions of sugarplums, steaming glops, and sleeping bags. To our disappointment the moon soon went out and we were lost again. About 53 hours later it grew light, and we continued to camp at 5 a.m.

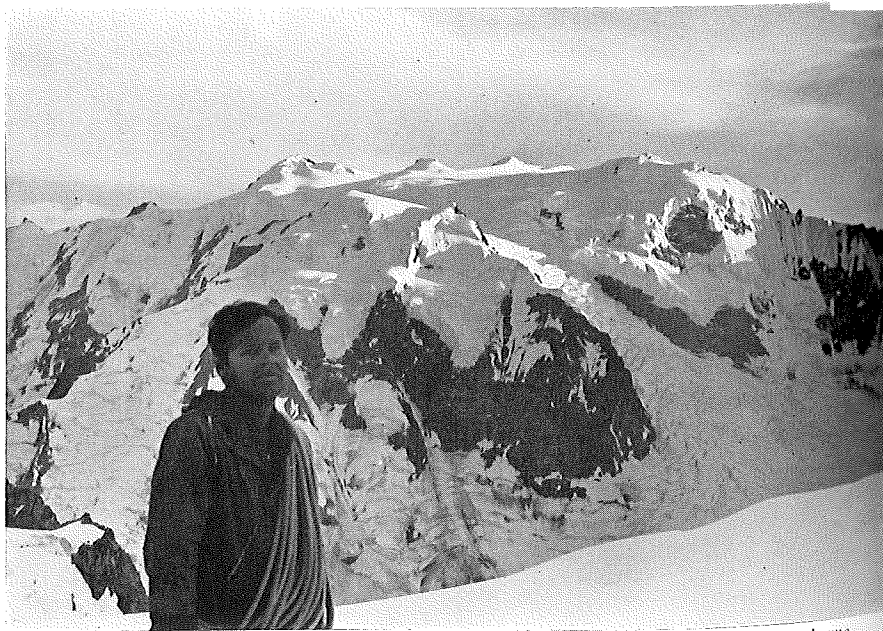
We awoke the next morning after 24 hours of sleep and started down. Rappelling into the basin was complicated by saturation avalanches and we spent many hours on this manoeuver. Since it was late and we did not want to descend the gully which had bombarded poor Leo, Hank and I spent the afternoon reconnoitering a new descent route while Craig and Leo made camp and glop at our former campsite in the bowl. The next day, July 26th, we descended the rock ridge on the south side of the basin and rappelled into the Bravo Icefall.

*Rick Millikan:* Steve, Don, brother George, and I zigzagged up the Bravo Icefall on July 26th, following an irrational path of willow wands, until at the end of the maze we came to a fifteen foot crevasse. . . . No! They couldn't have come this

way! While we stood perplexed, Craig et al. appeared on the other side and asked what we were waiting for. Hank casually showed us how he had originally jumped the crevasse — and demonstrated how to prussik in the bargain. After a brief discussion of the quality of Waddington rock, we decided to head back down to the Tiedemann Glacier.

Chris and Leo were not ready for the civilization at Base Camp, and they decided to join the four of us in an attempt on Mt. Munday (11,500 feet) the following day. Munday rises 6,000 feet above the Tiedemann Glacier, but the route running diagonally from east to west up a long ridge was free enough from technical difficulties to be managed in a single day.

The next morning the sky was overcast, and we postponed the attempt for one more day. We occupied ourselves reading Leo's *History of Orgies*, which unfortunately lacked the thrills implicit in its title. July 28th dawned beautiful, and after a hasty breakfast of buckwheat groats we gained our ridge a thousand feet above. After two thousand feet more of mixed snow and rock, we



THE NORTH FACE OF MT. MUNDAY;  
West (highest) Summit is second peak from right;  
ascent route up diagonal ridge behind Craig Merrihue's head.

R. Hartshorne



ON THE SUMMIT PLATEAU OF MT. MUNDAY.

*C. Goetze*

stopped for mid-morning life-savers and a view of the Serras — still above us — and Waddington dominating the scene. The route was straightforward. We skirted the terminal peak of our ridge and traversed the summit plateau toward the west peak. After an hour's slog we gained the split rock summit, where a note left by Don Munday in 1935 confirmed our guess that this was the highest of Mt. Munday's three nearly equal summits.

The clouds were closing in, so we started down. What a glistade — six thousand feet! We got back to camp in two hours for a well-earned rest.

*Robin Hartshorne:* Mt. Tiedemann (12,800 feet) is the second highest mountain in British Columbia. It was first climbed in 1939 (*CAJ*, 1939) from the Scimitar Glacier via the Chaos Glacier. The second ascent was in 1954 by the Stanford Expedition (*CAJ*, 1955) from the Tellot Glacier via the Radiant Glacier. Both routes converge at the Tiedemann-Mt. Damocles col and follow the north snow ridge to the summit.

When Craig, Sandy, Steve, and I left Base Camp on July 30th, our immediate problem was to descend to the Radiant Glacier. The icefall used in 1954 was impassable, but Richard Goody and

John Humphreys discovered a steep rock rib which drops 600 feet from the Mt. Shand-Mt. McCormick col to the Cataract Glacier whose head gives easy access to the Radiant. We found the rock unstable and switched from down-climbing to rappelling. At the bottom it was necessary to swing out over the 'schrund; this move perplexed Sandy, but with a belay from above and a pull on her rappel-rope from below she made it safely to the snow — upside down!

We spent all day August 1st descending the rock, and on August 2nd we crossed the Radiant and climbed to the base of Mt. Tiedemann. The icefall leading directly from the Radiant to the Tiedemann-Damocles col was hopelessly crevassed, and so we approached the col via two small peaks on the ridge to the north. In the col between these two small peaks we pitched a precarious camp for the night. At 5:30 the next morning, hoping to avoid the steep snow and rock across the col, we started to traverse around the second small peak on some snow toward Mt. Damocles. Imagine our surprise when the snow turned out to be 60° ice! Steve led slowly across the ice and found a dead end on the far side. It was now mid-afternoon, and we slogged back to camp discouraged.

At 7:00 the following morning we started up the far side of the col under Craig's leadership. After climbing the steep snow we reached easy rock, and at 11 o'clock we stood on the summit of the second small peak. From there we climbed the firm snow slope to the summit of Mt. Damocles, descended a gentle granite ridge to the col, and then toiled up the long smooth ridge to the top of Mt. Tiedemann. At 3:30 p.m. the sky was darkening and the wind blew in gusts; only Mt. Waddington stood above us, and we could see four specks nearing the northwest Snow Summit.

We reached camp after dark and completed the descent on August 6th in a snowstorm. At the base of the climb we found the tent of Gus Benner, Chris, Hank, and Ted who repeated our ascent the next day.

*Dennis Dunn:* Although Mt. Waddington's two major summits differ in height by only sixty feet and stand no more than three hundred yards apart in space, no man has ever traversed from one to the other. In between, an icy chaos reigns which no mountaineer could contemplate with both eyes open. For this reason, the two summits cannot be approached from the same direction. The northwest Snow Summit is climbed from Fury



Gap by the long west ridge, challenging in its own right — but if your Base Camp is situated on the Tellot Glacier, a minor expedition is required just to get you onto the mountain.

In our initial plans, few of us had envisioned Waddington as a major objective, but day after day of unbelievably fine weather made “Mystery Mountain” irresistible. When Craig, Chris, Hank, and Leo returned after seven days out of Sandy’sville, their hair-raising reports ended all thought of further ascents of the Rock Tower; it seemed that interminable sunshine had begun to melt the ice that serves as glue to hold the mountain together, and everything was starting to fall apart. When people began to talk about an attempt on the Snow Summit, it seemed to me that Fury Gap at the foot of the west ridge might just as well be in Hades — particularly considering the number of hideously named glaciers it would be necessary to negotiate in order to get there (Cataract, Chaos, Scimitar, Fury).

I returned to Base Camp one evening after two days of rock climbing and found John, Richard, and Don packing their belongings, saying their prayers, and preparing to answer Pluto’s beck. A fourth man was needed, and I was more exhausted and fuzzy-headed than anyone else that night — which explains how I got talked into going along. John and Richard had already discovered the rock rib leading to the Radiant Glacier, and we started down the next morning. It took us four hours to descend with packs. We soon reached the edge of the Radiant Glacier basin, where we stopped to eat and to gaze in wonder at the breathtaking panorama of the rugged cirque formed by the north walls of the Serras, Mt. Asperity, and Mt. Tiedemann, all rising 4,000 precipitous feet above the glacier. After lingering to speculate on ways of attacking the practically inaccessible fortress of Serra V, we glissaded swiftly into the Radiant basin and trudged up the other side. We spent the first night on the large snow plateau at the foot of Mt. Tiedemann’s north ridge. On the following day, three days of exertion caught up with me, and I rested in a sunny stupor while the others reconnoitered a route down to the Scimitar Glacier.

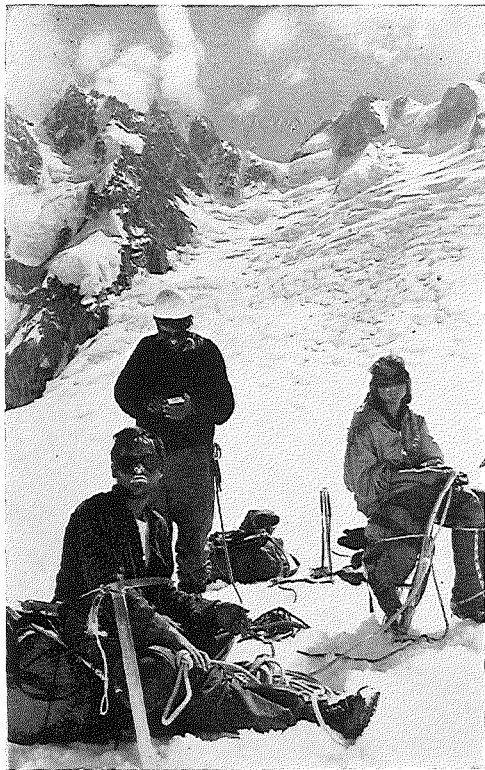
The third day was the longest of the climb. John’s route descended from the northwest corner of the plateau in fragmented rock terraces leading into a series of steep rock and snow gullies. We had to keep working to the right in order to avoid the Chaos Glacier which tumbles off the side of Mt. Combattant in threefold pandemonium. We reached the bottom where

the Chaos unites with the Scimitar. From the medial moraine we had a splendid view of Fury Gap, several miles away, suspended above Scimitar's giant elbow, and as we moved ahead Waddington's long snowy mane, rising 7,000 feet above us, gradually appeared from behind Mt. Hickson's dark shoulder. Easy walking brought us to the foot of North Fury Glacier in two hours. The steep climb to the col at Fury Gap required ankle-cracking cramponing, but with excellent luck we found a route along the right-hand edge of the icefall. In three hours we reached the col and established camp on a rocky terrace at the southeast corner. "Hades" had indeed been reached, and we ate dinner barefooted that evening — toasting our toes in a blazing sunset.

