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Skyladder.. Mt Andromeda *Hans Fuhrer*

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Cover: Big Bend route, Hans Fuhrer leading Edi Klopfenstein

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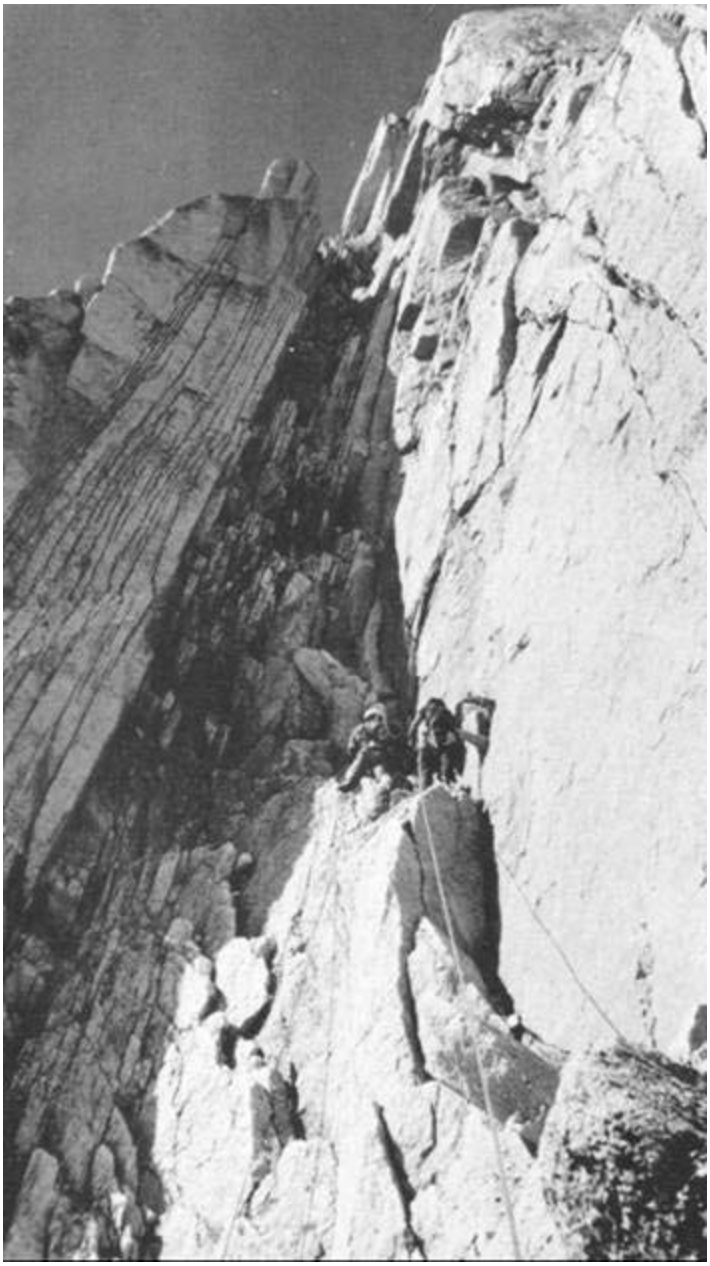
In fractured rock late on the second day, West Face of North Howser Tower
Chris Jones



When do climbs begin? Not when we rope up at the start, surely, but when the idea of the climb first begins to intrigue us. Maybe we have read about the route in a journal, or have seen a peak in the distance that excited us. Then, often over several years, some of these shadowy ideas begin really to take hold, to become climbs that we simply have to do—we are obsessed by them. It must have been sometime in 1966 that I first read Chouinard's Yosemite expose, with its call to arms to attempt the great alpine walls. "The future of Yosemite climbing lies not in Yosemite, but in using the new techniques in the great granite ranges of the world . . . The western faces of the Howser Spires are from 3,000 to 5,000 feet high . . . Who will make the first ascents of these breathtaking rock faces?" (AAJ 1963)

In 1967 I was in the Bugaboos for the first time. That year I went 300 yards beyond Boulder Camp before breaking my leg bouldering, (or perhaps failing to boulder) an activity I have subsequently shied away from. A bad omen, I should have sold all my gear and taken up bird watching. Shortly after my crash three Chicago climbers arrived in camp having just climbed the west face of N. Howser (CAJ 1968, p. 205). Chouinard, who was with us on this ill fated trip, questioned them closely on their climb and afterwards said that he was certain their route was near the existing Beckey-Greenwood route (CAJ 1965, p. 143), and not on the big face. (Beckey has since said their route should be called the Northwest Face.)

Around 1969, thinking Canada once more, I read both Zvengrowski's account (AAJ 1968. p. 174) and Beckey's, where he states "it is the highest precipice in the range and until Brian Greenwood and I climbed it on Aug. 5, perhaps its outstanding unclimbed challenge", but from all I could tell the real prize was still waiting. At this time the idea of the Howser face was just one of many. I made a point of talking to Beckey, however and received the usual vague reply, and from Chouinard heard about the violent storms that sweep into the Howsers from the west—"You wouldn't be able to move in one of those mothers".

By early 1970 Canada was again luring me, and I began to comb old journals for new clues. The description of the first climb on the back side of the Howsers—the West Buttress of South Howser by Beckey and Chouinard—was intriguing enough "an overwhelming panorama of granite buttresses and couloirs . . . Our immediate reaction was: Patagonia. The Howsers looking like FitzRoy and Cerro Torre and their satellites all grouped together." (CAJ 1965, p. 140). But I had yet to see a single photo of the face. By all accounts the wall was larger than El Capitan with a reputation for bad storms. Obviously this was not a climb that would appeal to everyone—I was far from certain that it appealed to me. One evening in Galen Rowell's "war room" he showed pictures of what he had seen of the Howsers from Pigeon. "What about that pillar on South Howser?" said he. "Yes, could be ... or maybe the big face, it sort of appeals more," said I. Whatever, we were going to get a close look at the beast. Sometime later Brian Greenwood suggested that we join a Calgary group who were having supplies helicoptered into the Howsers, and when Galen was finally unable to come, we established ourselves under a boulder beneath these Patagonian walls.

Several days of snow and liar dice later the weather cleared and we had our first real look. Or was it real? Vast granite walls bore down on us, enclosed us, demoralised us. Camp was on a spur beneath Central Howser and, way below our spur, the almost unbelievable wall on North Howser began, to pass us and continue some 2000' more to the summit. Bigger than the west face of the Dru, it was far more oppressive than I had supposed: too large to comprehend, too large for us.

Luckily there were alternatives. From the glacier above us a ledge led onto the south west face of North Howser and connected with a prominent crack system. While this was not the big daddy, it promised to be an excellent climb, and one we would come to grips with, (AAJ 1971 p. 389; CAJ 1971 p. 77)

The Howser Towers from the south west: North Hower - 1 West Buttress, 2 West Face, 3 South Face. South Howser - 4 West Buttress.

After the climb, in order to photograph the face. I went as far as I could down the spur between Central and North Howser. I made a schematic of the face with the possible routes marked down. Though not at all certain that I wanted to return I knew one thing—the problem of the west face had not been solved. During the winter, knowing I do not have to put plans into practice for some months yet, I usually become bolder. Sitting round a good fire with a jug of ale, snow swirling outside, I wonder why I did not attempt such and such last year. Getting too old, too cautious? After all, it was not that bad! By insidious means such as these the formerly impossible becomes possible, even attractive. The following spring Galen and I studied pictures of the wall, thought about it and decided to give it a whirl. It seemed to us that the climb would take three to four days, combining the scale of El Cap with the objective problems of a remote alpine climb.

Certain climbs become landmarks for us; before we attempt them we know that we are deliberately reaching out, and, when they are behind us they provide a basis, a reference point. Perhaps the most significant climb for me in this respect was the Walker Spur of the Grandes Jorasses. It turned that I could do, even enjoy, these legendary climbs—it was all pretty exciting. Four years later, under Chouinard's watchful eye, we were attempting what appeared to me to be an awesome new route—the north face of Assiniboine, Once more this enabled me to expand my horizons, and now we were up against it again on the west face. No American party, as far as we knew, had yet climbed such a large Yosemite type wall in a remote alpine setting—was this what Chouinard had been talking about?

In the spring of 1971 all sorts of rumours popped up: a Calgary contingent were going to helicopter into the Howsers to seige the climb if necessary, then Chouinard was supposed to be going in. In the end a poor spell of weather washed out the Calgary team and it looked as if Galen and I would be hoofing it alone,

A week before Galen was in Canada I was in the Bugs with Tony Qamar and sold him on the west face, sight unseen. This was good for morale all round, a three man party being stronger than two. We ferried loads into the Howsers and saw my old adversary

in a new light—this time we were after it. Back down the dusty Bugaboo road and in again I met Hans Gmoser loping down the trail.

"Where are you headed?"

"Oh, to the back side of the Howsers."

"Ah-ha, unfinished business," said Hans with a knowing smile.

Originally we had planned to use bat tents, but as only Galen had one, we ditched that idea in favor of lighter gear, the old com promise between speed and safety. There was snow visible on some ledges so I hoped to avoid having to haul water. The discussion was resolved when I stumbled and threw our water bottles to the depths below. With four days food, ice axes, bivouac food and so on our haul bags would be heavy enough anyway. After another excellent meal on the supplies we left last year, labelled "ragout de boeuf" on the can, but known to you and I as stew, I was woken by both the alarm and snow drifting onto my face.

"Hell, we're screwed, its snowing."

"Damn right, I'm getting wet, move over."

Later that day it cleared, and we took the chance to make a topo of our proposed route and the variations. The harder we peered at the climb, the better it looked.

The following morning, as I was about to enter the descent couloir, we noticed my day pack was coming apart. Already looking like a patchwork quilt, I fixed it again—we were not about to stop now for lack of equipment. After a hard first pitch Galen called down that the climbing eased above him. This lower part of the wall has only one weakness, and from the spur we had never been able to see what it was really like. The overall difficulty of the route would depend greatly on this section, and it was turning out easier than we had anticipated. In a gully for the most part the climbing was mostly moderate fifth, sack hauling evolving into horrendous bouts of sack carrying. Delicate face climbing eventually took us onto a ledge leading to the spur we had to reach. After one day we were where we had expected to be after two, the weather was perfect, and ahead the climbing looked superb. I was both pleased and disappointed, for we had built ourselves up to a major effort. It would be good to see if we were up to it.

The next day we had all the difficulty we wanted, the climbing being consistently at 5.7 or above. With a lighter haul sack and the increased steepness of the face we began to cover ground rapidly. The second man would jumar up the rope and immediately begin the next pitch while the third man would remove the pitons. Our Yosemite experience paid off as we seemed to devour each succeeding pitch with cold blooded efficiency. It was hard climbing, some dozen pitches being 5.8 or higher, but all free save for 30' we kept right on storming up. As we neared the summit our topo was a decisive factor in enabling us to choose from a number of possibilities. After a region of poor rock, the first on the climb, we broke out onto the summit ridge. Racing the clock our 34th lead brought us on top just before sunset, to be greeted by the shouts of a party on Bugaboo Spire.

Back at camp the next day we went over the climb. True, it had not been as demanding as we had expected, yet it was probably the first Grade VI in the Interior Ranges on what is most likely the greatest granite face in the Interior. Although we had not made a personal breakthrough to a new alpinism we had made an exceptional climb that stood as its own justification. The fact that we had been prepared to go beyond what was familiar, to try something new, was also most significant to us, for the decision to attempt a major climb, to crack the aura that surrounds it, is often as hard as the climb itself. (Climbed: 29, 30 July 1971. Grade VI, 5.9, A2)

Chris Jones

Mt. St. Elias

Emboldeded by past successes, the BCMC expeditionary camp this year decided to attempt Mt. St. Elias which, at 18,008'. is the second highest peak in both Canada and the U.S.A. Its position on the Gulf of Alaska makes it one of the meanest mountains anywhere. In fact, it has had only five successful ascents since the Duke of Abruzzi first planted his iron bed-stead on the summit in 1897. About 30 attempts have been mounted and their reports have given prime coverage to blizzards and avalanches. Like masochistic!

July 10 was a busy day. We arrived in Yakutat, Alaska from Seattle and learned that an Italian party had been on the mountain for the past five weeks, was due to be flown out that day, and had reportedly climbed our primary objective, the east buttress. Because they had fixed wing and helicopter support from Anchorage, we never did meet them. We next made an air reconnaissance of our approach march and of the east side of the mountain, sighting the Italian base camp and tracks both on the east buttress and in its adjacent valley. No tracks were visible to the upper shelf of the Newton Glacier below the headwall.

On the same day we flew into Oily Lake, nestled at 1500' between the Samovar Hills and the mighty Malaspina Glacier. (The bubbling, gurgling lake is indeed covered with slicks of oil amidst its icebergs.) This approach route is believed to be an innovation, although one of necessity rather than choice. No ski-wheels could be found, and approach from Whitehorse or by helicopter was just too expensive. We flew with Gulf Air Taxi of Yakutat, and pilot Butch Vent.

In high spirits, the next day we shouldered packs and skis and headed up easy snow slopes to a 3800' col at the north east end of the lake. What a view! The massif of St. Elias rose against a clear blue sky, its south face buttressed by rows of ridges and jumbled icefalls. Below us, the Agassiz Glacier stretched reflecting the warm sun.

We decided to cross a col in the divide between the Agassiz and Newton glaciers rather than tangle with the nasty icefall at their junction. Next morning, delay occurred in the aforementioned col (5800') when we discovered that the easy routes on either side did not meet. Eventually we tossed skis overboard and repelled. We

Mt. Saint Elias. Russel Col at right *Alice Culbert*

Mt. Jeannette from the Newton Glacier *Alice Culbert*

especially appreciated these skis while shooshing down hundreds of feet in minutes out onto the Newton. But, moments later, we found them a real nuisance, forever tripping on the ropes as we threaded through crevasses.

Second camp was about 5500' in the middle of the Newton. With raised eyebrows we observed wispy lenticulars float about the summits of St. Elias, Augusta and Cook. We also spent considerable time observing a most unusual phenomenon on the outskirts of Mt. Malaspina—a 2000' stream of falling rock! Except for occasional coffee breaks and two or three strikes of longer duration, the Egyptian Rock Quarry, as we dubbed it. rarely stopped clattering and thumping. Its permanent dust cloud became a landmark.

Our third camp (base) was reached in 11 hours, six of which were spent crossing two crevasses necessitating route finding, preparation, pack hauling and photography. Our air drop was due next day, but the weather pattern was rapidly going sour, with clouds drifting above and coming up the valleys. With next to no food and visions of unending blizzard, we decided against wasting energy on recces, and instead sunbathed, while reading as a group project the only two books available. When our noses felt strong, we also made a couple of raids on the recently vacated Italian base dump. Strewn over a 500 square yard area were all sorts of half-burned expedition remnants, including much food, now inedible. We did salvage a few good tins of shrimp and tuna. Although this party could not have known of our arrival, their untidy camp and wanton wastage were disgusting.

With limited time and the now doubtful virginity of the east buttress, we eventually decided to go after the Duke's route.

July 17 afternoon; the distant din of an airplane engine caused more sudden activity than an avalanche alert. The little Cessna buzzed several times, dropped one box, then incredibly disappeared back down the valley. On the box was a message to the effect that our goods were in the Alaska Airlines Terminal, the operators of which had locked up early in order to go fishing! Our screams of

Crevasse problems on the Newton Glacier *Alice Culbert*

Looking down the Newton Glacier, Mt. Augusta on left, Mt. Cook in centre *Alice Culbert*

indignation must have been carried home on the winds, because our gear was duly dropped that evening and the next morning.

After a hearty meal, Fred, Ross, Dietmar and Alice set off at 8 p.m. to find a route over the toe of the east buttress and establish a cache site. Back in camp by 4 a.m., they had decided that while travel in the wee hours was feasible, route finding was nearly impossible due to flat lighting. Jim and Marg then began the unenviable task of ferrying loads while Steve and Jack went ahead to push a route as close as possible to the headwall. That afternoon, six of us sorted gear and high-graded the now excessive food supplies. At 4 p m. Dietmar and Alice donned heavy packs and set off to occupy the advanced base camp hopefully established by Jack and Steve.

The route was quite straightforward, involving a steep ascent up the toe with the aid of a Jumar on fixed line, much weaving between crevasses in the upper part of the icefall which drops away from the Newton's upper shelf, then seemingly endless slogging over rolling hog-backs till the dump was reached. It was still about 1 1/2 miles to the headwall but avalanche spoor deterred closer location. Dead tired. Alice and Dee finally turned lights out at 2 a.m. after pitching camp and fighting with the stove. Meanwhile, load ferrying continued below.

At 6 or 7 a.m. these two were off again, anxious to push as far as possible up the headwall while the others moved up to advance base. Despite all the speculation and fears from afar, the headwall was almost disappointingly easy from a technical viewpoint. Enticed by an anticipated view of Mt. Logan trail was established to just below Russel Col, when a 'schrund guarding the col robbed them of their reward.

Meanwhile, all was quiet at base. Finding the snow bridges too soft to be safe, the remaining loads were packed to the cache and the move to join the other two postponed 'till evening. It was while in the jumble of snow and ice below the toe that Fred fell over and lost a ski into a crevasse. Using his ample ingenuity, however, he was able to construct another from scrounging of wood and nails at the Italian site. About 11 p.m. both parties met at advance base, chased by an approaching storm.

Two days and 20 inches of snow later, all gear had been cached below the headwall and we were at last ready to move onto the mountain itself. By now the route established by Dee and Alice was of little use and largely unrecognizable. In fact, several large crevasses had filled in, making movement easier. In another two days we were established in Russel Col (12,400'), having decided to short ration ourselves rather than spend a third day ferrying on the headwall.

The soul of St. Elias must have been with us. That night a storm broke which kept us cave-bound for 5 days while it dumped 6 to 8' of snow. By the third day our tunnel entrance had grown from about 6' to 15' in length. By this time also, the four tenters decided to enlarge the cave and move in, persistent shovelling having done little to alleviate their collapsing tent. Only one break occurred during the 5 days, and then a highly contagious affliction of photoitis broke out. Such scurrying about must have appeared comical indeed.

Thursday 29 July was last chance day. Spirits low at the early morning weather report. By mid-morning, signs of improvement appeared. More scurrying.

After so much inactivity, it was great to be moving again. Mt. Logan wore a necklace of cloud while glaciers below made a carpet of theirs, although both advance base and the Italian site were visible. Snow conditions varied from hard on the north ridge to thigh deep powder towards the face, with a bit of ice thrown in. It was slow going, requiring 7 1/2 hours to gain about 3000'. Luck was with us and we were able to hollow out a drifted crevasse, plug a few holes and squeeze in for a crowded but relatively comfortable night.

Sunrise was beautiful: clear blue skies, sparkling snow. More crowded chaos in readying for the day ahead. Finally we were away shortly after 6:30. At this point Steve declared he wasn't up to the 3500' slog and decided to await our return. Except for Fred and Dee. who seemed to have unlimited reserves of energy the pace was slow. Perhaps a major tiring influence was a continuously buffeting surface wind, which denied relaxation and buried steps

as they were made. Snow conditions were again variable, though not nearly so bad as the previous day. Crampons finally made themselves useful. Except for about an hour of whiteout, during which time we followed Fred's nose, the view was magnificent.

Eight hours of slogging then at last—flat steps. The summit of Mt. St. Elias (18,008')—a dip between two low hills and shelter from the wind. 7° F. Mt. Logan. Is all that really Malaspina? What a relief not to be going up anymore. Photographs. Looks like early signs of another storm. We made it! Any signs of the Duke's bed? Seventy-four years to the day since he was here! No sign of the Italians, wonder if they really did make it? Better get going.

Ross and Marg had already left—Ross barely able to breathe and move. A bit below the summit he had begun coughing, but thought nothing of it. Now we realized he likely had pulmonary oedema. He somehow made it back down to the crevasse to rest while Steve cooked supper. Then we all descended to the familiar comforts of our cave. Ross was put to bed immediately, allowed no further exertion, and started on an antibiotic routine. We could only hope for the best, as our food was essentially gone and the weather deteriorating.

Carrying only a few pounds next day, Ross was able to move well and he seemed improved. Now we were in for a few surprises. Intermittent snow and extremely flat lighting caused us great difficulty in recognizing landmarks on the headwall. most of which had been obliterated by avalanches during the past week. This necessitated more variations in our route, and led, indirectly, to a serious accident.

It had been necessary to skirt a couple of huge crevasses on ascent, but these were now filled in. Heading straight down we were suddenly cut off by a narrow split, narrow enough to jump, but of the type where a suitable landing spot should be chosen.

This done, Steve jumped.

"My leg's broken."

"Oh come off it. This is no place for a joke."

"I heard something crack."

"You serious?"

Steve had landed on a deceptively hard piece of ground, was anchored by his crampons then torqued by his pack.

A shot of Demerol, a brew, and a level platform. A pow-wow.

While Alice, a nurse, would stay behind with Steve, the others would descend to salvage skis from the cache 700' below, and Marg and Ross would proceed to advance base to radio for assistance. Eventually Marg reappeared—cache nowhere to be found—buried by avalanches— all have proceeded to camp— Marg disappeared. Hmm. What to do. A limited scouting trip convinced Alice that a "shelf" 100 yds. away was a somewhat less undesirable location than the funnel in which they were now situated.

Ninety minutes later, a ramp had been built and Steve relocated. Just then the others appear with news that a chopper was on its way. We converted our large snow shovel into a "shovfram" by lashing a Kelty frame onto the handle, rigging a set of security straps, and padding the "seat" with ensolite. Steve, in a sleeping bag sat on the shovel, splinted legs extending up the frame. A man on either side was attached by a Jumar-adjustable yoke, while a third effected a brake-bar belay from behind. This system worked amazingly well, even in crossing the unbelievable chaos of avalanche debris 30 to 40' high which now spread from the foot of the headwall and beneath which our skis were entombed.

We weren't yet at camp when the chopper hove into sight, scooped up Steve, and was off to race the twilight. We almost envied him as the rain that night and the hot sun the next day made the snow soft and deep. However, from base camp to Oily Lake the trip was a relatively trouble-free two days on good snow. (We wouldn't have been so envious of Steve had we known that his chopper had been forced down onto the water by bad weather and then towed ashore by a fishing boat!)

In Yakutat we were greeted with beer and pancakes on the house (Dick Nichol's Gulf Air Taxi house), topped off with fresh salmon and Alaska King crab, "donated" by Butch Vent.

This was the 1st Canadian ascent of Mt. St. Elias, by a typically Canadian climbing party: Fred Douglas-Canadian born. Alice Culbert-Canadian born. Jack Bryceland-Scottish. Dietmar Setzer-German born, Ross Wyborn-Australian. Marg Wyborn-Dutch born, Jim Craig-Hungarian born. Steve Heim-American.

We have since received word that the Italians were successful in their bid for the summit, but that they claimed it via the Duke's route and not the east buttress. This claim seems strange in view of the fact that their tracks near the east buttress were still visible when one month old, while at no time did we see any sign of recent human encroachment on the upper Newton, the headwall. Russel Col particularly, or above. More tragic news was that of the avalanche deaths in August of John Hall, Lucille and Stanley Adamson, and Joan Deery; but at least the lone survivor had been able to use some of the supplies we had left behind.

A bad taste has also been left by the fact that Steve was charged almost 1 1/2 times the Yakutat-Seattle fare by Alaska Airlines to fly him from Yakutat to Juneau, and has since been presented with a $500 bill for his rescue. This was carried out by a private firm, but the Coast Guard refused the bill on the grounds they will assist people in trouble, but climbers climb at their own risk since they should know what they are doing; and it happened in Canada (Steve's being American seems to be irrelevant). While in Yakutat. we met the Comox Air-Sea Rescue unit, in the area for several days to search for a couple of Americans lost in Canada, for free. So don't get hurt.