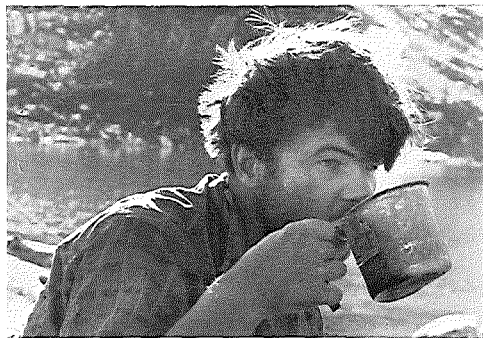
When August 4th dawned with a cloudless sky, we felt certain that Waddington would be ours before the day was out. Halfway up the rubble-heap (called Fireworks Peak) at the bottom of the west ridge, we noticed in the western sky a distinct line between the pink of advancing day and the blue of receding night. Strangely projected onto the pink was the blue sky-shadow of Mt. Waddington, created by the sun still beneath *our* horizon.

The ascent of the west ridge was long and uneventful, but thrilling nonetheless, and complicated by only a few technical problems. A third of the way up the ridge the crest becomes narrow and is cut by two deep gaps; we found it easier to climb down and up the edges of these cuts than to skirt their icy flanks which fell away to nothing. Two-thirds of the way up we dropped to the left below the ridge-crest into the Angel Glacier basin in order to avoid a vicious rock arete. From the basin, an easy terrace leads to the last bergschrund, at 12,700 feet. The thirty foot icewall indicated trouble, but it had one flaw in it: a perfect spiral staircase starting from far underneath.

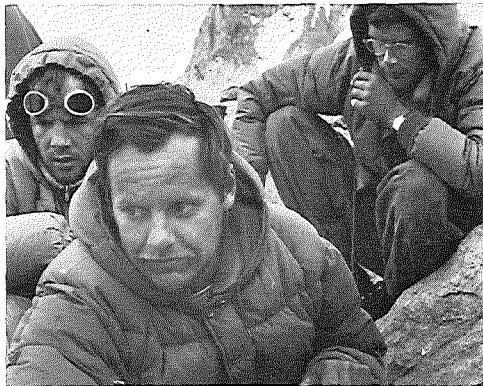
After this last obstacle, debate arose over which of the two prominent snow cones was the true northwest summit. Consequently, the two ropes separated, Don and Richard heading for the false summit on the right, and John and I aiming for the higher one on the left, a symmetrical 300 foot high cone of 50° snow and ice. John offered me the final lead, and I went at it perhaps more slowly than necessary; the whole structure seemed precariously stable at best, although I suppose I was projecting my own feelings onto it. Two steps below the top I got the surprise of my life: there, suddenly, on the other side of the very crest itself, was the head of Don who stood one step from the top! Don's tooth-and-claw tactics had won, and first



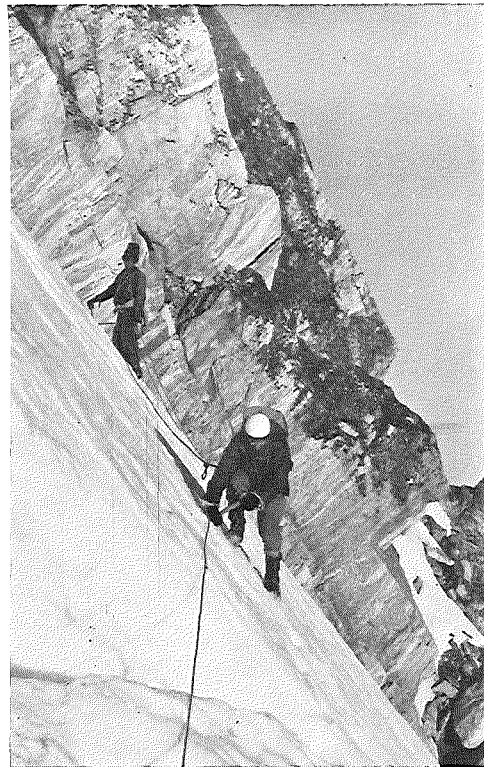
Merrihue, Jervis, and Merrihue  
on the Radiant Glacier;  
background, l. to r.: Serra III,  
Serra IV, Serra V, Mt. Asperity.



Keith Kerney.



Hallstrom. C. Merrihue, Humphreys.



*photographs by R. Hartshorne*

Descending to the Tiedemann-Damocles col,  
Jervis climbing, C. Merrihue watching.

honors of the one-man summit went to him, our Canadian companion.

Much had been said of the edge-on view of the Rock Tower seen from the Snow Summit, but I will not try to describe the indescribable. By all the laws of nature and the limits of the imagination, you would say the monstrosity has no right to exist! And you would be correct, except that nature has a way of breaking her own laws.

Our summit time was 4:10 p.m. We arrived in camp at 6:45. The swift descent was due partly to our chase of John's down-parka down the Angel Glacier, partly to hunger, and partly to signs of deteriorating weather. The next day we experienced the only blizzard of the entire Climbing Camp, and our trip back from Fury Gap will be remembered for its dampening effect on body and soul. We returned to Base Camp the way we had come, having completed one full week's absence from Sandy's cooking.



# A Stormy Month on Mount Logan

by BOYD N. EVERETT, JR.

**D**URING June and July, 1961, Albert Nickerson, Leif Patterson, Edward Carman, Walter Gove, and I made the third ascent of the East Ridge and East Summit of Mt. Logan (19,850 feet), the highest mountain in Canada.

Prior to 1961, Mt. Logan had been climbed five times, three by the first ascent route on the west side of the mountain and two by the East Ridge. There are at least five possible new routes, but since our party was limited in time to one month, we decided not to try any of them. (Incidentally, the South Ridge of Mt. Logan may be the most difficult long climb in North America. It appears to offer more problems than the Italian Ridge on Mt. McKinley.) The lengthy accounts of the previous East Ridge ascents (AAJ, 1958; CAJ, 1960) indicated to us that the East Ridge offers many technical challenges, and we did not expect to be bored.

The 1957 and 1959 parties only climbed to the East Summit. This peak is about 85 feet lower than the Central Summit, which is two miles away and separated by a 1,000 foot gap. There is no technical problem in reaching the Central Summit from the east, but as it had not been done, our major objective was to accomplish the first "ascent" of Mt. Logan from the east. In this, we were not to be successful.

The ascent of the East Ridge is divided into three stages. From Base Camp at 8,000 feet on the Hubbard Glacier one must climb 1,000 feet to gain the ridge. This is the most difficult technical part of the climb, as the ridge ends abruptly on every side in 55° to 65° rock, snow, and ice slopes. The second stage consists of the ridge from 9,000 feet to 15,500 feet; this is very narrow throughout its length, which necessitates much steep side-hill climbing. No section longer than 25 feet has an angle less than 30°. From 8,000 to 15,000 feet the slope averages 40°. At 15,500 feet the slope levels off in a large summit-plateau. From the edge of the plateau to the East Peak is about 3 miles. Here, altitude, high winds, and cold are the principal problems: storms on the plateau can be exceptionally severe and most parties have at-

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*photographs by members of the Expedition.*

MOUNT LOGAN FROM THE EAST;  
The East Peak and East Ridge *en face*.

tempted to get off it as rapidly as possible.

In 1959, a Canadian party hiked up the Kaskawulsh Glacier from Kluane Lake, a town on the Alcan Highway. As a result of their exploration, it is probable that many future expeditions to Mt. Logan and the vicinity will set out from Kluane Lake, as did eight parties to the St. Elias Mountains in 1961. Kluane Lake is easier to reach than Yakutat and offers better weather for flying; in addition, although distances are nearly equal, it is easier to travel on the Kaskawulsh Glacier than on the Malaspina. The only disadvantage of Kluane Lake is that no Canadian pilot is available to make a glacier-landing. Thus, an Alaskan bush-pilot must be employed, and this involves bureaucratic negotiation with the Canadian government. Our expedition hired Jack E. Wilson of Glenallen, Alaska. He deserves to be better known among those who are planning trips to the St. Elias Mountains. He has done much flying in the area and knows it well. His rates were reasonable, he was punctual (an attribute not shared by all Alaskan bush-pilots), and he did some difficult flying at night and, on two occasions, in weather that suddenly turned bad.

Between the 18th and the 21st of June, Wilson flew the members of the expedition into the Hubbard Glacier, to the cwm between the East Ridge and Mt. MacArthur (14,400 feet). He was able to land less than a half mile from the East Ridge at an altitude of 8,000 feet. His ability to fly us closer to the East Ridge than the landing site of the 1957 party saved at least two days of arduous relaying of supplies.

Getting onto the ridge was a matter of concern. Parties in 1953, 1957, and 1959 gained the ridge from its southern face by routes that seemed dangerous because of avalanches of loose rock and snow. Instead, we climbed the steep northern face directly. Because of its exposure, this face is entirely snow and ice. For the first 500 feet, up to a large bergschrund, the route is easy. However, above that the slope rises another 500 vertical feet at an average angle of  $60^\circ$ . It is likely that in most years this slope is solid ice; however, during 1961, heavy storms had left a coating of snow over the ice. During the day this snow cover slid, but at night it was relatively stable.

After several futile attempts to cross the bergschrund on the night of June 20th, Patterson, Carman, and Gove successfully

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APPROACHING THE "FIRST KNIFE-EDGE RIDGE";  
Mount King George is across the Hubbard Glacier.  
CROSSING THE "FIRST KNIFE-EDGE RIDGE".



climbed the face in a light snowstorm on the night of June 21st. The ascent of the upper 500 feet required nearly eight hours; the last 200 feet, which averages  $65^{\circ}$ , was particularly slow and difficult because the snow-covering was only a few inches thick and steps had to be cut in the ice beneath. Several ice-pitons were used for protection.

Once the ridge had been gained, a 700 foot coil of rope was fixed, and it made further ascents and descents quite simple. On the night of June 22nd we pulled the expedition's gear up onto the ridge with the aid of a pulley and A-frame (which was anchored to rocks on the crest). In this operation a large sled (of wood and aluminum) with a capacity of 300 pounds was most useful. Camp I was placed at the top of the pulley-system, at 9,000 feet.

On June 23rd, in a storm, Nickerson and I scouted the route to 11,000 feet. Progress was slow because of wind and poor snow conditions, and this section seemed much more difficult than it did on later ascents. From 9,000 feet to 9,500 feet there is a traverse nearly a mile in length. Although this section is technically easy, it is exposed, since the ridge drops sharply to both north and south. At 9,500 feet there is a section of rock which is not difficult, but strenuous with a pack. This is followed by a moderately steep section of mixed snow and rock. Gendarmes occasionally force a traverse off the ridge-crest onto one face or the other. A fixed roped, placed in 1957, was still in place, but it was not used. The entire section from 9,500 feet to 11,000 feet was later climbed unroped.

As the weather was still poor on June 24th, camp was only moved to 9,500 feet, since this could easily be done in poor weather. On June 25th, we experienced the first completely fine day. We all carried heavy loads to a cache at 12,100 feet, just below the "First Knife-edge Ridge", a section that had been vividly discussed by both previous parties. The route between 11,000 feet and 12,100 feet proved to be challenging. There is no rock above 11,000 feet, the remainder of the route being on snow or ice. Above 11,000 feet much of the snow is over  $45^{\circ}$  in steepness, and some passages exceed  $55^{\circ}$ . Ropes were fixed over the steeper sections. Previous parties had found ice on some of these slopes, but, except for one section of 15 feet, we did not encounter ice here. During our entire ascent we felt that much more snow was on the mountain than is usual at this time of year, but, for the most part, this excess of snow was beneficial.



During the morning of June 26th it stormed again. One tent at Camp II (9,500 feet) was ripped, but not seriously. In the afternoon the weather improved enough for us to carry double loads to 11,000 feet, where Camp III served as an advanced base-camp. The site at 11,000 feet is a good one (all the other camps on the ridge are cramped), and had been used by both previous parties. 11,000 feet approximately marks the dividing line between alpine and arctic conditions on Mt. Logan.

On June 27th, again in fine weather, loads were carried above 11,000 feet. The fixed ropes were of considerable help over the steepest sections. At 12,200 feet we arrived at the First Knife-edge Ridge. This is a 200 foot traverse on a 50° slope. It is actually less steep than a section 150 feet below it, but the ridge is so sharp at this point that the exposure is unnerving. Previous parties reported ice here, but we found the surface to be snow, although below two feet there was ice into which a piton was driven for protection. Just beyond was a small platform on which the 1957 expedition had placed a camp. At first we did not recognize the spot because the photograph of it in the 1958 AAJ is reversed. Patterson and Nickerson took over the lead from Gove and Carman and continued beyond this old campsite up a 45° slope interrupted in the middle by a small section of ice. This was later protected by a fixed rope. At 12,600 feet we cached our loads at the base of another steep slope.

While the weather remained fine on June 28th, a double load was hauled to Camp IV at 12,600 feet. Nothing was done on the following day because of a light snowstorm, but on June 30th and July 1st Camp V was established at 14,000 feet. Three loads were also carried to a cache at 15,000 feet. The route above 12,600 feet begins in a 300 foot snow slope which is quite steep at the top and which we protected by fixing a rope. At 12,900 feet the slope ends abruptly in the sharp "Second Knife-edge Ridge", which has loose snow, rock, and ice, and which also required a fixed rope. A hundred feet higher the ridge broadens slightly, losing its knife-edge shape, but it still necessitated a side-hill traverse on a steep face until 13,300 feet, where the sharply distinguishable ridge merges into the East Face. Here and again at 13,600 feet we had to traverse to the left, crossing several crevasses on snow bridges, in order to skirt larger crevasses and ice walls. Much of the section below 14,000 feet is quite steep, but snow conditions were good after sundown and we climbed easily.

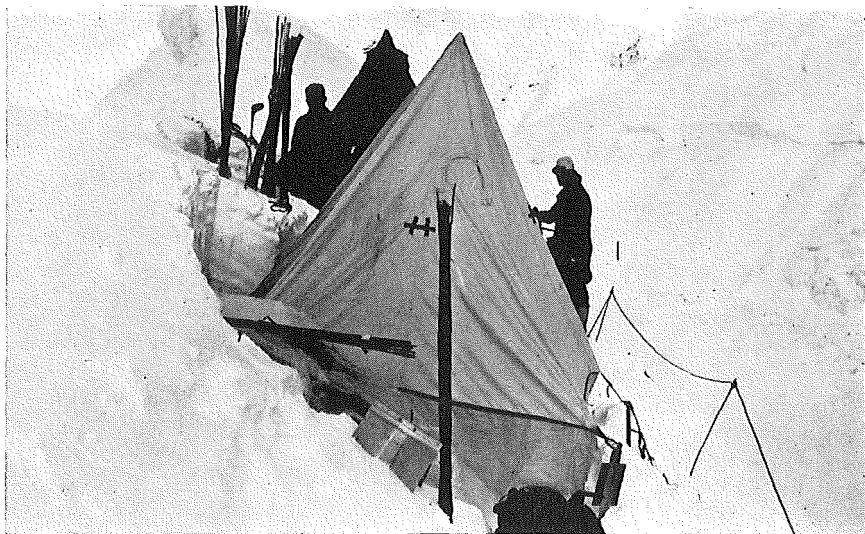
Camp V at 14,000 feet was placed below and to the right of a small ridge which extends up to a prominent hanging icefall. The site seemed flat compared to the slopes below, but later examination showed the slope to be  $35^{\circ}$ . Above Camp V there was a choice of alternative routes — either to the left or to the right of the ridge — up to 14,300 feet, where a large snow-filled crevasse cuts the slope, making it necessary to traverse to the left again. The long slope to 15,000 feet is the one portion of the route which is long enough to create a dangerous avalanche after a heavy snowfall. At 15,000 feet there is a snow-bench which is threatened by the icefall mentioned previously, which rises above it. The bench probably is safe, but the potential danger kept us from camping there. Instead, we planned to reach the summit plateau at 15,500 feet. To gain the plateau one must traverse 1,000 feet to the left and then ascend a 50 foot wide ramp 500 feet long. This ramp is the only entrance and exit of the eastern side of the plateau.

During the morning of July 2nd, two inches of snow fell. In the afternoon the snow stopped, but a brisk wind continued to blow. We carried more loads to the cache at 15,000 feet, but we decided against moving up to the summit plateau, as very strong winds were driving long snow-plumes off the plateau.

July 3rd was stormy. At 4:00 p.m., during a lull in the storm, we struck the tents in order to make an attempt to climb higher, but the return of wind and snow stopped us even before we could leave camp.

July 4th was a bad day for the expedition. During the night the snowfall had increased sharply, and by morning nearly two feet had fallen. We had food for three days at camp. This could have been stretched over five days if necessary, but we were worried lest we be unable to reach the bulk of our food — enough for eleven days, cached at 15,000 feet — if the slope above us should become dangerous. Thus Patterson and I set out during the storm to bring down food for two more days. Our progress was slow because of the wind, but this same wind had swept the big slope almost clear, and our ascent was a safe one. Face-masks were mandatory.

During the absence of Leif and myself from Camp V, 50 feet of the slope above camp slid to a depth of six inches and wiped out the tents. Ted Carman was buried inside one tent, but, the snow being light powder, he was quickly extricated. Both tents were badly damaged, and one was beyond repair. This misfortune



CAMP II.



AT 15,300 FEET,  
descending the ramp from the summit plateau.

forced us to dig snow-caves at this and subsequent camps, and at least two of us always slept below ground. At this point, snow-shovels became our most valuable equipment.

It continued to snow on July 5th and 6th. At 1:00 a.m. on July 7th, Patterson and Gove climbed to 15,500 feet to retrieve food for two more days. They found the snow in bad condition on the 700 foot face. Even though the storm was violent, they carried loads to 15,500 feet, reaching the summit plateau for the first time. Their time for the round trip from Camp V to 15,500 feet was six and a half hours, which would be very slow in normal circumstances. However, this is what a storm can do.

During the evening the wind died down. Although visibility continued to be poor, a quick examination of the slope above Camp V showed that a miraculous consolidation had occurred in the previous twelve hours. When we started up at 10:00 p.m., the weather partially cleared, and the ascent to 15,500 feet was pleasant and uneventful. By 3:00 a.m. on July 8th, a second load had been brought up from the cache. The sun rose spectacularly through the solid layer of cloud below us. The sky above was clear. From Camp VI at 15,500 feet we were able to get our first view of the East Summit, but the Central Summit was hidden behind it. With good weather for the first time in seven days, we had high hopes of accomplishing our objective.

By the time we dug a snow-cave and cooked a small meal, it was 5:00 a.m. We planned to break camp at 10:30 a.m. to take advantage of good weather. However, at 7:00 it was snowing again, and plans for an early start were effectively ended. Fortunately, the snowstorm was not accompanied by strong wind, for the campsite was unprotected. The snow only lasted a few hours, and by mid-afternoon the clouds began to lift.

It was our hope to put our last camp somewhere below the East Summit at about 17,000 feet, from which we could climb both the East Summit and the Central Summit. Gove, who had not felt well since his effort in the previous day's storm, asked to remain behind for two hours so that he could get more rest. Carman offered to stay with him. They planned to arrive at Camp VII a few hours after we did, by which time the snow-cave would be completed. They would follow the willow wands marking our route.

At 4:00 in the afternoon of July 8th, Nickerson, Patterson, and I started off with our personal gear and food for thirty man-days. For the first time in three weeks we exchanged crampons for

snowshoes. We had considered leaving the snowshoes below to reduce weight, but we were thankful for our decision to bring them, since three feet of snow had fallen in the previous six days. We felt that our pace was fast, yet it took three and a half hours to travel two miles and climb 1,500 feet. This emphasizes the effect of carrying 55 pounds at high altitude. At 17,000 feet on the east face of the East Summit we placed, or rather, one should say, dug our final camp, Camp VII. It took four hours to make the snow-cave because of ice just below the surface. At 11:00 p.m., when the cave was still not large enough for three, I prepared an open bivouac. Carman and Gove had not appeared, and we presumed that Gove's condition had not improved. Nevertheless, we planned to depart for the Central Summit at 7:00 a.m., for the good weather looked as if it would hold.

By 1:00 a.m. it was snowing. At 17,000 feet the snow was not heavy, and the wind, which came from the southwest and did not hit the east face directly, was only moderate. Although covered with two feet of drifted snow, I was comfortable in my bivouac. However, out on the plateau Carman and Gove were having a bad time. At midnight, seeing ominous gray streaks forming in the sky and not wishing the party to be separated in a storm, they had packed and started. Within an hour, in the middle of the exposed plateau, the storm hit them. For a time they continued to follow the willow wands, but the wind, which was blowing directly into their faces, eventually forced them to bivouac. When they set up the tent, the wind shook it so hard that they decided to take down the pole. With the loose cloth flapping over them, they spent a noisy and sleepless night.