Alice Culbert

Bonatti Pillar, pitch 14 *Helmut Microys*

Bonatti Pillar, Teutsch following pitch 7 *Helmut Microys*

Bonnatti Pillar

Snowed and stormed off the north face of the Tour Ronde—that damn slow party of Swiss on the Blaitiere. How could anyone in his right mind do the west face in one party of four? Why did Georges and I only take gear for a fast ascent? Another retreat— then that beautiful day we hiked around Chamonix when the weather forecast was for thunderstorms in the afternoon. Just because Georges saw a party get wiped out by lightning the previous summer. OK, so it was on the east face of the Grand Capuchin. so they were only a pitch above him, and Georges' retreat was an epic. But why so paranoid a year after the event—and now back up to the Fiammes de Pierre. Is this going to be another retreat? But the weather is too uncertain. It is too serious an undertaking. And what a near vertical heap of rubble this stuff is! At least we are going unroped—get killed with a rope on this garbage.

Yesterday Georges and I bombed up to the Charpoua hut in less than two hours from Montenvers. On the way to the Flammes de Pierre intense thunderstorms and rain—even I needed no convincing to run back to the Charpoua for shelter. What next? No head lights—mine, the last we had, broke down that very day. No ice axes or crampons—Georges, with his experience on the north face of the Dru, said we could do without. However, the hard snow in total darkness early in the morning is going to be a different situation altogether. Rain hammering on the roof. Then two latecomers—Dutch, brothers—competition? Salvation! They have head lights and we shall go together.

Waiting—sitting in the fog. Glimpses of three parties high on the pillar—cold in the fog. Eating up food—packed only enough for two days. We should have gone on, but it's foolish in this milk soup. Nothing works!

The day passes slowly. Our long silences are interrupted by discussions of what we shall do, what we should have done. We watch the climbers on the pillar, speculate about an orange-blue immobile object near the base of the climb. A body? Remnants of a recent lightning accident we find out later.

Rappelling down the gully to base of Bonatti Pillar *Helmut Microys*

In the afternoon a gigantic block, freely descending half the face, explodes on impact followed by the cacophony of stones chasing stones down the couloir. . . diminuendo . . . silence.

They were descending from the pillar (skipping the summit) when he stepped onto this block. Fell 30 metres, his partner held him more by chance than by design. Late that evening we bandage skinless fingertips and rope burned hands, trade a little food for some of our first aid supplies.

The night is cold. I cuddle my Hasselblad and go shiver, shiver, while Georges snores in his elephant's foot. Sacrifices of a picture taker.

There is little breakfast because we are already rationing our food. Then we start looking for a new descent route. Georges and I had made up our minds that we would not go down that heap of rubble again to the normal descent route. We had also noticed that there were two pitches to traverse into the couloir, and without the necessary gear it was better to go straight down. Jaap and Jan, our Dutch companions, join us.

The rock is a bit better, although still loose enough to feel sorry for anyone taking the couloir route up. I am glad Georges convinced me to come down to the base of the pillar rather than climb this suicidal gully.

Check anchor, knot OK, new sling, check carabiner brake, I lead the way down. Continuation looks alright. Georges comes with the second rope. We get the rocks of Jaap and Jan. I descend with the same routine, as the others above get the rope stuck.

At a minuscule, sloping ledge I find a solitary piton. An extra one is added for the anchor. Then off on a free rappel. I pendulum on the rope trying to reach a ledge to my left. No go. All the way down to the knot at the end of the rope. I think of Jim Madsen on El Capitan. A bit tense I swing into the open book before me. Four pins up, the rope is slack—a hanging stance. Testing the rope for retrival. It works. Next man! I could have guessed—the rope is stuck again.

Hanging, waiting. The dark gully 20 metres below, terminating around me in soaring walls. The cauldron from which the stony brew spills down the couloir. Across the way the pillar, grey, yellow and brown flutes rising to the sunny rocks above, never ending. I am becoming impatient. The rope is still stuck. Georges tells me to come up again.

Damn those guys up there. Three full-fledged mountaineers and they can't even get a stuck rope down. Prusik, prusik, prusik, I have to have a rest. What can I do up there? They should have tried everything by now. Stop bitching and get going Helmut! The rope is touching the rock, watch your fingers. Go, go, go— the frustrations drive.

We are all hanging at this impossible ledge. I lead on upward. The frustrations are eaten away by the sudden change in potential energy. A pin or two, the stuck rope for aid. Then that sickening sound of rock grinding over rock—I let go, fall, wait for the stuff to come down. Lucky. A few more pins and the rope is free. On both ropes 70 metres into the couloir.

Test for retrieval: Georges. Test for retrieval: Jaap. Test for retrieval: Jan. And the rope is stuck again! My execrations rise, rise up the walls; the first stones are coming down. Brute force, gentle coaxing, finally standing in the middle of the couloir flipping ropes around. Then with my full weight it moves. A pendulum traverse across the ice, hanging on the rope with my hands, into the arms of Georges as the rope crashes down behind me—the new, doubled, 5 mm sling broken. Lucky, again. The mountain still craving a sacrifice? No time to think. One more rappel across the couloir to the base of the pillar. It is past noon.

I am ready first and start. There is some loose stuff on the ledges of the first pitch, like overflow from the fussilades in the couloir. Then the famous rock starts—solid, steep and warm now. We try to climb quickly to get as high as possible today. The Dutch are right behind us. They ask politely whether we would wait and let them pass. After having done all the work so far Georges and I intend to stay in the lead. We tell them so even though we realize that they may be faster climbers.

On the third pitch we go slightly off route; on the fifth pitch the real difficulties start. On the sixth pitch Georges takes the easiest line and finds himself off route again. I can't read the French guide and listen to translations. Up the horrible jam crack it says, and Georges comes back for it. It turns out a trifle easier than it looks. Clouds envelop us, we climb on. Then some aid and more cracks. Killing myself in one of those monsters—constantly jamming the rope with my boot while trying to get higher at the same time. Georges runs up it easily.

Near 5 o'clock we reach a big pulpit-like ledge. Eight pitches in a little more than four hours. We stop for the first rest of the day. Georges and I have not eaten anything for the past twelve hours. We are starving, but restrain ourselves and stick to our rations. Jaap and Jan, well equipped, eat to our envy. The fragrance of their oranges tantalizes my nose; atavistic urges surface, spin grotesque

fantasies. Georges later confesses similar primitive thoughts—us sitting on the ledge eating apples and oranges with Jaap and Jan disappearing into the fog.

The fog is still with us but none of us seems to be concerned or nervous about a weather change.

Two more pitches is all we do. We cannot make the very good bivouac ledge two pitches higher before dark. George and I settle reasonably well on a sloping ledge, while Jaap and Jan try to get comfortable on some rather narrow and bumpy stuff. Staying in the lead certainly paid off here. The skies clear in the evening and a cold night follows.

The cold gets me up first again—it is a beautifully clear day—and automatically makes me the leader. In the distance Blanc glistens brilliantly in the sun, while we struggle somewhat sluggishly in the shade. Soon we see a party at the Flammes de Pierre following our descent route of yesterday. Two other parties are coming up the couloir.

Then we reach the bivouac ledges we should have made yesterday. Too bad indeed, because there would have been lots of room for us. The party on our descent route is silently rappeling. They do not find our last anchor but use instead a piton and an old sling which I had left when recovering the stuck rope.

"Georges, they are heading for disaster if they go straight down." Too busy climbing he does not answer.

"Don't you think we should tell them where to go?"

"Maybe."

"OK, you start in French."

We get no response and I try the English version. No reaction, so we climb on. The big overhang below the famous 50 metre wall takes all our concentration. It is strenuous but not very difficult. Lots of pitons. I bridge, pull up, using the etriers only near the end to get onto some small ledges. The exposure is wild. A short pitch to an uncomfortable belay and it's my turn to start the 50 metre wall.

A few rickety old wood wedges with the thinnest slings possible lead up to the long thin crack which passes through this blankest, steepest, and most exposed section of the whole climb. This is the alternative to Bonatti's lasso manoeuvre of the first ascent found by subsequent parties. The exposure is fierce and one can see right down to the start of the climb.

We are so absorbed in our climb that we have all but forgotten the party on our descent route. As expected, however, we notice their difficulties in finding an anchor on the smooth, steep face to which they had rappelled. From their signals we determine that they speak English. Suddenly, for the last time, we are reminded of their existence. A scream pierces the morning air—terror, the certain knowledge of death. One of the climbers rappeling from what must have been a loose block is pulling block and partner down the couloir.

My ears ring from the scream . . . the cacophony of stones chasing stones . . . the famous engraving of the Matterhorn disaster. . . Munch's painting ... a dry mouth, thirst . . . silence.

"The English?" Jan and Jaap did not see.

"Yes, they are dead ..." "Are you alright?" Georges asks.

I hang from broken wedges and old, thin nylon slings, testing every piton, feeling none of them to be any good. More pitons, I calm down. The heat is unbearable now. Rope drag, a tension traverse around a corner, out of rope, a belay—uncomfortable. Images repeat, I can't erase the scream. Was this the sacrifice? Georges is really suffering from the heat. We drink the little water we have left. Only 1 litre each in 2 days. Georges goes on, slowly. He feels faint as I go on to the next lead, a long free pitch. A terrible semi-hanging belay in an open book. Drops of water collecting near my head are caught one by one in the depression of a climbing nut. Later Georges licks the drops one after another as we hang silently at the belay.

"Can you go on ... I know I can."

"I'll try," is Georges' feeble reply.

On a wobbly pin he starts a very strenuous overhang. Steadily he takes out the rope. My turn. At the end of the overhang I find Georges' etriers. I pack all of them away and find myself doing one of the hardest, most strenuous pitches, hanging onto the few fixed pins whenever I can. He must be suffering from heat stroke already! Georges is in one of his superman states. Completely fagged out he puts up one of the hardest leads. I praise him by scolding him.

We are slightly off route but continue straight up. Others have gone here and the shoulder can't be far. Maybe there is some water there. We all hope. Although Jaap and Jan had more water than we, they are also suffering. Water becomes the most essential commodity for all of us.

For one who climbs in Yosemite it is essential to face the sensation of intense thirst stoically. Some of my experiences in the Valley help me here. My mouth is dry, talking difficult, yet I know I can climb on for quite some time. Georges realizes this, and from now on I stay in the lead.

Shortly below the shoulder we hit the first patch of ice and snow deep in a crack. We all chew lumps of ice and can only slowly separate ourselves from this precious mine. More snow at the shoulder, but no water. We linger, trying to catch water and melt snow. After this lubrication we have some of the remnants of our food.

Although we do not want to admit it for a while, the continuation of the climb follows a terribly wet and steep chimney—according to the guide the last obstacle. The water drops seem to be spread out for uniform coverage—enough to get us completely soaked, but not enough anywhere that one could drink. Our Dutch friends, so eager yesterday to get into the lead, resist all offers.

It is getting late. We have lost several hours. I seem to have the greatest drive to get off this place—mainly because I visualize what this chimney must look like after a cold night—and so I lead off, first to the baptism. Climbing desperately fast between positions which promise a minimum of irrigation, I find myself out of rope at a stance where only a quick change into my cagoule prevents me from getting totally soaked. Still no water to drink. While belaying Georges I discover, well hidden, a good drip, which although not accessible to a bottle, can be used to fill a plastic bag which I have along. Water at last.

The final problem becomes how to get to the summit and off the mountain. None of the climbers we observed actually climbed onto the summit. Jaap, Jan, and I, however, are interested in bagging the peak. Georges figures that once is enough. After three pitches of chimneys, the guide directs, it's easy to the summit. Georges is leading again and manages to find one hard pitch after another. I am getting annoyed that Georges cannot remember how he got off the north face route, and even more so because the guide is so vague.