At 2:00 p.m. in the afternoon of July 9th, the storm abated. The clouds were packed solidly at 14,000 feet, and a high wind was coming off the summit ridge, but visibility from Camp VII to the summit was good. Nickerson, Patterson, and I prepared to start for the summit, but when Carman and Gove were sighted on the plateau, we waited for them to arrive. To no one's surprise, they could not go further without rest. Because it was now 6:00 p.m. and the weather was unsettled, we decided that Nickerson and Patterson should leave immediately for the East Summit, while Carman, Gove, and I would wait until 3:00 a.m. and then attempt the Central Summit.

Nickerson and Patterson started up a moderately steep snow-face, where they were protected from the southwest wind which was blowing hard above them. At 18,000 feet they reached the

southeast ridge of the East Summit and came into the wind's full force. The final section of the ridge is not technically difficult, but wind and high altitude slowed their progress. They were able to see the summit until, 200 feet below it, a fog obscured their view. When they gained the top a few minutes later they could not see at all. It was 10:00 p.m. They shook hands, took two photographs, and left.

The storm which encircled them on the summit made their descent difficult. After fighting through a complete whiteout and hard driving snow, they made their way back to camp at 12:30 and received our congratulations.

July 10th and 11th were miserable days. Two feet of snow fell, and, although our campsite was protected, the wind was the worst that we had experienced. Breathing was difficult outside the tent or cave. During the morning of July 11th the storm reached its peak, and the end of the tent-pole was driven through an aluminum cup which was being used as a base.

The weather remained unsettled on July 12th, and with food remaining for three to five days, we were forced to abandon our attempt on the Central Summit. During the morning, it cleared enough for us to descend from the plateau. Most of the willow wands had been buried by the storm, and we made a visual descent to the crucial ramp at 15,500 feet. Below this the condition of the snow was not good, but we avoided any unpleasant incidents. Below 14,000 feet we dropped once more into fog which later turned to falling snow. It took us four hours to descend the Second Knife-edge Ridge at 13,000 feet, and we spent the night at 12,600 feet at Camp IV.

The snow stopped falling at 5:00 a.m. the next day, July 13th, and, for the first time since July 1st, it was a perfect day. However, this was no great blessing, since we were now in danger of avalanches from three feet of new snow. We waited until the evening to continue, and did not reach Base Camp until the night of July 14th. There, Bert discovered what appeared to be a minor case of frostbite on his foot; however, it was later diagnosed as trenchfoot, and healed without permanent damage. Perhaps twelve consecutive days of storm, during which we could not air or dry our socks, contributed to this injury.

In the next days, Nickerson and I flew directly to Kluane Lake while Carman, Gove, and Patterson walked 35 miles to Walter Wood's camp and proceeded from there by plane.

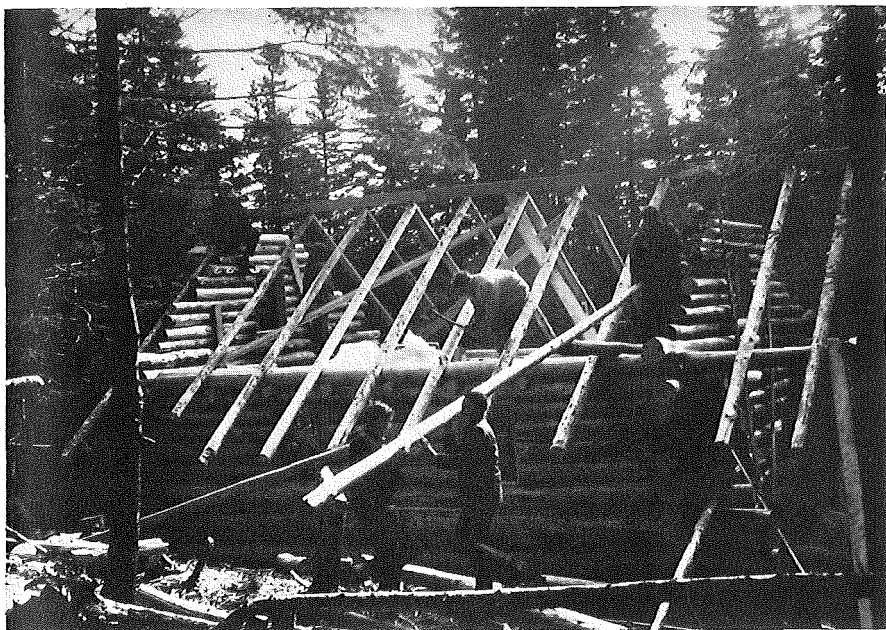
# Three Sweaty Months on Mount Washington

## The New H.M.C. Cabin

by ROBERT B. REDMAYNE

**I**N its declining years Boot Spur Cabin was increasingly beset. But, like most great institutions it fell not at the hands of one enemy, but only through the efforts of all its detractors. In its final year it was: too old, too small, unsound, an eyesore, a fire-trap, and in the way of a ski trail. In short, it had to go.

During the Spring Vacation of 1962 several sites were staked out along the stream running out of Huntington Ravine, sites which promised more convenient proximity to the Ravine's gullies and more seclusion from wayward hikers. In early June, the snows melted and exams ended, and we re-examined and selected the location. It lies in the neighborhood of a half mile from the Ravine floor and about half that distance from the Tuckerman Fire Trail. To the east and west the site is immediately lost in thick forest, on the north it falls into a stream and on the south into a small swamp. It had all the pre-requisites; water, a thick



THE NEW CABIN IN PROGRESS, SEPTEMBER, 1963.

*E. Carman*

stand of tall and straight spruce and fir, and a reasonably clear and flat area on which to build.

The building began with the digging, and when the digging began all reason connected with the task fled. Rotten-appearing stumps displayed a tenacity worthy of oaks; slender, weak-seeming spruce proved to be coniferous icebergs, their bulk revealing itself only after hours of digging and chopping; and finally, there was rock, omnipresent under a film of soil. Each of these early days ended after twelve hours with only the smallest dent in the hillside to show for Herculean labors. Clean healthy expectations of hard work in a spring scented forest were dulled into a dirty depression wrought by hours of clawing into the wet, sticky half-soil that covers the middle slopes of the mountain. The faltering resolve of the few daring dirty souls who elected to work during the June weeks was renewed every five days by the weekenders who arrived each Friday night rested and vigorous and who left tired and crestfallen each Sunday night, or earlier. Finally, on a glorious June Saturday the slope succumbed to a mass effort culminating in the hauling, placing, and cementing of the foundation stones engineered by a Scottish mason named MacRae.

Expectations rose now at the thought of spending the rest of the June preparation in the romance of felling trees, interspersed perhaps with excursions to the Fire Trail to carry in building materials. But fallen trees must be stripped, and June was baptised sticky by the rivers of pitch which lie under the bark of every spring spruce and fir. Obstacle followed obstacle. Trees that were supposed to crash to the ground with a roar didn't. Instead they leaned on their brothers and had to be coaxed to the ground with time-consuming cajolery. As the number of trees felled in a day decreased, the number estimated to build the cabin rose. The huge foundation logs took days instead of minutes to winch down and settle onto their respective berths on stone pilings. The final week-end of the two week June work-party is a sequence of impressions seen through sweat-filled bug-tormented eyes. First, and everywhere, is the dusky apparition of Rick Millikan, unwashed, uncut, unshaven after two and a half weeks of labor. Then there is the lingering taste of peanut butter spread with a rusty twelve penny nail. There is the brilliance of gleaming spruce logs, newly stripped and white in the dark woods. And there is the procession of eager Harvard friends and acquaintances lured up by Ted Carman from weekend to weekend, shocked and appalled by the dirt and the work, exhausted



and mute after two days.

The weekend of June 22nd ended all concerted work at the site for the summer. This peace was broken only twice; once to saw still more trees and again to reinforce the foundation logs. It had been a frustrating two weeks and once optimistic construction timetables lengthened. The new cabin, it was said, would not be finished before the summer of 1963.

Enter the hero, in the grizzled person of Freeman Holden, ex-big league baseball prospect, ex-furniture maker, ex-wood-sawyer, the compleat carpenter, spinner of stories tall, funny, dirty; hunter and fisherman extraordinaire. He could also build log cabins. As Ted Carman thought about it over the course of the summer it became apparent that the only way in which the cabin could be built before winter would be to hire a professional. Freeman was recommended, and after some maneuvering with his possessive employer he was engaged for two weeks early in September, during which time it was hoped that enough errant club members could be mustered to give him sufficient support on the job.

At first it seemed as if June's misfortunes would spill into September. The winch needed to haul logs to the cabin site was unprocurable. Ingenious Tom Roth thought up a substitute that he made out of five logs found on the forest floor, but after hauling several logs down with it, its gasping horsepower was dubious. Then Fortuna changed her course. Roth's fecundity coupled with Carman's eagerness developed a two man technique for guiding the logs down that considerably lessened the work of the two persons at the makeshift winch. Their technique was further amplified on Monday morning with the arrival of Freeman. Up to this point a mysterious logging instrument known as a 'peavy' had been used by the men from Harvard as little more than a caveman's lever. It remained for the eighth-grade-educated woodsman to show how civilized a tool it was. With a developed peavy technique it became possible for four clumsy young men and Freeman to handle the logs with ease, to bring them down to the site, to pull them onto the cabin floor, and to raise and position them. Optimism sparked anew as Freeman revealed skill after skill: sharpening saws, planing rough logs with his amazing axe, working an eleven hour day.

Soon the cool early fall days fell into a scheme imposed upon them by Freeman's deep Yankee vigor. Up at six fifteen and a quick breakfast of hot food and drink, followed immediately by

a jaunt to the work site. A log was hauled into place and soon the rhythm of the work day began to his metronome swearing. Put the log in place — swear — measure it for the notches — rich profanity — notch the log with chain saw and axe — variations on the previous theme — put the log back in place — crescendo or diminuendo depending on the virtue of its fit. Repeat the movement for one or two cycles around the cabin's walls. Finally, a grandioso of magnificent cursing as the rain began to fall; and it invariably did. September became a month of music: of Freeman, of his axe, of Ted Carman's shouts as each log was spiked into place, of contented sighs after a meal of ham and blueberry muffins, of air and stream and forest as Autumn shook Summer from its siesta.

On the weekend there was a break as Freeman went down the mountain and the faithful horde of weekenders came up. Conspicuous among these, both in sight and sound, was Ritner Walling. Add to the spectacle of Walling directing his coolies from M.I.T. in digging holes for his dynamite the cry of "Fire in the hole" and a shattering noise, and one has an outhouse hole and a garbage pit. In the course of this final weekend of the September stay most of the odd, nagging jobs were gotten out of the way by a plentiful labor force and once more the arrival of Freeman was awaited.

The last five days of the Big Leap Forward were augmented by the return of Millikan from the Tetons, still unwashed, uncut, and unshaven; and by the arrival of Charlie Bickel from rock-hunting in Maine. Freeman showed a rapt audience his virtuosity on a new Homelite saw brought up over the weekend that cut notching time in half. The race with Harvard's registrar went down to the wire but by Friday morning, September 19th, the walls were up and the rafters started. Then we knew at last that the cabin would be finished by Winter. (In October it was crowned with a roof. In December the floor of the loft was laid and a stove that can only be compared to Nebuchadnezzar's furnace was installed. More small work remains to be done.)

Six reluctant undergraduates walked down to the Notch that morning, to be met by blazing Fall making its seasonal trek to the tree line. It was hard to leave: the hunting stories, the intense physical activity, the plentiful dinners and deep-sleeping nights, the feel of nature against the skin. The only spirit that accompanied us was the feeling of having done something that would last a long long time.

# H. M. C. Activities, 1961 - 1962

by EDWARD C. CARMAN

## ROCK CLIMBING

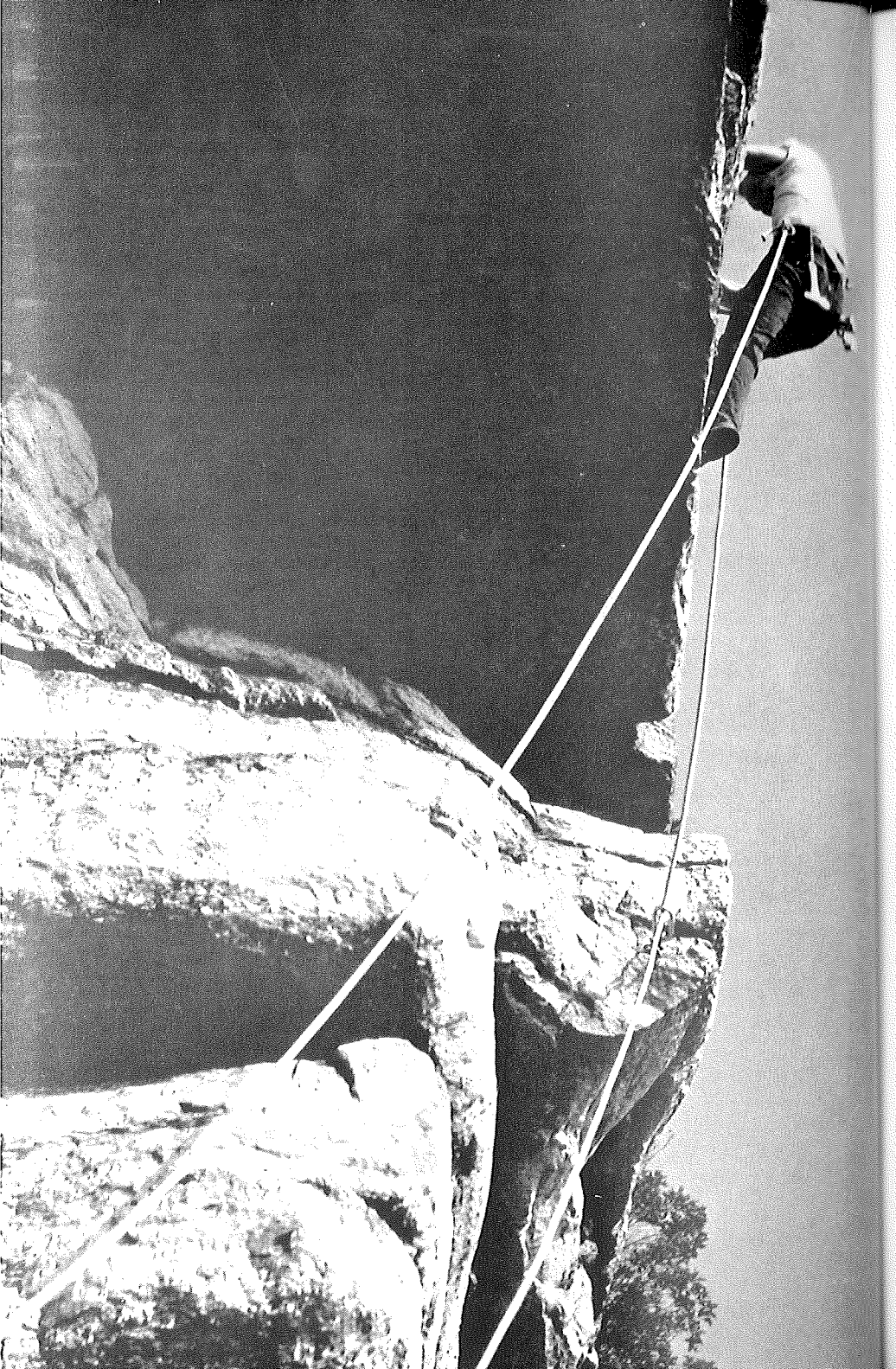
Interest in difficult rock climbing has increased in recent years, and the Shawangunks have grown in popularity. On Friday evenings in fall and spring, ten to twenty climbers often headed down the Mass. Pike to New Paltz and the 'Gunks. A succession of hearses, the traditional transportation, supplied many humorous breakdowns on the way. The caliber of climbing has improved steadily. Many of the eleven undergraduate leaders can do routes of extreme difficulty, and the team of Pete Carman and Rick Millikan surmounted the formidable 5.9 *Apoplexy*.

The Club visited the New Hampshire climbs approximately once each season. Whitehorse, Cathedral, the Cannon face, and the Pinnacle gave many a taste of long alpine climbs. The Whitney-Gilman route on the Cannon face was climbed half a dozen times (probably for the first time in winter by Leif Patterson and Henry Kendall), and in one grand weekend eight climbers ascended the face by three different routes. Pete Carman and Millikan went up the Kann-Course in the middle of the face, a series of wet slabs and direct aid pitches which is seldom climbed.

Book-weary students in search of an afternoon's relaxation often went to Quincy Quarry, the scene of training trips where beginners were initiated in the rudiments of climbing and safety technique.

## WINTER TRAVERSES

The Club's annual attempt to traverse the Presidential Range from Randolph to Crawford Notch during the four days between semesters has become popular. The Fifth Winter Traverse in 1962 was limited to fourteen, divided into two groups. Bickel, Abrons, MacRae, Graham, P. Carman, and Ward started up the Webster Cliff Trail from Crawford, intending somewhere near Mt. Washington to meet R. Millikan, Knott, Clark, Roberts, Young, Redmayne, T. Paige, and T. Carman, who started up the Howker Ridge Trail on Mt. Madison. Reality shattered their hopes for godspeed, for bad snow-conditions, nefariously wandering trails, and inclement weather ended this Traverse in the fashion of most of its predecessors.



The first group met impossible conditions: without snowshoes, they broke the crust and were swallowed by up to six feet of soft snow; with snowshoes, they stayed on the crust but skied backward two steps for every step forward. Time and energy were exhausted chopping steps for bearpaws. After four days and six miles of technical snowshoeing, having reached the summit of Mt. Webster, they returned to Crawford.

At the other end of the range progress was no more impressive. Signs of the Howker Trail having disappeared, the second group bushwhacked up close to timberline and camped comfortably. Late the next afternoon, as they reached the summit of Mt. Madison, the wind and snow started and they raced to the Madison Hut. Half of the group climbed Mt. Adams the next day in a blizzard and the others skirted the upper regions of King's Ravine. After a brief council of war at Adams Col, a retreat was ordered to the warm stove of Crag Camp. The long trip back to Cambridge ended the Fifth Traverse.

In 1963 the weather was kinder and the trails more visible. The Sixth Traverse again split into two groups: Graham, Roberts, Muir, and Young once more attempted the Howker Ridge, while R. Millikan, Jensen, Redmayne, Hale, R. Wood, Coler, Shurecliff, and Birney went from Randolph to Crag Camp. The black hearse and a station wagon left Lowell House on Wednesday evening loaded with gear and people. Two blocks away, a familiar scene occurred. The hearse's wheels locked and it slowly glided into the wagon which had unfortunately been able to stop on an icy incline.

The Howker Ridge group succeeded in bushwhacking to timberline by Friday afternoon, and they cramponed up Mt. Madison and Mt. Adams before camping in Edmond's Col. The next day, in rising wind, they climbed Mt. Jefferson and Mt. Clay by instruments, and reached the shoulder of Mt. Washington where they met a full gale which forced them to self-arrest on level ground. They retreated down the Jewell Trail and snowshoed out to Crawford. All the next week, muffled swears and "... only 800 feet more and we would have made it. . ." were heard in Cambridge.

The Crag Camp company set out Friday amid sunshine and cold still air. As the day continued to live up to its morning promise Mt. Adams, Mt. Jefferson, and Mt. Washington fell beneath their

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*H. L. Abrons*

HIGH EXPOSURE IN THE SHAWANGUNKS

steps. The weather had been too good to last, and as they emerged from Lakes of the Clouds Shelter the next morning, the climate deteriorated. Soon, bad weather became extremely bad, and blinding snow forced them below timberline just before Mt. Pleasant. On the trip back to Cambridge, only one auto accident occurred.

### ICE CLIMBING

In March 1962 an accident caused by an avalanche occurred in Huntington Ravine. Fortunately, the outcome was not as serious as it might have been. Chris MacRae and Don Jensen were climbing on wind-blown snow above the steep ice-pitch high in Damnation Gully when the whole slope slid away. MacRae's ice-axe belay rapidly became useless, and the two roped climbers were carried out of control for 1,000 feet until they came to rest on the floor of the Ravine. MacRae suffered a twisted leg, but was able to assist Jensen, who had broken his shoulder-blade, to the first aid cache at the bottom of the Ravine. They waited until Rick Millikan, Chas. Bickel, and Hank Abrons returned from their climb. They were evacuated to Pinkham Notch by 7:00 p.m. This points out the danger of avalanches in Huntington Ravine.

In both 1962 and 1963, all the gullies in Huntington Ravine were climbed. Pinnacle Gully was ascended seven times by a total of 25 persons.

### SAFETY

The Standard and Advanced Red Cross First Aid courses were again sponsored by the Club.