Finally, with the rope stuck, and Georges' usual laconic comment "It looks alright" which is bound to produce at least one 5.8 move, I decide there must be a better way and refuse to follow. Georges returns, furious. While we wait for the others he sits across from me silent, glowering. He has a wild temper. We follow the line of least resistance. We are still on the ridge and we know we should not be here. In the gloaming Georges tries to force me up a difficult unprotected chimney in our desperate search for a reasonable bivouac site. I refuse. We later find out that it leads to the top of a pinnacle. We have already decided to bivouac, when on a hunch I have Georges belay me to look around an overhanging corner. I find a pin, swing on an etrier, and look at the most beautiful flat ledge anyone can imagine when searching for a bivouac site.

Bad tempers subside after this discovery. I sit on the ledge watching the others swing around the corner, their silhouettes outlined against the last red of the evening sky.

Just water for breakfast. Georges and I ate our last morsels the night before. Three easy pitches to the summit, after finding the route by following an earlier guided party on their way to traverse the Drus. Georges still adverse to the thought of going to the top, but he has little choice if he wants to stay tied to the rope, as I lead all the way.

The descent a nightmare of stuck ropes, loose blocks, and uncertain rappel slings. Our recent experiences have left too deep an impression. We reject rappel points that several parties only hours before us had found adequate. We look at the pillar as we descend and find it deserted.

The heavily crevassed Charpoua glacier is crossed in the heat of the day, all of us properly tied in, without much trouble. I look with disbelief at the trail which we had followed in the dark only 3 days ago, unroped. In retrospect I am glad it was dark.

In Chamonix standing in the public shower I think of the many gallons of water pouring over me. I taste the warm water thoughtfully, consciously, close my eyes—a psychedelic feeling in being alive.

(Mont Blanc Range: Bonatti Pillar of the Petit Dru, 3733 metres; with J. G. Teutsch, 28 to 31 July 1971; NCCS VI, F7/F8, A2)

Helmut Microys

You can't get there from here: The Remillard Group

Remillard Peak is situated 11.5 miles north west of Mt. Sandford, and is the central peak of a south west wing of the Windy Group. The area which will be referred to as the Remillard Group is made up of those peaks and spires that surround upper Windy Creek. The map sections containing these peaks are 82 M/9E and 82 M/16E.

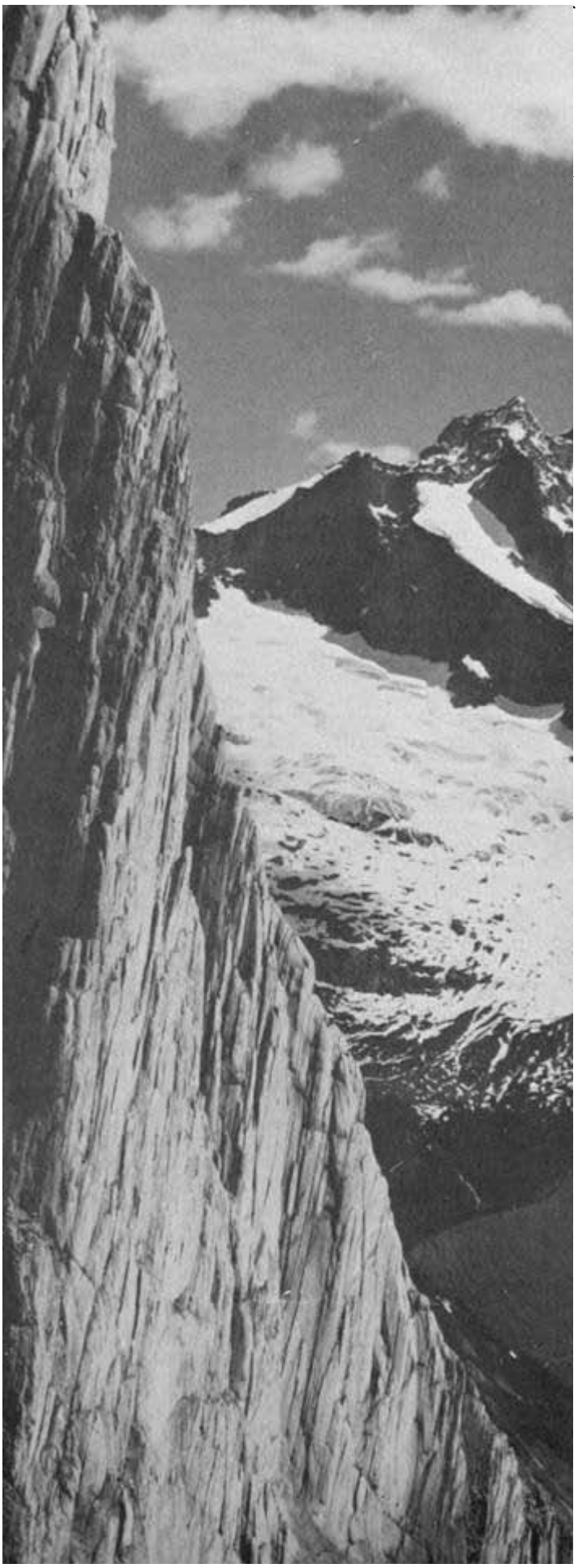
The rock of this area is generally of two types; the peaks near the upper Remillard Glacier, Unnamed F, and "Craw Peak" are of the monzonitic granite found in the Adamant Batholith, while many of the remaining peaks are of the Lardeau formation, many of them crumbly marble. The former almost always means excellent climbing rock, where as the latter generally is much less reliable. Beginning on or about 14 July 1971, a group consisting of Dr. George Bell, Morgan A. Broman, James Fitzgerald, Gordon Freedman, Linda Harris, David Jones, Andrew J. Kauffman, June Lehman, David Michael, Jr., William L. Putnam, Lowell Putman, Karyl Roosevelt and myself spent ten sunny and enjoyable days in this area. Due to the large number of the party and the vast amount of supplies needed, most of the members went in by helicopter from Mile 54 near the mouth of the Goldstream River. However, Bill, Morgan, Gordie and I made the arduous trip up Swan Creek, with its zillion voracious mosquitoes, to the Fairy Meadow Cabin laden with supplies needed to affect repairs. After a few days of labor, Gordie and Morgan were picked up and flown in, with Bill and I walking in the next day.

Our route over was mostly on snow, starting with a crossing of the Colossal-Unicorn col, and an abortive attempt at skiing down to Austerity Pass. A rappel was needed to descend the moraine of the Austerity Glacier. Then we traversed Austerity Pass and ascended the sources of Stitt Creek, to the lowest point on the north east ridge of "Craw Peak"; thence down to "Nadir Notch" and camp on Windy Creek. The total time was 14 1/2 strenuous hours with medium packs. Permanent camp was already made above the large gravel flats just about at the 6000' level on Windy Creek.

In reading the descriptions of the climbs and points of interest that will follow one should remember that the spring of 1971 was cool with an unusually heavy snowfall, and where snow is mentioned here, another year may find the spot bare.

The area may be divided into four sections—the peaks south of Windy Creek, most of which surround the upper Remillard Glacier; those north of Remillard Peak, which includes three peaks of

Adamant from the South Face of Whiteface Tower *George Bell*



Several days later, two parties reached the summit by different routes on the same day. One party, consisting of James Fitzgerald, Andy and Bill reached the upper basin as the first group had, and proceeded across it to a low point in the south east ridge. It would have been Class 4 from there to the summit via the ridge, but in attempting to contour around a highpoint in the ridge on the south side, they got mired in a sticky spot, and even had to place pitons to extract themselves.

The other party of Dr. Bell, Linda, Davy Jones and Judge Michael likewise reached the basin via the ramp. However they chose the north east ridge as their route, and stayed on or near it all the way to the summit; climbing on good rock of 5.4 difficulty. The only tricky spot was a difficult rappel at the second notch. Their time up was 9 hours. Both parties descended via the east snow face.

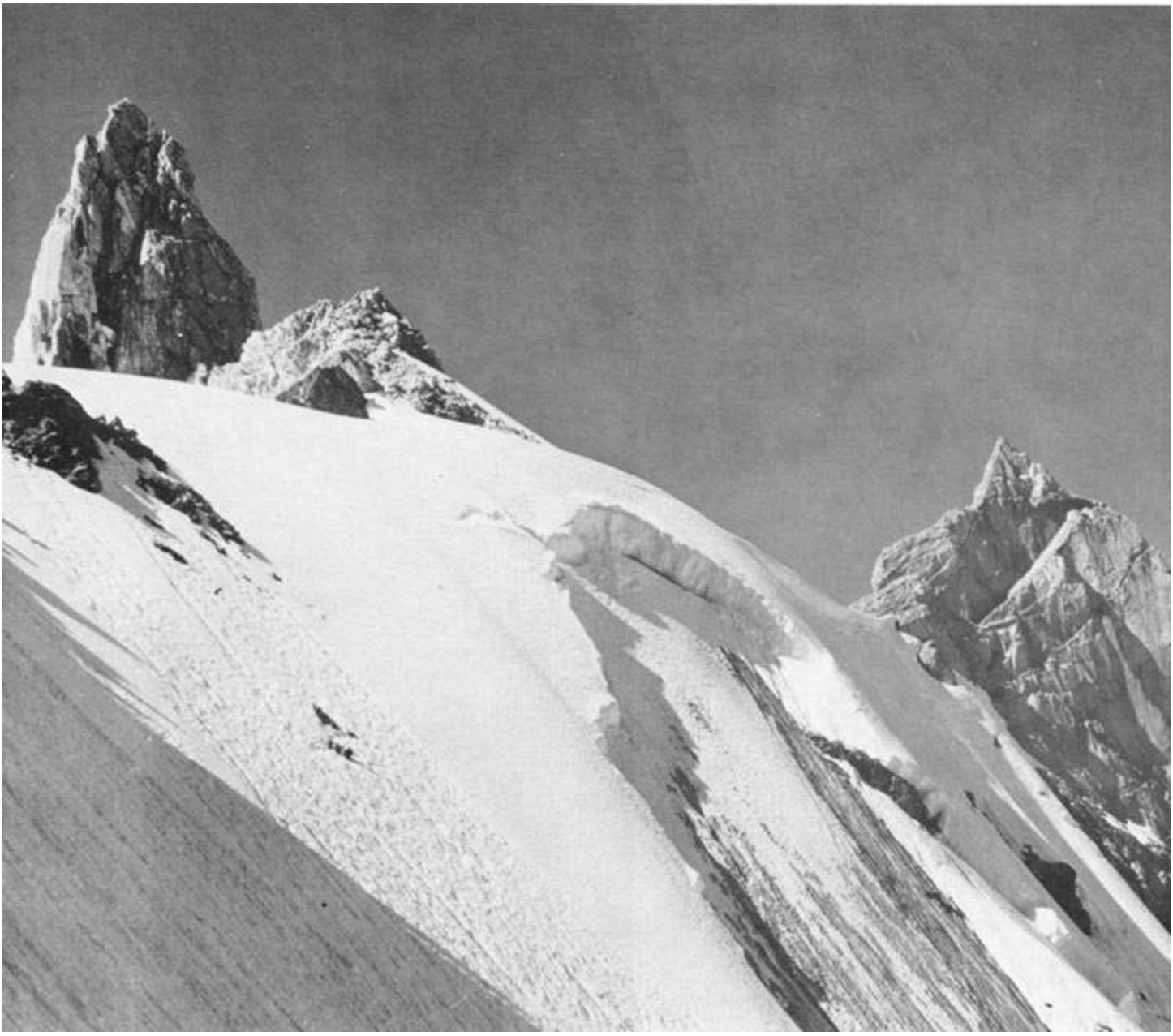
One and a half miles east of Remiilard Peak is an interesting formation which we called "the Wart". It is 8100' high and although no attempt was made on it, it probably could easily be reached from the upper glacier basin as in the Remillard routes. It resembles a large block on the east edge of the glacier, and is of the monzonitic rock.

Another unattempted peak is the "Halfdome", 8000' in altitude and 1.7 miles mostly east of Remillard Peak. It resembles very closely its more famous namesake in Yosemite. Davy Jones, who failed to convince anyone to climb it with him, avers it has many 5.8 pitches on it. The rock is excellent granitic monzonite.