The telephone which the Club has maintained in Huntington Ravine for safety purposes was wiped out last spring by a large rock-slide. At the moment there are no plans to replace it; the proximity of the New Cabin renders its function less necessary. A litter, blankets, and basic first aid supplies are still tucked snugly in their cache at the bottom of the Ravine — the slide managed to miss them. A litter is also kept at the New Cabin.

### CAMBRIDGE

In the fall of 1961, Hank Abrons engineered a display of photographs in the window of the Harvard Trust Company. Color prints represented Climbing Camp and Mt. Logan, Alaska and the Himalayas, the Shawangunks and Crow Hill. The people of Cambridge seemed to enjoy the pictures — at least, they stopped to look.

Improvements of the Library and Clubroom were made by

Don Jensen, Rick Millikan, and Pete Carman. New bookshelves were added and the furniture and books were rearranged. Several members generously donated furniture to the Clubroom.

### MEETINGS

The Club heard lectures on the Climbing Camp, Cordillera Blanca, Mt. Logan, and Mt. McKinley Expeditions described in this Journal. Henry Kendall spoke about Yosemite rock and Peruvian ice, and again about his ascent of the Walker Spur of the Grandes Jorasses. George Bell and Ad Carter described summer climbing in the Rockies and Wind Rivers.

We coaxed Terris Moore down from Maine to tell us about the 1932 ascent of Minya Konka, and invited Walter Wood from New York to show films of the St. Elias Range in the '30s. These were most interesting, and the contrast with the fancy airplane flights and down jackets of today was poignant evidence that the age of mechanized climbing is truly upon us.



## The Geological and Glaciological Program of the American Mt. Everest Expedition, 1963

by MAYNARD M. MILLER

### *Introduction*

THE American Mt. Everest Expedition, 1963, led by Norman Dyhrenfurth, provides a unique opportunity to carry out some pioneering glaciophysical studies and related field work in geology. Because of the expedition's other objectives, it is planned to concentrate this part of the scientific program along selective lines primarily in the discipline of glaciology, with adjunct observations in geophysical, geomorphic and bedrock geology where they are found to have unusual significance. Particular emphasis will be placed on the upper reaches of the Khumbu Glacier system and the Chomolongma (Everest) massif. Here some studies are anticipated of a kind not previously attempted in the Himalaya. The mountaineering and some of the physiological research

hopes of the expedition are fortunately compatible with the pursuit of this earth science program.

### *General Objectives in the Present Plan*

It is clear that there is ample scope for new research in the Everest region and that the proposed investigations can yield valuable results even though but concentrated in sectors traversed by the expedition and made otherwise commensurate with time and personnel limitations. The locus of the work is the Khumbu Glacier whose vacillations in recent decades indicate significant climatological sensitivity. Another advantage is that the nourishment zones of this glacier encompass one of the widest ranges of elevation of any main glacier system in the Himalaya. This means that glacio-physical parameters controlling its behavior may be expected to have broad regional significance.

The field work is being conducted both above and below the mean neve-line (i.e. 18,500'). Special attention is to be paid to the accretion zone in the Western Cwm during the course of ascent.

### *The Program<sup>1</sup>*

To paraphrase Sir Francis Younghusband's comment of many years ago: "On a Himalayan expedition one must have a plan, but if the wind blows be prepared to throw the plan to the wind." For this reason the key aspects of the program are of flexible nature. Emphasis will also be placed on glacier morphometric and movement study and on sub-surface structural and regimen measurements, as well as thermal characteristics. Where possible, the stress distribution within the glacier should be plotted and the zones of compression and extension delineated. The regimen aim is determination of the current state-of-health of the upper Khumbu Glacier and detection of trends or reversal of trend in the dissipation zone. To add to this, an investigation of marginal and englacial moraine patterns should be made. It is hoped that such evaluation will result in defining a prototype behavior pattern for systems of high ice in the eastern Himalaya. From this, comparison may then be possible with regional patterns of glacier fluctuations in coastal Alaska and in the Peruvian and Patagonian Andes where comparable orographical and atmospheric controls apparently exist. This is *teleconnection*, the long-

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<sup>1</sup> The geological-glaciological program is being supported by a grant from the National Geographic Society.



distance correlation of effects of climatological significance on a world-wide basis.

### *Specifics of the Khumbu Glacier Program*

The data gathering sites will be selected from gradient and hypsometric curves. Full advantage will be taken of the main expedition camps, the exact positions of which will, of course, be conditioned by factors encountered in the field.

#### 1. *Regime Measurements Above and Below the Main Icefall:*

From a study of photographs from earlier expeditions, the long-term variation of the mean neve line will be defined for an adequate interpretation of the accumulation/ablation trends. Measurements will be made to determine the elevation and areal extent of the zone of maximum annual snowfall, the record of retained accumulation over the last 30–40 years and the dominant mode of this accumulation. A study will also be made of the extent and nature of ablation, the relative effect of radiation-ablation vs. melt-ablation, and the length of the ablation season. Since development of the annual firn pack (retained granular snow outlasting each season) is controlled by the variables of accumulation and ablation, conclusions should be possible on the annual mass budget of the glacier.

#### 2. *Physical Characteristics of Sub-surface Firn, Snow, and Ice:*

By means of a snow kit, measurements will be made, especially at the Cwm camps, of density, hardness and firmness in the snow and firn to depths of 5 meters. Samples of firn will be collected in decontaminated bottles for subsequent pollen and particulate analysis and for determination of p.p.m. chloride and NaCl ion. Also, samples will be taken to 50 feet for natural Tritium and oxygen-isotope analyses. Below the neve-line, cores will be taken with the hand auger and an empirical assessment made of crystal size, water and air bubble content, inter-growth complex and strain direction (orientation)

#### 3. *Glaciothermal Measurements:*

This is perhaps the most significant of the research possibilities and one which has not as yet been programmed on high Himalayan glaciers. Englacial temperature data can have broad significance. For this part of the program, light-weight 26-meter and 18-meter strings of thermistors are being used. One will be

implanted on each of the movement transects and the longer ones inserted in boreholes at test sites at 21,000 and 23,000-feet in the Cwm. In addition, a dozen short-length temperature sensing devices will be used for shallow ice measurements. Mean and extreme crevasse depths will be measured both on the lower and upper glacier.

#### 4. *Surface Movement Surveys:*

Several of the surface velocity transects set up by Muller in 1956 will be re-established for detection of any significant changes in volume transfer over the past 7 years. Surface gradient measurements will also be taken at key positions on the glacier surface. Allied observations of tectonic foliation, overthrusting and crevasse patterning, as manifestations of discontinuous movement, will also be recorded.

#### 5. *Glacio-meteorological Records:*

Light-weight weather recording instruments, including plastic rain gauges, max.-min. thermometers, shelter screens and other standard recording equipment, . . . such as thermographs . . . will be installed at Thyangboche and Thukla, near the terminus of the Khumbu Glacier (15,158'). Meteorological observations will be systematically obtained at the Khumbu Icefall Base Camp (18,000') and at the advance base in the Cwm (21,500'). Further records, if possible, will be taken at Camp III (23,000') and at Camp IV (25,800'). If all goes well, a few days of record at the South Col (26,200') will also be maintained.

#### 6. *Glacial-Geology and General Geomorphology:*

##### (a) *Depositional Features and Erosional Topographic Forms*

Moraines, morainic remnants and glacio-fluvial terraces below Thukla and from there to Namche Bazar will be noted for correlation with valley flank features in the Khumbu Glacier area.

While enroute to and from the upper glacier, several traverse profiles will be made of the moraine systems on the lower Khumbu Glacier. The level of all *berms* (bedrock shoulders) and cirques produced by former glacial high-stands along the valley walls will be noted as important indicators of former ice levels.

A close scrutiny of rock weathering at high levels and any evidence of major grooving and striae in the outer zones will be noted and integrated with observations of other geomorphological features. This kind of information is elemental in the interpretation of outer glacial limits of the Pleistocene.

(b) *Pre-glacial Morphology and Evidences of Recent Crustal Movement*

All evidence upon which conclusions about the pre-Glacial morphology of this sector of the Himalaya can be drawn will be cited to add to the random observations reported in the literature.

(c) *Glacio-botanical and Other Observations*

Among the enroute studies which are possible is the relative dating of remnant moraines of the lower Khumbu Glacier. This may be aided by careful description and measurement of lichen and their substrata.

7. *Bedrock Geology*

So that the main glaciological efforts, as outlined, will not be jeopardized, investigation of bedrock geology will be minimized to spot assessment of the structural attitude of bedrock outcrops and the collection of key samples to be studied petrographically in the laboratory at a later date.

A gravimetric survey at selected locations will also be carried out, using a light-weight gravity meter. This instrument will permit calculations of glacier depth on key transects, as well as be useful in the extension of the world-gravity network into this theoretically thickest zone of the earth's crust.

\* \* \* \* \*

In conclusion, it is reiterated that the glacial-meteorological character of the glaciers in Nepal is but the reflection of the climatological character of the high Himalaya. Both are little understood. Through our study we can hope to extend backwards, from the present glacial position into the past, the interpretation of morphological features representing the sequence of major Pleistocene and post-Glacial events. It may be possible to relate these oscillations to patterns recently worked out for other low and middle latitude Cordilleran regions of the globe. Such correlation with the Himalaya has as yet hardly been developed, because of lack of sufficient details from this part of Asia. The prospects are good, however, since in each of the aforementioned regions there are similar linear ranges paralleling a main continental margin and separating opposing cyclonic and anti-cyclonic weather systems.

# High Altitude Pulmonary Edema

by CHARLES S. HOUSTON, M.D.

In the past few years acute pulmonary edema of high altitude has indeed become a *cause celebre*. This "physiological disease" (rapid water-logging of the lungs) occurs in some individuals who go from low to high altitudes allowing too little time for acclimatization — and it can be rapidly fatal.

In June, 1962, the Fifth International Emphysema Conference meeting in Aspen Colorado (altitude 8000 feet) discussed the many unknowns in this fascinating condition but did not reach any conclusions. Well demonstrated was the fact that constriction of either small veins or small arteries in the lung can produce high blood pressure in the arteries of the lungs. Equally well shown was the development of edema in lungs when their blood pressure remained high for some time. Not so clear was the cause of the blood vessel constriction — except that oxygen lack would cause it — and even less clear was whether or not this vascular change was important clinically. Least clear was a satisfactory treatment other than evacuation to low altitude or oxygen administration.

So the condition remains much as it did last year: certain individuals will accumulate fluid in their lungs very quickly if they climb above 10,000 feet too rapidly, either for the first time, or after an earlier ascent and re-descent. The disease is often called pneumonia. It occurs very much more often than ever suspected, and it can kill in a few hours.