The only other peak climbed in this section was Unnamed A, 7900' and another mile east of Halfdome 2.6 miles east north east of Remillard Peak. The cliffs on its north face towered over our camp, so after staring long enough, three parties of George Bell and Davy Jones; Andy Kauffman and June Lehman; David Michael and Bill put up two routes of 5.6 difficulty on excellent rock in one pleasant morning. Their descent was made by way of the east ridge and "Nadir Notch".

Directly north of the previous section and in the sunset direction from our camp, is a very pleasant group of summits which for reasons that scarcely need explanation we called collectively the "Yardarm Ridge". The first peak, 8500' high and 1.65 miles north of Remillard Peak, was ascended by James, Gordie and Morgan. They travelled west from camp and crossed the tributary of Windy Creek which flows from the lower Remillard Glacier, via a snow bridge. They gained the pleasant meadows and snowfields of the prominent east ridge, and walked to the south shoulder, where they built a conspicuously large cairn. Then, after napping unduly, they continued on to the summit, a route of Class 4 difficulty.

…the small snowfield that separates the two peaks. We then skirted Three days later, Morgan, Lowell, and I once again reached the summit by the route described. However, having more expeditiously handled our time, we continued on down the N. Ridge to beneath a prominent smooth area on the peak's south face, and scrambled up a loose gully to the south east ridge. Here we roped up, and climbed the final exposed, but not difficult, 150' to the summit, 8600' and 1.9 miles north of Remillard Peak; a total of 6 hours up. Only inclement weather conditions and a sustained attack of lassitude kept us from continuing on to the final peak,



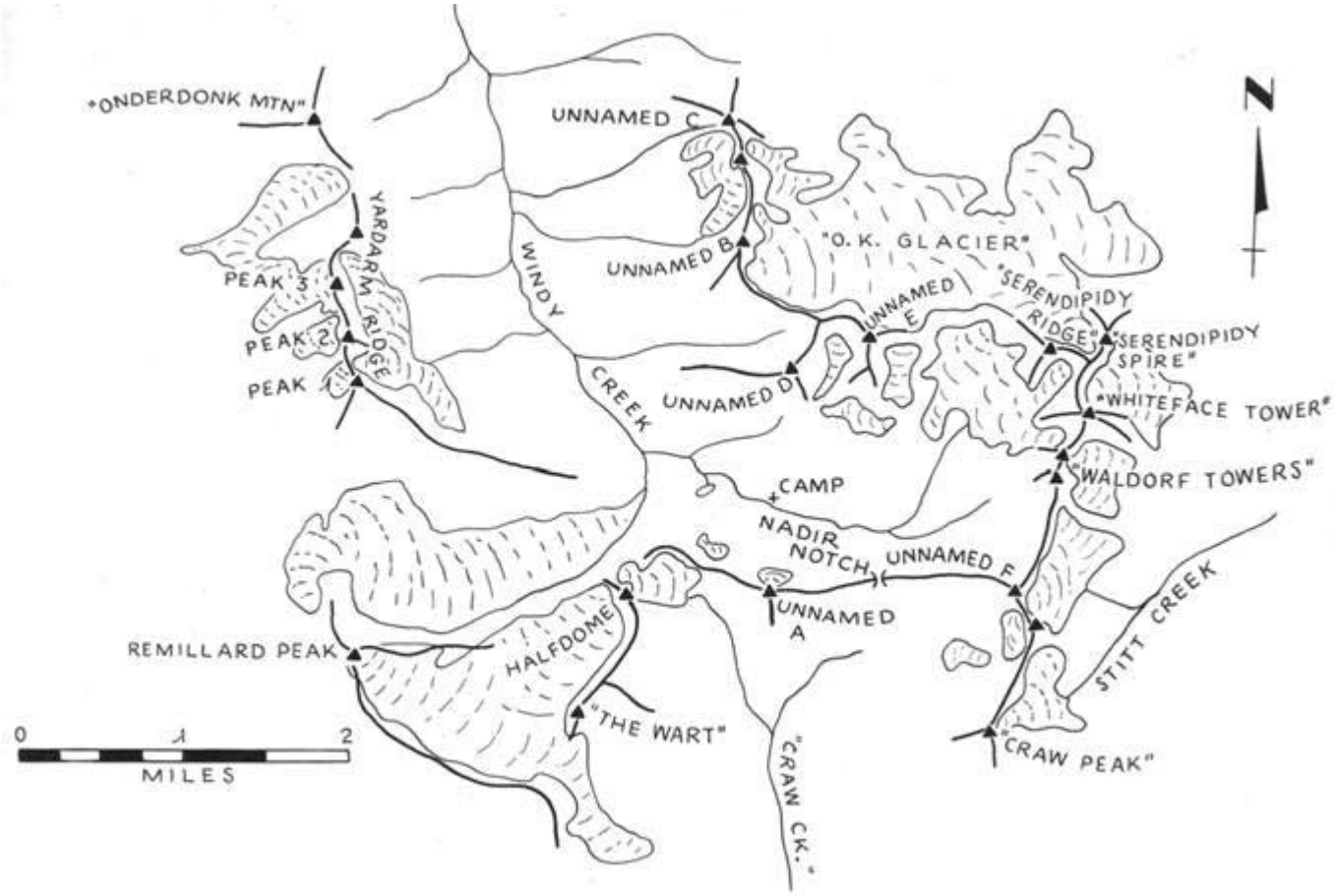
8800' in altitude and 2.25 miles north of Remillard Peak. No serious difficulties were seen, but an early start is recommended.

One final peak which should be mentioned in this area is "Onder-donk Mtn,' 8700' high and 3.2 miles north north west of Remillard Peak. Andrew Onderdonk, a native of New York, was the first contractor to complete this section of railway for the CPR. As some recall, one of the specifications for British Columbia joining the Dominion as a province was the stipulation that a transcontinental railroad be built. We therefore saluted an unsung hero with a flashy name.

The peaks north of Windy Creek are mainly made up of the marble described before, and the crumbly shale widely found in parts of the Interior Ranges. The first sojourn into this area was made by Davy, Bill and I. We travelled north east from camp and gained the snowfield east of Unnamed E, 9700' high and 3.7 miles north east of Remillard Peak. The snow was followed northward, until the east snow ridge was gained, this leading to the summit; 5 hours from camp. While eating lunch, we saw to the west the granitic spire that is the summit of Unnamed B, and decided to climb this too before descending to camp. We continued down the west ridge and skirted the southern edge of the "OK Glacier". However, our ranks were struck a staggering blow when Bill decided he'd rather "geologize" than climb; so Davy and I continued westward, up a steep scree slope to the final tower, about 100' of easy climbing leading to the summit, 9100' high and 3.4 miles north east of Remillard Peak. We descended back to the "quarry", where we were loaded with Bill's specimens, and descended to camp via the snowfield south west of Unnamed E.

About 1/2 mile north east of Unnamed B is Unnamed C, 9700' in altitude. An attempt was made on the south ridge of this peak by George Bell, Morgan, David Michael, and Bill Putnam. The rock was intermittently granitic, and the ridge very spired. However, its length and the heat of the day forced them back short of the summit. They rappelled off the east side to the "OK Glacier" and went home by a devious route over Unnamed B.

The final peak of the section is Unnamed D, 8600' feet high



and 3.2 miles north east of Remillard Peak. An attempt was made on its north face by Morgan, Lowell, and I, via a prominent crack. However, we turned back because of the poor quality of the rock. Later views revealed that it can probably be climbed without serious difficulties by the north east ridge.

The "OK Glacier", mentioned in some of the above routes is the prominent glacier north of Unnamed C and D. It received its name from the fact that it is the only glacier in the area which has not shrunk from the size given on the newer Topographical Maps.

The peaks of the final section are found at the head of Windy Creek. The spires are of "fairly good" Lardeau marble, while the three southernmost peaks are granitic.

The first spire ascended was "Whiteface Tower", 9100' in altitude and 1.4 miles east of Unnamed E, by Dr. Bell and Judge Michael. They travelled east from camp and gained the snowfield which is at the head of Windy Creek, then crossed it to the col south of the summit. From here the south ridge and difficult 5.6 rock of the south buttress was followed to the upper snowfield. This was traversed to the north west ridge, thence back to the summit; 12 hours from camp. The descent was by way of the north west ridge and a steep snow chute to the snowfield at the peak's base; 51/2 hours back to camp from the summit, a long day.

On the same day, Linda and Davy Jones were making their first attempt on "Serendipidy Ridge", 8900' high and 1.1 mile east of Unnamed E. Although from the valley floor it appears to be a summit, in reality it leads only to a snowfield with the summit some distance behind. Davy and Linda ended up making two unsuccessful bids for the summit, both of which failed because of a lack of protection on difficult pitches, some of them up to 5.7, and many spires on the ridge itself. Their highest point was a little over two-thirds of the way up.

A third of a mile south west of "Whiteface Tower" lie the "Waldorf Towers", 8600' in altitude. These were originally called the "W Spires", because when viewed from our camp, they formed a perfect letter "W". This was later changed to the present classier name. They were first ascended by a party consisting of George, Davy, The Judge, and Bill. They followed the previously described route to the col south of "Whiteface Tower", then easily gained the centre of the "W"; both peaks were climbed from here. The West Tower, about 4' thick and 80' high, with fair rock of 5.2 difficulty, was ascended by the south east ridge with alternatives on the north face. Only one member of the party could attain the summit at a time—so in essence there were four solo ascents, although after the first a series of slings offered a useful belay on the coarse, crumbly marble. The South Tower is somewhat thicker, and of 5.4 difficulty. It was ascended by the north face and east ridge, with alternatives by way of the north west face and gully.

Unnamed F, 8400' in altitude and 4.1 miles north east of Remillard Peak is one of three granitic peaks in the section. It was ascended by a group made up of Morgan, Gordie, Linda and I. We crossed to the south side of Windy Creek via a log, and climbed south east to "Nadir Notch". Here we picked up the prominent west ridge, which is good granitic rock of 5.1 difficulty, and followed it to the summit, 5 1/2 hours up. Our descent was via the south east

ridge to a snowfield which extended to "Nadir Notch".

There is a low peak which divides "Craw Peak" from Unnamed F, on which no attempt was made. There were no difficulties seen from either peak.

"Craw Peak" is 8650' high and 4 miles south east of Remillard Peak. An attempt was made by a party consisting of Morgan, Uncle Andy, June, Lowell and I. Crossing "Nadir Notch" as described before, we gained the north east ridge at its low point, and continued up it on good rock. However, impending weather conditions and lassitude forced us back; the difficulty was about 5.3 to our highest point. Another possible line is the long, steep snowslope on the north east face.

One final landmark which should be mentioned is the gargantuan cairn in which we all participated, built on the gravel flats below camp; it is 18' high and 8' square, with a ramp to its apex. It was built according to the plan of Davy Jones, and under the supervision of master masons Bill Putnam and David Michael, with the slaves' ranks made up of the rest of us. It was duly christened by all on our final day in the area.

Eugene Boss

Peru

Even though all the highest mountains in Peru have been climbed, there are still many challenging routes. The following photographs show a few possibilities. None will be easy.

The author is currently engaged in preparing a climber's guide to Peru, to be published under the auspices of the Alpine Club of Canada. All photos by John Picker except for No. 3, which is by Ross Wyborn.

1 Nevado Salcantay (6271 m., Cordillera Vilcabamba)

The south face of Salcantay. The true summit is the pointed peak in the left centre of the photograph. The west ridge (skyline left) is unclimbed. The south west pillar (left centre) has been climbed although the route to the summit was not completed. The south ridge (climbed) and the south summit are visible to the right. Part of the east ridge is visible on the right hand skyline.

2 Rumihuayin (5676 m., Cordillera Raura)

South west wall (left), south east ridge (centre) and east wall (right) are all unclimbed routes.

3 Yanaqaqa (ca. 5750 m., Cordillera Vilcabamba)

Looking at the unclimbed south west faces and spurs of Yanaqaqa which descend over 10,000 vertical feet into Apurimac River valley (to the right). The (lower) north peak (left) and the south peak (right) are unclimbed. The central peak (highest) has been climbed from the north (opposite side of the mountain) on the left skyline.

4 Yerupaja (6634 m., Cordillera Huayhuash)

The unclimbed east face is to the left of centre. The south ridge and south peak form the left skyline. The unclimbed north ridge is on the right skyline. The north east ridge descends in the right centre of the photograph and bifurcates. The left hand (south east) spur is still unclimbed, the right hand one (north east) was used to climb the entire north east ridge. The north east face between the north east and north ridges has also been climbed.

5 Torre de Cristal (or Flor de Loto) (5529 m., Cordillera Raura)

The unclimbed east face. The only route on the mountain to date is the left-hand skyline ridge.

6 A panorama showing the two summits of YerupajaChico (6121 m., left); Jirishhanca (6126 m., centre); and JirishhancaChico 5467 m., right)

In the Cordillera Huayhuash. The rounded dome to the left of Yerupaja Chico is still unclimbed. The south ridge (left skyline), south east face and south east ridge (right skyline) of Jirishhanca are unclimbed.

7 Nevado Siula (6356 m., Cordillera Huayhuash), and Laguna Cuchillo

The north east face is hidden by the two difficult unclimbed peaks (foreground) rising above the lake. At the head of the cirque Nevado Sarapo is partially hidden by the unclimbed south east spur of the east ridge of Siula, which forms the left hand margin of the (unclimbed) diamond-shaped rock face. There is a route on the wedge of ice to the right of the "Diamond". The right hand skyline (north west) ridge is the original ascent route. Laguna Cuchillo has formed since the publication of the 1:50,000 map of the German Alpine Club, 1939.

8 Nevado "Kimsajumayoq" (ca. 5487 m.) (right) and Nevado Kallini (ca. 5244 m.) (left), (Cordillera Carabaya).

The north east side of "Kimsajumayoq" ("Trident") and the north side of Kallini are both unclimbed.

9 Torre de Crislal (or Flor de Loto) (5529 m., Cordillera Raura)

The unclimbed Mina Raura face. The right hand skyline ridge is the only route climbed so far. Laguna Nino Perdido is in the foreground.

John Ricker

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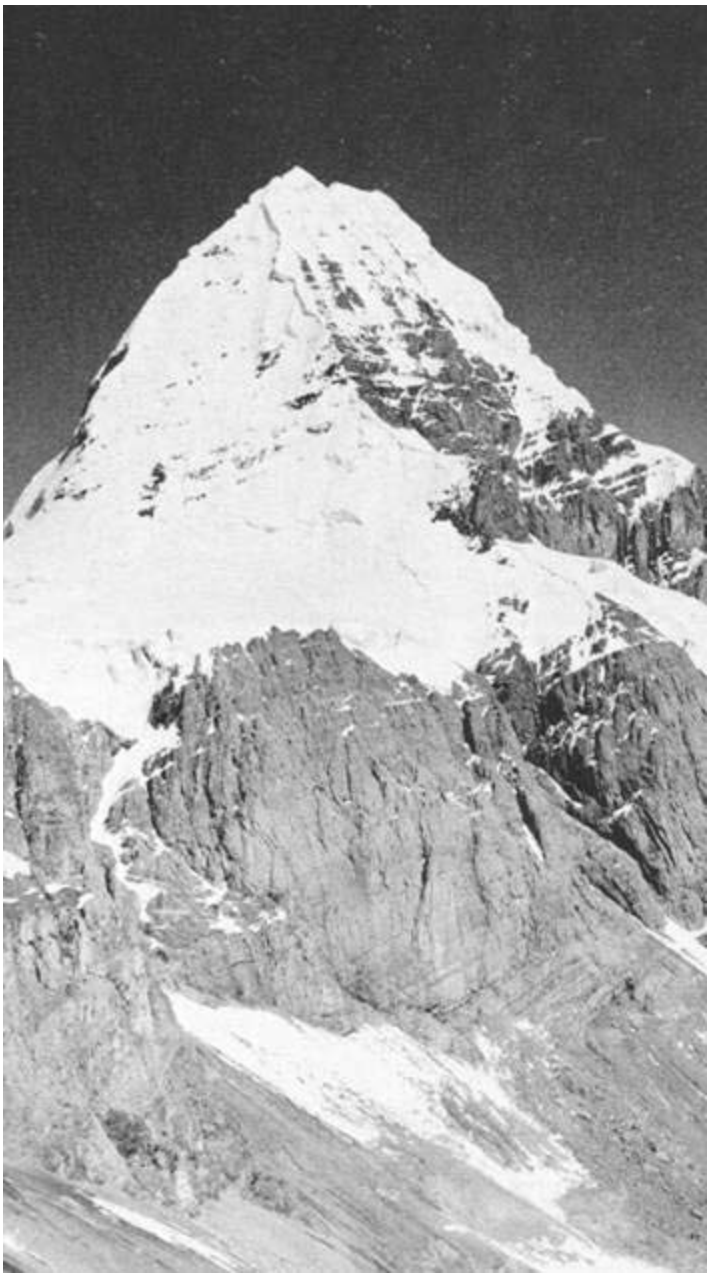

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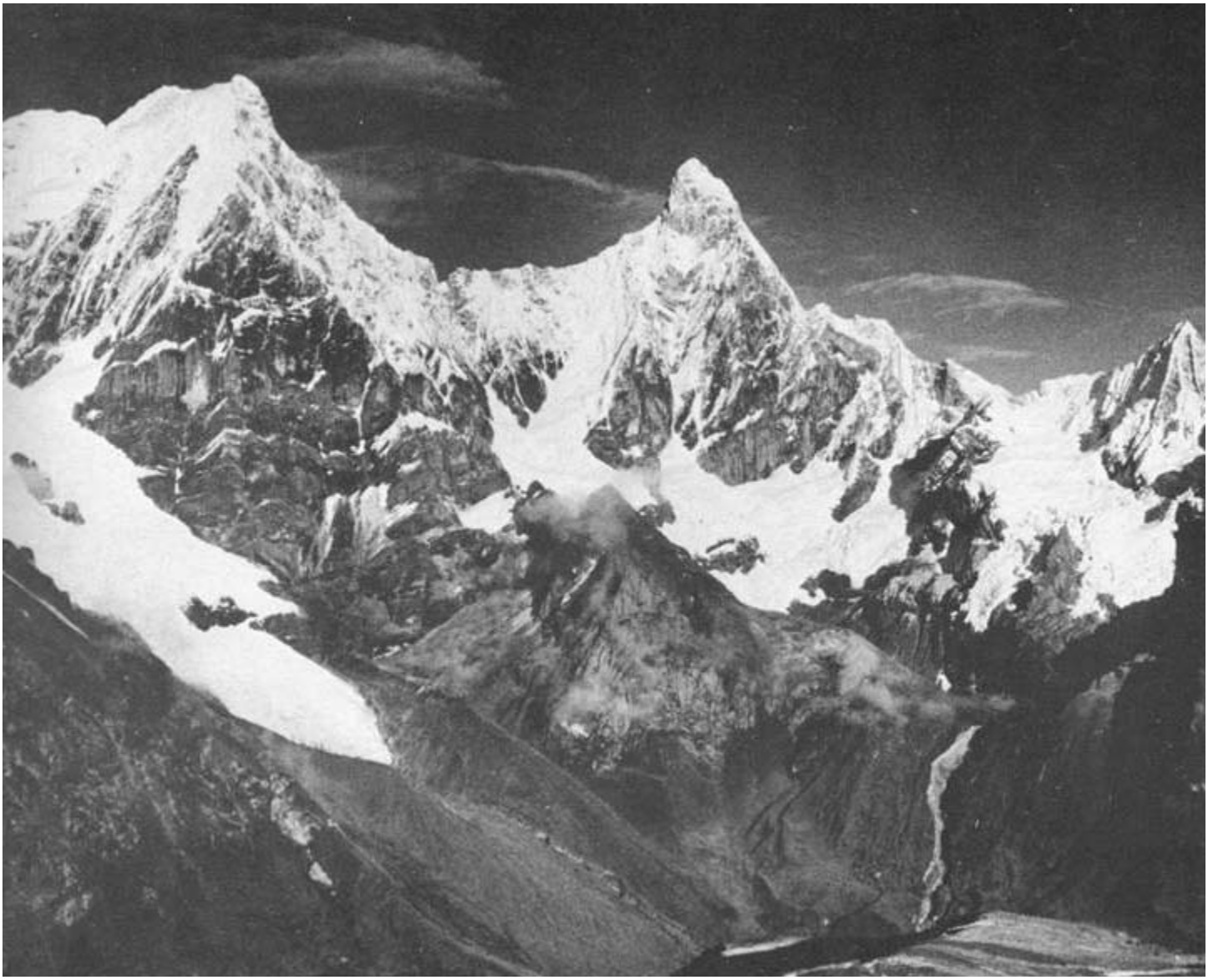

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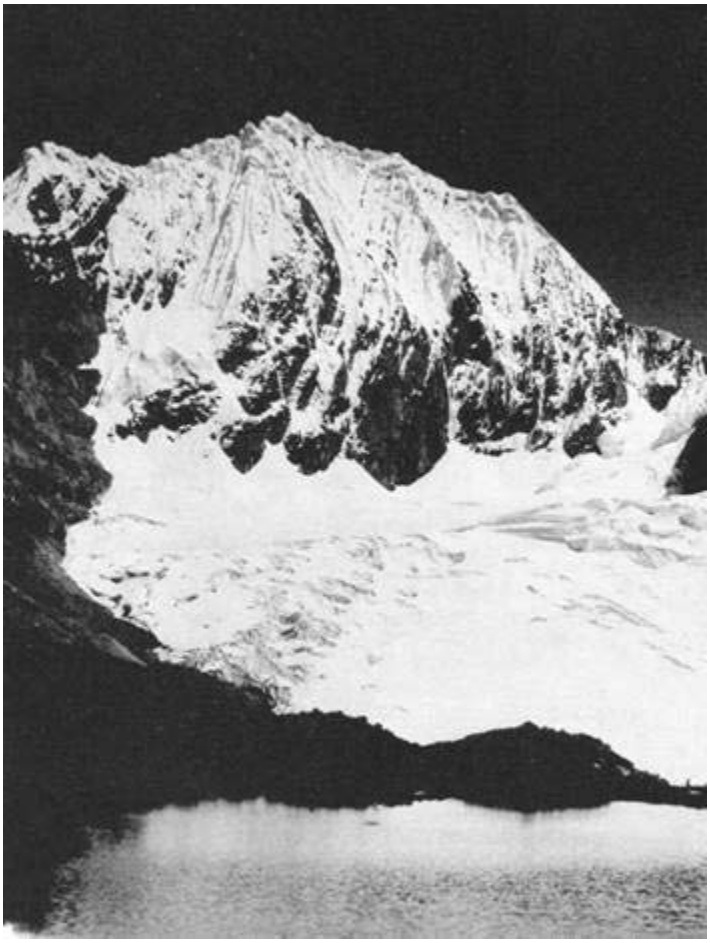


The Cordillera Blanca, Alpine Style

During July 1971, Timothy K. Griffin and I visited the Cordillera Elanca of Peru. As a two man party climbing alpine style we made the following ascents:

We attempted a 2nd ascent of Uruashraju (5753 metres) via south ridge route used by Mauri and Giobbi in 1966. Leaving base camp beside the lake at the head of the Quebrada Rurec on 13 July, a single high camp was placed in the col just below the summit of Pumahuacanca Chico. Two porters were used to establish base camp and it had been hoped that they would make it to the high camp as well, but one contracted soroche and both returned to base camp leaving us very heavy loads to force up a steep ice couloir to the col.

Suffering somewhat ourselves from the effort and altitude we remained all day on the 14th at our high camp. Starting at dawn on the 15th we descended to the south west side of Uruashraju Glacier and then climbed to the south ridge. The ascent of the summit ridge was uneventful in alternating good weather and cloud. However, within 200 metres of the summit the ridge had narrowed until both east and west faces seemed to meet beneath a cornice that projected in both directions, a condition that extended virtually to the summit. This, coupled with extremely deep snow, caused a two rope lengths per hour pace and at 3 p.m. we had to return, not relishing, or being properly prepared for, a bivouac in these conditions.