Recently the rapid transportation of troops to high altitudes in the Indo-Chinese "border incident" resulted in a large number of these cases. Forewarned of the possibilities, Indian medics had prepared a booklet on the subject — but this did not prevent or cure the affliction. In a series of cases they concluded that no medication or treatment other than transportation to sea level had any beneficial effect. They tried digitalis, diuretics, aminophylline, blood letting, extremity tourniquets, and oxygen — and claimed no benefit. It should be added that this observation does not agree completely with others made of a few patients under hospital conditions. Nor has any one found a way to prevent the condition except by taking time to acclimatize.

Pulmonary edema remains something of a puzzle, and very much of a problem for those who go high too fast.

# The Theology of Mountaineering

by PAUL JOHN RICH

FOR many climbers, mountaineering is a religion. Alpine literature is replete with mystical allusions. In *Annapurna*, Maurice Herzog writes, "For us the mountains had been a natural field of activity where, playing on the frontiers of life and death, we had found the freedom for which we were blindly groping and which was as necessary to us as bread. The mountains had bestowed on us their beauties, and we adored them with a child's simplicity and revered them with a monk's veneration of the divine."

Growth in mountaineering activity is mistakenly attributed to the Renaissance and the rise of the scientific spirit of inquiry. But mountaineering is not the child of the Renaissance and the Scientific Revolution. The Renaissance attitude towards mountains was contemptuous, for mountains lacked the discipline and restraint that the Renaissance exalted in the classical revival. Thomas Burnet wrote in 1681, "They have neither Form nor Beauty nor Shape, nor Order . . . they do not consist of any Proportion of Parts that is referable to any Design, or that hath the least footsteps of Art or Counsel. There is nothing in Nature more shapeless and ill-figured than an old Rock or Mountain, and all that Variety that is among them, is but the various Modes of Irregularity."

Increased interest in the mountains is due to the Romantic movement and the writings of Byron and Wordsworth. Wordsworth's sonnet on the Simplon Pass and Byron's dramatic poem *Manfred* with its Oberland background are good examples. Then, of course, there is John Ruskin, whose paintings of mountain scenery sparked the interest of many in the real mountains. If present efforts to give a scientific veneer to expeditions arouse irritation, it is perhaps because mountaineering springs from religious and Gothic tastes rather than analytical and scientific inclinations.

Mountaineering represents a theological heresy variously identified as naturalism, pantheism, transcendentalism, Universalism, Unitarianism, and latitudinarianism. Its American expression in theology and religion is to be found in Emerson, Thoreau, Frothingham, and other 19th century thinkers. In all these liberal theological movements there is an appeal to Nature, and a firm belief in the values of this world as opposed to some other world.

Nature has its own values and teachings, and it is not necessary to develop a *systematic* theology or to appeal to Holy Writ. Man and Nature stand in a constantly deepening relationship, engaged in a constant dialogue.

The mountaineer is often represented an initiate, the possessor of knowledge denied to the layman. Sir Leslie Stephen says in *The Regrets of a Mountaineer*, "I say that the qualities which strike every sensitive observer are impressed upon the mountaineer with tenfold force and intensity. . . . He has learnt a language which is but partially revealed to ordinary men. An artist is superior to an unlearned picture-seer, not merely because he has greater natural sensibility, but because he has improved it by methodical experience; because his senses have been sharpened by constant practice, till he can catch finer shades of colouring, and more delicate inflexions of line; because, also, the lines and colours have acquired new significance, and been associated with a thousand thoughts with which the mass of mankind has never cared to connect them. The mountaineer is improved by a similar process."

The epitome of mountaineering as a religion is to be found in the life and writings of George Mallory. Since the disappearance of Mallory on Everest in 1924, the interest in his enigmatic greatness has not faded. One recalls the bravery and adventure of the exploit, and even more, the intensity in which the whole adventure was lived. The late Dean of Harvard Divinity School, Willard Sperry, was sufficiently intrigued by Mallory to discuss him at length in his book *Reality in Worship*. Dean Sperry heard and recorded some remarks of Mallory on an American lecture tour shortly before the last expedition:—

The first question which you will ask and which I must try to answer is this, "What is the use of climbing Mount Everest?" and my answer must at once be, "It is no use." There is not the slightest prospect of any gain whatsoever. Oh, we may learn a little about the behavior of the human body at high altitudes, where there is only a third of an atmosphere, and possibly medical men may turn our observation to some account for the purposes of aviation. But otherwise nothing will come of it. We shall not bring back a single bit of gold or silver, not a gem, nor any coal or iron. We shall not find a foot of earth that can be planted with crops to raise food. It's no use.

So, if you cannot understand that there is something in man which responds to the challenge of this mountain and goes out to meet it, that the struggle is the struggle of life itself upward and forever upward, then you won't see why we go. What we get from this adventure is just sheer joy. And joy is, after all, the end of life. We do not live to

eat and make money. We eat and make money to be able to enjoy life. That is what life means and what life is for.

One of Mallory's companions on the 1924 expedition, Captain John Noel, has asked, "Did Mallory and his companion perhaps feel that exalting urge to be above everything in the world and to get a glimpse, so to speak, of God's view of things? Did Mallory's spirit drive his body to death?"

It is interesting in this respect to recall Mallory's own comment, "Have we vanquished an enemy? None but ourselves. Have we gained success? The word means nothing here. . . . To struggle and to understand, never this last without the other; such is the law."

Thus mountaineering raises the most profound questions about existence, and brings Man into dialogue with Nature. The lesson is that running life's race is not enough, that conventional goals are not sufficient. There are claims upon us that would make us more than domesticated animals. Mallory, then, did not choose death on Everest. He chose life.

## In Memoriam

ARTHUR BREWSTER EMMONS, III

On August 22nd, 1962, Arthur B. Emmons, III died of cancer at age 51 after a few months' illness.

Art joined the Harvard Mountaineering Club in its early years and became its President for two college years, 1934-5 and 1935-6. In 1930 he was a member of the H.M.C. trip to the Selkirks, and that same year went on Bradford Washburn's first Alaskan venture to Mt. Fairweather.

Taking college leave of absence, Art spent two years on the Sikong Expedition, 1931-3, which first surveyed and climbed China's highest mountain, Minya Konka, 24,900 feet. He sustained an accident after reaching 23,400 feet and eventually lost the forward part of each foot from frostbite. *Men Against the Clouds*, the account of the expedition, was written by Art and Richard Burdsall and published in 1935.

Undaunted by having to learn to walk all over again, and equipped with special boots, Art left in 1936 with the British-American Himalayan Expedition which he had helped to organize. The expedition reached the summit of Nanda Devi, 25,645

feet, and established a record which stood for many years for the highest mountain ever climbed.

Art joined the State Department in 1939 as a career Foreign Service Officer and had attained ambassadorial rank in Class I, the highest echelon, at the time of his death. From his many foreign posts he climbed in the Andes and in the New Zealand Southern Alps; in fact, wherever he could reach his beloved mountains.

Art Emmons was one of our great mountaineers, and the H.M.C. can take pride in the part it played in his early mountaineering years.

## Climbing Notes

1961

*Shiprock.* Our climb of Shiprock, the 1,700 foot spine of rock projecting from the New Mexico desert, began one chill Saturday morning in March. Having no love of fifth class back-packing, we avoided a bivouac by fixing ropes the first day. On Saturday, using the fixed ropes, we started up the great black dike forming the first part of the route, passing the overhanging first pitch, several third and fourth class pitches on loose rock, and a fifth class pitch. Now astride the main fin, with the imposing north summit directly above, our problem was to get around this rotten tower. We accomplished this by rappelling a wide chimney in the east face to a broad sloping ledge from which the route crosses around the north summit on its south side. Rich Baldinger lead several hundred feet across the wandering traverse ledge, then surmounted a double overhang with direct aid. Tom Cathcart, Fred Smith, Dave Boore, and I prussiked up to him and scrambled up 300 feet of twisted yellow rock to the "horn pitch", where we had a terrifying view down the west face to our pathetic "base camp", two cars and a pup tent on the desert floor. The horn pitch involves  $\frac{1}{4}$  inch bolt-hangers and a rope toss. Tom, Fred, and Dave got past the problem with some effort, and climbed the remaining few hundred feet to the summit. Meanwhile, Rich and I, casting baleful eyes on the storm mounting in the west, decided to reverse direction and prepare the descent. As we began to prussik up the ropes we left in the chimney, and the others struggled across the slippery traverse below, the first snow fell. We



rappelled the dike in snow and gathering darkness. In the morning Fred and I retrieved some ropes we had left behind; this was messy, but getting the cars out later was worse, as the desert had turned to mud. The drive was harder than the climb had been.

Shiprock is worth a trip. It is one of the classic climbs in the country. But I'm not sure I'll go back for those last hundred feet unless I can somehow arrange to start at the base of the horn pitch.

*Note:* Shiprock is on a Navajo reservation and should not be climbed without prior contact with the Tribal Park authorities at Window Rock, Arizona. — *Steve Jervis*

*Tetons, Cascades, and Wind Rivers.* By late June, Chris Goetze and I were already in condition for the coming Climbing Camp. We had been among the first climbers to arrive at the very snowy Tetons, and we were the first party of the year on all our routes. On the first day, in terrible shape, we staggered up South Teton. Then, after feeling somewhat better on the Northwest Couloir of Nez Perce, we undertook an ascent of Nez Perce's East Ridge. We then moved to Ampitheater Lake and ascended Mt. Owen by the East Ridge, where we encountered the only mountain thunderstorm of our trip. After climbing the East Ridge of the Grand, we returned to Garnet Canyon and climbed the Dike Route on Middle Teton. We ended our stay at the Tetons with a climb of the Underhill Ridge of the Grand, an enjoyable route that is surprisingly seldom climbed.

We drifted on to Washington and decided to climb Ranier. Like everyone else, we discovered that Ranier's most formidable defenses lie in the resolution of the rangers not to let outsiders climb the mountain. After our first summit attempt was turned back at the Paradise Ranger Station, we performed a successful flanking movement and, finding a cooperative ranger at White River, quickly made the year's first ascent via the Emmons Glacier.

Following Climbing Camp we returned to the Cascades, but after climbing Mt. Shuksan by the usual "Hourglass" Route on an exceptionally hot day, we were drawn back to the Tetons by the recollection of more pleasant weather. But the snow was gone and hordes of climbers had since arrived, so we sought seclusion in the Wind Rivers, where we climbed from a base-camp on Dinwoody Creek. We ascended Gannet by the North Face using a short unpublished variation, Bastion, Woodrow Wilson, Koven, and Sachem. We made a triple traverse of Warren — Doublet —

Dinwoody and threw in Miriam's Peak in order to justify our plans to overeat and oversleep the following day.