Mauri and Giobbi in 1966 were able to leave this ridge near our turn-around point and traverse the west face under the cornices. No such opportunity existed this year. Furthermore, the west face is now 70 degree snow and heavily ribbed with ice flutings making a traverse very difficult. On our descent we noticed a possible route across the head of the Uruashraju Glacier and up the north side of the west face to intersect the north ridge near the summit. This route looks feasible for another year.

We recommend access to the Quebrada Rurec from Olleros via the Canre Grande staying on the west side of the river. We were 8 days in the Quebrada, attempting a 1 day trip to Cashan from the east as well.

We then made an ascent of Nevado Huascaran Sur (6768 metres) by the normal route with variations and bivouac. Leaving Musho on 23 July we climbed without porters or burros, placing two camps before reaching the Garganta. Weather was alternatingly good and cloudy with approximately 12 inches of new snow. Before the Garganta we struck south, placing our third camp high on a steep snow slope in a crevasse ledge for avalanche protection.

At dawn on the 26th we ascended directly toward the summit on an ice rib immediately west of the upper ice fall thus by-passing the Garganta altogether. By 11 a.m. we grew weary of the severe

exposure and high winds and cut east directly into the icefall under whiteout conditions. After 2 hours following a circuitous route we realized a bivouac was going to be necessary. Some vertical ice walls requiring direct aid consumed the afternoon and it was 4:30 p.m. when we arrived on the summit ridge at approximately the 21,000' level. In the remaining daylight we dug a cave to escape the high winds. As dusk came suddenly, we crawled into our very small hole. Twelve hours of darkness went extremely slowly under claustrophobic conditions. Fresh snow sealed our opening so that considerable heat built up in the confined space but it still seemed cold and wet. At dawn we crawled out and promptly became very cold in the 50 mph., 10CF conditions

Two hours later we were on the summit and I had a minor case of deep frostbite in my right hand. Descent to our high camp required 8 hours, as we retraced our route, fortunately finding our wands in the deep snow, rather than attempting to develop a new route down. We did descend directly into the Garganta however, rather than try the exposed rib again. Thus a re-ascent to our high camp from the top of the lower ice falls was required. The rest of the descent to Musho and on to Mancas was uneventful. Total time on the mountain was 7 days.

We believe this to be the 1st ascent for a party of two. Three other parties were on the mountain, all several days behind us, but offering some measure of security in the event of an accident.

Edward Baldwin

Gibraltar, or Nine Nightmarish Nights on Nothing

I felt my foot slipping—damn rain! Rock and sky became one big vertical blurr—the next thing that registered was a tightening around my chest. There was blood all over the rock and on everything else. The belay plate had worked or I would have sailed 150' instead of just 120. I managed to get back to a ledge upon which to reflect on my misfortunes. DOWN BABY, SOLOING'S TOO DANGEROUS!

That was 1970. A few stitches and the N.A.Wall later found Jim White and myself back for more. More of what I don't know. Perhaps if I knew I wouldn't have to do stupid things like climbing.

Gibraltar had not changed. Still smiling down upon us minute mites, its upper lip formed one of the biggest overhangs I have ever seen.

"Ah—we'll piss up it," I said as we searched for reassuring gestures from each other.

We didn't have a good start. Car trouble, bad weather, bloody heavy loads to carry up to the base.

We fixed the first pitch, which I couldn't remember from last year, and returned to see Sharon off. Then back up to see the sun hightailing it westward. You know, the usual garbage. Oh how beautiful it is—peace of mind—wish I had a joint!

The morning dawned fine or did it? I don't remember. Should have made notes! The next few days mainly involved hauling our TWO BLOODY BAGS up the slabs. I suppose we did some climbing as well, but the hauling weighed heavily on our minds.

For the most part, the whole climb is vague in my mind. I think I could give you a menu for our suppers though. No? Well, let's see now—.

We made very slow progress. Would you believe two pitches a day. I remember Jim doing a lead in 20 minutes. Two hours later we got the bags up. Fun this climbing! Maybe the English have something when they revolt against this sort of game.

The bivys were great! On the second day my hammock opened its mouth and nearly swallowed me up. I retaliated by shoving it into the cavernous pit of the hauling bag. Belay seats from then on.

Higher up the technical difficulties increased, A4 to open a tin of tuna, but the hauling got easier.

The weather was always bad. Snow, storms, lightning, rain, cold winds, belay from pits and jackets, and all this on a north face which got the sun only a couple of hours a day.

Below us the route stood out in bold relief. Piles of—well piles and pink paper, all the way up to us. What's all that stuff about dropping something from the top and that's the line to take. Forget that—just follow the droppings, that's the line we took!

I won't bother with the usual trivia about how we nailed this, freed that, jammed this, squeezed that, bolted here, bolted there, and generally screwed around everywhere. If you want to know what it's like do the damn thing!

Every night we would have visitors on the wall and down below. It would come from the east, a sort of—well it sounded like a tractor in need of a tune-up—Sharon's car. She screamed; we screamed; not the generation gap, just the distance. Our wall visitor was in the form of a little furry ball of hair. What it saw was two funny animals in need of a wash. Piles of coloured things all over the place, and look at that! A long blue worm coming up the rock. I'll just take a bite, they won't miss one little bit out of 165'. The next morning Jim cried!

On the second last day, I was doing a Warren Harding on a smooth bit of rock when a shout caused me to look down. Jim pointed towards the top. Sure enough, a hairy head was peering at us over the edge.

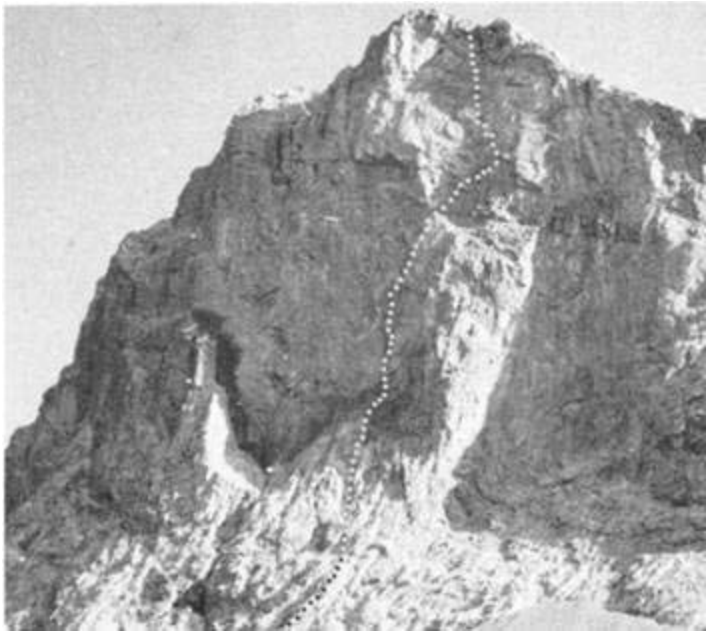
"Hello—who are you?"

"John Martin—how are you guys doing?"

Jim White leading *Bill Davidson* .

Cleaning one of the bolt ladders *Bill Davidson*

Gibraltar Rock, north face *Bill Davidson*



"Ug—moan—gas—ugg—gronk!"

"Will you get to the top tomorrow?"

The next morning—bolts, bolts and more bolts.

"How are you doing Bill?"

"Ug—gas—bang—bang—gas!"

Upside down bolting—dust in the eyes—clear air below—wanting just to GET OFF—and finally doing so.

John, Lorain and Sharon have come up to meet us. That was really nice of them. It's some slog! It begins to snow.

Bang, bang, bang-a quick bolt and Jim came up. Sign of relief from below. Jim had belayed me for 5 hours. John and I haul the bag hand over hand—no use bothering with proper style. Jim gets up. We shake hands, say smagma—click!—and down we go!

Driving out we looked up at our battleground. Still aloft and more mysterious than ever. It had not been changed by the mere presence of man, but we had. We were pissed off with climbing!

TECHNICAL DESCRIPTION:
(N.B. This is not a pitch by pitch description.)
1st ascent of the north face of Gibraltar Rock. 2000' of climbing Nine days—July 1971. VI, 5.8, A4.

Climb up obvious ramp for about 500' 'till small scree ledge is reached (it looks used). Drop down slightly to the right 'till able to climb slabs up to a small cave. Climb steep wall and then angle slightly to the right over easy slabs. Climb into easy dihedral on right and follow. Move almost straight up slabs towards obvious corner (The Yellow Dihedral).

The Black Band: from belay climb up obvious crack and onto loose ground. Continue up to a bolt. Move right into a second corner. Climb up this staying to the furthest right hand corner. Aid takes you up onto good rock and a hanging belay. Climb straight up for about 40', then face climb toward large flake. Traverse flake to left, make aid move up over steep section then move up about 60' to a hand traverse left. Follow this to belay below the Yellow Dihedral.

Climb the Yellow Dihedral 'till able to move inside. Move up and out onto a chockstone. Belay. Continue up 'till a bolt on the right side is reached. Aid up on sky hooks and rivets a few feet, then right. Free up again onto large sloping ledge. Belay at far right end. Nail crack above for about 30' then free traverse about 15' straight up and belay on large downsloping slabs.

Follow slabs to overhanging crack. Climb this and then follow bolts around roof. Continue up low angle crack to belay bolts. Continue up to large pillar. Belay on top.

Drop down other side 'till you can reach bolt. Face climb after it, tending to the right to hanging belay. From belay step around corner and free climb to steep section of aid then traverse 40' to the

right on ledges, then aid straight up 40' to hanging belay. Traverse right 30' and up jam crack to bolt then aid climb up long crack to small ledge with overhanging walls on all sides.

Follow bolts up to aid and free, more or less straight up to belay. Aid traverse to left, then follow aid cracks up and left to hanging belay. Four bolts then free climb up to ledge below large blocking area. From here two bolt ladders take you over the summit overhangs.

Bill Davidson

A Day to Remember

The first day of August, 1970, will always live in my memory as one of the most thrilling days of my life, for on that day I climbed to the very tip of Mt. Victoria, the snow and ice peak which forms the magnificent backdrop for Lake Louise. This was the realization of a 30 year old dream, born in 1940, when I worked for the summer at Lake Louise, and got to know the peaks and lakes and trails of this incomparable mountain region intimately. Victoria was the supreme attraction, and I spent many an hour memorizing its every detail from the lawn in front of the Chateau, or from the trail along the lake,

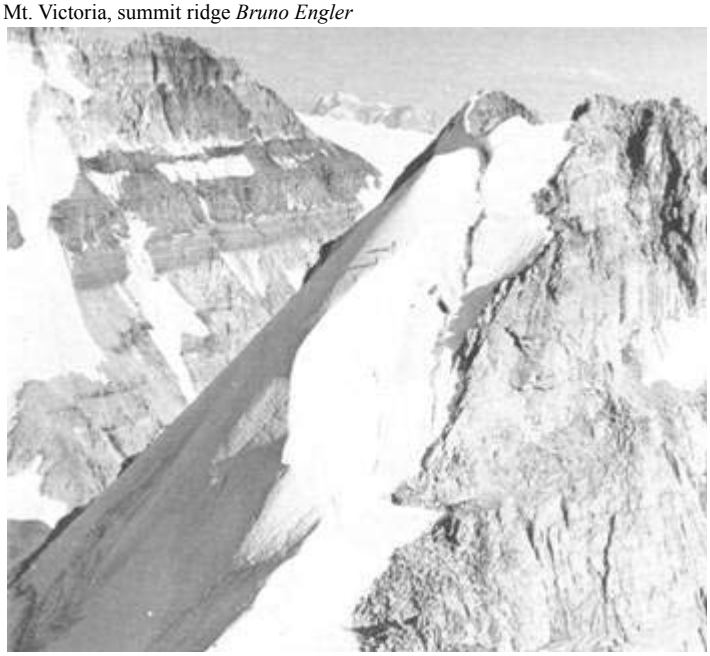
Mt. Victoria has been described as a classic climb of the Rockies. The mountain is magnificent in proportion, being about 2 1/2 miles long, and rising more than a mile above its base. Although only rated as moderately difficult in climbing circles, there is no easy way up it, and to do it in a day by any one of three main routes involves a climb of at least 10 hours. On two of the routes, from Lake Louise via Abbot Pass, and from Lake O'Hara via Huber Glacier, there is every variety of climbing to be found on a high mountain—rock, ice, and steep snow climbing—and the latter part of the climb, along the summit ridge, is among the most spectacular to be found anywhere.