The summer had been very dry, and all snow had disappeared from the range. But there was much soft ice which enabled us to crampon up steep slopes without cutting steps. A storm prompted us to leave the range a day early, and we followed the bad weather back to the East Coast. — *Charles Bickel*

*Arctic.* From early June to mid-September, I was isolated with Jim Walker of the Yale M. C. and a fifteen man Air Force "support crew" on Fletcher's Ice Island, or T-3, in the Arctic Ocean. Jim and I were conducting a geophysical research program for Columbia University. The program included continuous recording of ocean tides, seismic events, magnetic field fluctuations and microbarographic changes in air pressure, as well as a special study of underwater sound transmission.

Our thirty-miles-square island was grounded in the mud about 60 miles northwest of Point Barrow in a water depth of 120 feet. Not without occasional surprises, visitors during the summer included polar bear, Arctic white fox, Steve Den Hartog, seal, walrus, one fly, a Navy icebreaker and occasional parachutes. The level topography of the island precluded any climbing, so we indulged in white-water life-rafting on the melt streams which developed during the long days of the Arctic summer. — *Bob Page*

1962

*Tetons.* Pete Carman, Tom Knott, and I spent July climbing in the Tetons. As this was the first time any of us had climbed there extensively, we contented ourselves with the standard routes. Although Huey, the god of storms, was not always benevolent, and Bill Briggs's Teton Tea parties were not inductive to early starts, we did a number of interesting climbs.

Irene's Arete, one of the prominent ridges of Disappointment Peak accessible from Garnet Canyon, is an exhilarating high-angle climb, even after a whole night of tea-imbibing. The first two pitches lead easily to the steep part of the Arete. The rest of the climb is sheer joy: thin faces, 'Gunkslike ceilings, high-angle friction, and finally a difficult finger-jam. And just when it seems that you are at the top, a short overhanging wall appears. Sharpen your fingernails for this one!

We did the East Ridges of Owen and the Grand Teton. Then, lured by the famed "chockstone chimney", we joined Dennis Dunn

'62 in an assault on the North Ridge of the Grand. This is a fine climb, but long, and we did not reach the summit until 6:00 p.m. after a 5:00 a.m. start from Amphitheater Lake. Except for crossing the 'schrund, we were able to climb unroped to the top of the Grandstand. Here we put on klettersshoes. Three leads brought us to the chimney. The move over the chockstone was not very difficult, but certainly unique. The rest of the climb was straightforward.

We climbed several routes on Symmetry Spire. Tom, Pete, and I did the Southwest Ridge, but were forced to rappel down the South Face in a miserable snow-flurry. Dennis and Pete later completed the route. Tom and I did the Jensen Ridge.

Pete and I climaxed our stay with an ascent of the South Buttress of Mt. Moran. This has to be one of the finest climbs in the Tetons. The climbing is consistently difficult and unusual, the exposure tremendous, and the view magnificent. We spent an afternoon wading through swamps, bushwhacking, and boulder-hopping to reach a high camp in a little cave just below the Buttress. On the rock at seven the next morning. What a climb! — up and up, smooth faces, overhanging chimneys, huge detached flakes, and finally the “pendulum pitch”, a perfectly polished 75° slab. We climbed free to the bolt and then pendulumed 30 feet across to a three inch ledge. A short direct-aid pitch and the difficulties are over. The route down consists of an overhanging rotten rock-couloir. Impossible? Go see for yourself!

Leaving the Tetons, Tom went home to be married, and Pete, Dennis, and I joined Mike Wortis '58 for two days in the Sangre de Cristo Range in Colorado. — *Rick Millikan*

*Tetons.* In early August, Leo Slaggie and I joined Ritner Walling in his Piper Comanche for a cross-country flight to Wyoming to indulge in the pleasures of Teton climbing. As luck would have it, Leo injured his knee packing out of Hanging Canyon after the two of us had abandoned an attempt on the northwest corner of Rock of Ages following an all-night storm. With Leo's climbing ended, Rit, Steve Larsen, Jeff Moore and I did the south ridge of Nez Perce from a campsite at the Platforms. Sound rock, some high-angle pitches and moderate difficulty made this climb most enjoyable.

Wanting to do a long moderate ridge climb, Frank Gutman and I set out for the entire north ridge of Teewinot — and returned to Jenny Lake 27 hours later. The climb begins at Hidden Falls

and after some difficult bushwhacking puts one on the long pinnacled ridge which leads to the north face via the Crooked Thumb. The exposure and views of Mt. Owen to the west make the ridge-scrambling superb. Poor route-finding on the northeast face slowed us down and we reached the summit just in time to watch the sun set. Finding a route down the unfamiliar east face by the light of a full moon provided a tiring, but fitting, end to this seldom-done route. Two days later, Steve Larsen, Rit and I were blitzed off the southwest ridge of Symmetry Spire on our last climb of the summer. The next day the Piper Comanche was eastward bound. — *Bob Page*

*Jasper.* During the summer I attended the Alpine Club of Canada Camp at the head of Maligne Lake in Jasper Park, Alberta. Stormy weather during the first week prevented some ascents, although many of us chose snowstorms on the peaks in preference to rain in camp. However, the second week brought sunshine and the chance to try some new routes. Rising 5,000 feet directly above camp was the rock buttress of Monkhead (10,535 feet). For years climbers have camped on the same gravel flat, but no one had climbed Monkhead from this side. In response to the challenge I set out at 4:00 a.m. with Pat Baird of the Arctic Institute and Roger Brown to try the west face above Coronet Creek. Deep gulleys in the first two vertical steps brought us up two-thirds of the way using only four pitons. An error in route-finding required an exciting lead up a waterfall and a 100 foot rappel to mount the third step. This brought us to the summit at 4:30 p.m. We descended on the far side, over glaciers and through bush, and reached camp in time to eat an early breakfast with the climbers starting out the next morning.

After the A.C.C. Camp I drove to Glacier Park on the new Trans-Canada Highway through Rogers Pass. At the Wheeler Hut I joined some friends for an ascent of the northwest ridge of Mt. Sir Donald — a delightful climb. — *Donald Morton*

*Northern Selkirks.* On July 14 I met William Putnam, Graham Matthews, David Michael, all of the H.M.C., and Jed Williamson from U.N.H. at Downie Creek. Our goal was the Carnes group. We were enticed to try a short-cut via Keystone Basin, and we spent the next five days bushwhacking, hiking in rain and fog, or bewildered in camp. Such are the advantages of "easy approaches". After we reached the cabin at the end of the Kelly Creek trail and waited a day to allow new snow to slide off the

peaks, Putnam, Matthews, Michael, and Williamson made the third ascent of the south summit of Carnes Peak via the southwest ridge. The next day we moved camp across the valley to attempt a first ascent of Bridgeland. Our route led along the glacier below Bridgeland's broad face which had been spewing forth extraordinary avalanches. We gained the northwestern cirque and followed an easy snow slope to the west ridge that led to the north summit. After some deviations onto the face, well led by Williamson, we followed up easy rock to the north summit where we had a glorious view of Robson to the north and Sir Donald and the Purity group to the south. We traversed to the higher south summit, where extensive cairn-building was done on the edge of the cliff. We rejoined our ascent route and returned to camp by a number of splendid glissades.

The next day we packed out and headed for Glacier and some climbs in the Southern Selkirks and the Bugaboos with the Bells.  
— *Benjamin G. Ferris, Jr.*

*Southern Selkirks and Bugaboos.* Walter Goad, my wife Ginny, and I were up at the Hermit Hut climbing Mt. Rogers when Ferris, Putnam, Matthews, Michael, and Williamson arrived at Glacier, B.C. While waiting for us to return, they climbed Uto. Although trails can be followed to timberline on Uto, this hardy crew carefully chose a route which required hours of steep bush-beating before finishing the ascent from the Uto-Sir Donald col. The next undertaking was an ascent of the splendid Northwest Arete of Mt. Sir Donald by Matthews, Michael, Williamson, Goad, and myself. Upon reaching the summit we were threatened by advancing clouds, and we spent an unpleasant afternoon descending the South Face during a series of violent thunder and hail storms. After recovering from this harrowing experience, the party (minus Matthews and Goad) went to the Bugaboos. First, everyone climbed Pigeon Rock from Boulder Camp, obtaining splendid views. The next project was to be an ascent of Snowpatch Spire — filmed by Putnam. Michael, Williamson, and I reached the Snowpatch but were frightened down by gathering clouds. Then it rained and snowed for many days. During this period Putnam diverted a stream across a moraine, thereby depositing a colossal amount of moraine onto the glacier below, and Michael and I wandered up the wet North Face of Marmolada, finding (perhaps) a new route. Finally, everyone had had enough and left. Michael and I joined Bill Hooker and Bill Buckingham

on the spectacular North Face of the Tower of Babel, a 1,000 foot climb on surprisingly good rock which can be reached in twenty minutes from the road at Moraine Lake. — *George Bell*

*Canadian Rockies.* In July and August I climbed in the Canadian Rockies with Bill Buckingham. In the Assiniboine Area we traversed Wedgewood and Naiset with my wife. We attempted Mt. Bryce via the east ridge but were turned back below the east summit by bad snow conditions. With George Bell and Dave Michael we Climbed the Tower of Babel. Then, north of the Columbia Icefield, we climbed Woolley and Diadem, and the East Peak of Stutfield. The latter was done in one day from the highway by climbing rock to its north col; descent was via the Columbia Icefield and the Athabasca Glacier. This was probably a first ascent of what may have been the highest unclimbed peak (over 11,000 feet) in the Canadian Rockies. — *William W. Hooker*

*Swiss Alps* — Four days after my arrival in Zermatt, the town sages predicted two days of perfect weather — the first in a long while. I made ready to spend them on the Matterhorn. The aesthetic qualities of the route up the Hornli Ridge were as low as expected. I had arranged with Werner, my guide, to have a try at breaking the “three hour mile” (from Hornli hut to the summit) which we just did, making the climb in 2:55. The summit view was superb, with peaks stretching in all directions under a cloudless sky. A day later I found a climbing partner at the youth hostel for a try at the Breithorn. A heavy rainstorm foiled that attempt, however, and we had to settle for the Theodulhorn, a messy rock climb. The descent provided some excitement when heavy clouds shrouded the summit and made downclimbing the bad rock unfeasible. A series of bollard rappels on a long snow and ice slope brought us down safely. — *John Graham*

# Membership of the Harvard Mountaineering Club

(A) indicates Active Member

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