I had joined the Alpine Club of Canada in 1937 as a boy of 16, and done a considerable amount of climbing by the summer of 1940. I had also read extensively in books and in Alpine Club journals about the exploration of the Rockies, and knew almost by heart the records of the first ascents of the various peaks. Thus it was quite a thrill to find myself working at Lake Louise that summer so close to the great peaks which I had come to love with an intense passion. And Mt. Victoria, which I could see daily from the service station where I worked drew me irresistibly, and I knew that some day I must tread its summit snows.

The years passed, I graduated from university, spent several years in the army, returned home, went to work, got married, and generally settled down. For ten years after the war, I climbed quite regularly, mainly in the Jasper area. Then, an acute shoulder separation left me with very restricted movement in my right arm. Since climbing requires the full use of both arms and both feet, feeling that I should not endanger my friends, I discontinued climbing, although I continued to hike and ski.

Thirty years after my first summer at Lake Louise I found myself in the area again, taking a holiday by myself, hiking and

Mt. Victoria, summit ridge *Bruno Engler*



taking pictures. The old urge to get up to the heights possessed me once more, and this time I decided to follow it up by enquiring into the possibility of making a climb with a professional guide. Accordingly, I checked with offices of guides in Banff and Lake Louise, and met Bernie Schiesser. On learning of my climbing experience, and having my assurance that I was in reasonably good physical shape, he felt that I could do a peak like Victoria, since the rock work involved did not consist of any steep hand over hand climbing.

I spent the next few days hiking to get into condition, and searching for a companion to share the cost of the climb. In the latter I was unsuccessful, and finally decided to climb alone anyway, in order to be free to set my own pace, and to take as many pictures as I wanted. So 31 July I returned to Lake Louise, looked up Bernie and made a firm commitment to do Victoria with him the next day.

Bernie has a private climbing camp at Lake O'Hara, and because of this, and the fact that the Huber Glacier route was the one in the best condition, he decided that we should make the ascent from his camp. Accordingly, that evening we caught the Brewster bus at Lake Wapta, and went in the 8 miles to Lake O'Hara, where we had supper at his camp, and retired early. Next morning, we were up at 4, and after a substantial breakfast, were on our way by 5 a.m. Although the sun was not up, the sky was clear, and there was every indication that it would be a beautiful day.

From the alpine meadow where the camp is located we dropped down to the lake, and then followed the trail for about a 1/4 mile along the north shore of Lake Oesa. Here we took the route for Wiwaxy Gap, the steep trail taking us rapidly up through the trees and beyond the timberline to the gap at an elevation of just under 8000'. Looking back, we got some great views, the first sunlight striking Mts. Lefroy and Hungabee, and Lake O'Hara lying like a jade jewel in the forest, almost 1500' below.

From Wiwaxy Cap we followed the high trail toward Lake Oesa for a short distance, then turned left up the west ridge of Mt. Huber.

Shortly we reached some steep cliff bands, and stopped to put on the rope. We would remain tied together until we returned to this area some 12 hours later.

The rock was firm and we climbed rapidly, gradually traversing north, aiming for the Huber Glacier at a point just above the ice-fall. At the edge of the glacier, we stopped to put on our crampons. We made rapid time on the glacier, and shortly after 9 emerged from the shadow of Mt. Huber into brilliant sunshine. A short while later, we stopped on the ice for a breather and second breakfast. Here, at an elevation of about 9500', the views were tremendous. The south face of Victoria, crowned by the glistening summit which was our goal, loomed some 2000' above us, and to the west peaks 30 and 40 miles away were rising above the nearby ridges.

Continuing up the glacier, we had to be constantly on the watch for crevasses, since the warm weather of the previous month had softened the snow bridges. Most of the time, we crossed by jumping over them.

From the glacier, we passed onto the snowfield and finally reached the col between Mts. Huber and Victoria. Here we turned left, and headed for the face of Victoria. But before getting onto the face we had to pass the bergschrund, which is sometimes difficult, partly because of its width (up to 10 or 15') and partly because the upper edge can overhang the lower edge by as much as 10'. Fortunately we found a snow bridge caused by small avalanches on which we crossed.

We ascended the snow slope and then entered the steep snow and ice filled gully, which extended some 500' up to the ridge. This was the steepest part of the climb, and we could only go for a few minutes without a breather. The altitude, now well over 10,000' was also beginning to take effect. Finally we could see a notch in the ridge above us, and in a few moments were standing on the summit ridge of Victoria, at about 11,100'.

I had read about the view from this ridge and had been told about it, but still I was unprepared for the sight which burst upon my eyes as I raised my head above the notch. 5000' below and some 6 miles away, was Lake Louise, looking like a green tear, cupped in the rocks and trees of the valley. From the ridge, the face fell steeply toward the north as the one we had climbed from the south. To the right were the snow covered precipices of Mt. Lefroy, plunging some 3000' to the depths of the lower Victoria Glacier. It was absolutely breath taking and worth all the effort of getting up there.

It was now 12 noon. We had been climbing steadily for 7 hours. We removed our crampons, since the ridge climb to the summit, visible to the west as a beautiful snow cone, involved considerable amount of rock, and the crampons would have been hazardous.

As we started our climb toward the summit, I had my only anxious moment on the climb. The ridge is exposed, with a drop of 2500' to the right and 1500' to the left, and just west of the notch, extremely narrow. I wasn't certain at first whether I could do it standing up, or would have to get down on my hands and knees.

I gave it a try, and by stepping very cautiously, was able to make it to the point some 30' on, where the ridge widened out. This was the first time in 17 years that I had been on a mountain like this, and it takes a while to get your confidence back. Returning over the summit, I passed over the same place without even noticing it.

The climb along the arête was the most spectacular route I had ever done. We were walking along the ridge-pole of a roof—the roof of the continent. As we ascended toward the summit, we had one foot in B.C. and the other in Alberta, straddling the Great Divide, streams on the O'Hara side draining to the Pacific, while those on the Louise side drained to the Atlantic. The snow was a dazzling white and the sky a deep blue. Far below, the mountains were soft and hazy. A gentle breeze was blowing, and the air was fresh and cool. I felt suspended between heaven and earth, and had a feeling of freedom and exhilaration such as I had never experienced before. My 41/2 hours on the summit ridge were one long glorious rapture, something I will never forget and will always quicken my heart and mind.

Rock alternated with snow and we kept right on the ridge crest. At one point the arête was too sharp and we traversed onto the Lake O'Hara side, kicking steps in the steep slope, and belaying each other.

Finally at 1:30 p.m., we climbed the last snow slope and stood together on the very highest point of Mt. Victoria, at 11,365'.

It would be impossible for me to adequately put into words what I felt as I stood there on this beautiful summit, with the world literally at my feet, trying to fully comprehend that my dream of 30 years had a last come true. In so many cases, the experience falls short of the expectation. Here, however, it exceeded my wildest hopes. The thrill and happiness I felt were overwhelming. I felt suspended in time and space. No problem from the past, or the future, intruded on the peace which I felt. I had climbed a mountain, but, much more than that, I had kept faith with a youthful vow, and had proved to myself that I had the strength and willpower to achieve success. It wasn't so much the mountain which I had overcome, as myself. Now I would be content.

Peaks 60 miles away stood out sharply, and could easily be identified. Ranges beyond the limit of recognition could be seen approximately 100 miles away in every direction. The view down toward Lake Louise was fabulous. The north face of the mountain fell almost sheer for 2500' to the upper, then another 1000' to the lower Victoria Glacier. The lake appeared as a tiny green pond, while the Chateau, some 7 miles away, and more than a mile below, looked like a tiny little box. Back along the ridge up which we had climbed loomed Mts. Lefroy, Hungabee and Deltaform, other giants of the Divide, all over 11,000'.

I finally tore myself away, and joined Bernie for lunch. However, I was too excited to be very hungry, so I satisfied myself with a tin of sardines, and a few swallows from the water bottle. Then I returned to the summit with my binoculars and camera, while Bernie enjoyed a summit snooze. With the aid of binoculars, I could see skiers setting up the slalom course for the summer ski race on the upper Victoria Glacier. We got the summit record, in an old jam tin, out of the cairn. There were records of ascents going back to 1934, and a metal tube with a record of more recent

ascents. Bernie wrote up our climb and we prepared to descend, it being nearly 3 o'clock.

Leaving the summit, we retraced our route back to the notch. On the whole, it was good going, but the place where we had cut steps in the morning, we encountered some difficulty. Under the heat of the sun, the snow had become moist, and was very unstable. I was leading across this spot, facing into the slope and kicking steps, with the pick of my ice-axe jammed in above, when suddenly my feet shot out from under me, the snow having broken away leaving bare ice. I hung by my ice-axe, and cautiously made some new steps further over. Then I changed the position of my axe, and continued across. At the notch we turned to the right down the face of Victoria and ran into more trouble. The snow was again unstable, yet damp enough to plug up our crampons. Bernie decided it would be best not to use them and I started down. I soon lost my footing, but was brought up sharply by the rope. It happened a second time, and then a third. Bernie finally let me down a rope length, sliding on the seat of my pants. I got myself into a secure position, and then he joined me. We repeated this until we struck the snow above the berschrund, as even my guide found the footing treacherous, and did one 30' section on his seat also. We were very careful to stay directly above the snow bridge, so that if we slipped, we would shoot over the bridge, and not into the crevasse.

Once past the bergschrund, we had comparatively easy going. Making rapid time, we got onto the glacier, and finally were approaching the spot where we had got onto it in the morning. Here we had the only mishap of the day. The glacier had a film of water on it, making footing precarious. I stepped on what appeared to be a bump with fine stones embedded in it. This should have been a solid point, like stepping onto sand-paper. However, the ice had melted around the rocks, leaving them loose on a slippery surface. My foot shot out from under me, and I fell heavily on my left elbow, partially dislocating my left shoulder. For ten minutes the pain was intense, and I couldn't move my arm at all. Then, since we still had 2500' to descend, including some steep rock where both hands would be required, I instructed Bernie how to lever my arm, and, after several tries, the shoulder snapped back into place. Although the joint still pained me considerable, I could now move my arm fairly freely.

It was now early evening, shortly after 6 p.m., and the peaks were changing to a bronze colour, the valleys were filling with shadows. We continued very cautiously over to the edge of the glacier, and onto the rocks adjacent to it. Here we followed an easier route than in the morning. Carefully picking our way down the ridge of Huber, gradually traversing towards Wiwaxy Gap, which we could see below. Several cliff banks and one deep gully were the only obstacles, and we made slow but steady progress. At about 7 we reached the Gap, and stopped for one last breather before the final stretch down to camp. It was a beautiful evening, warm and soft, and there was a marvelous colour on the peaks. Far below, Lake O'Hara nestled among the spruce and pines, and we could see the tents of the Skyline Trail hiker's camp at Schaeffer Lake. To our left, was the mirror-like surface of Lake Oesa, tucked in a high alpine valley under the snows of Mt. Lefroy. We descended rapidly, and soon were back at Bernie's camp, where just 15 hours earlier we had set out for our great adventure. I wasn't particularly tired, physically but strung out emotionally after all the experiences of the day, and felt somewhat numb, noticing people and things but not feeling any strong emotion toward them.

Later that evening, after supper, I had a chance to reflect on the day and what it had meant to me. As the shadows deepened and the light faded from the great peaks which circled the camp I gazed up at the summit of Mt. Victoria which now seemed impossibly remote. Why had I wanted to climb the mountain, and why did I get such a thrill out of doing so?

Later that night, as I prepared to crawl into my sleeping bag, I looked up at a cloudless sky. It was like a velvet canopy, sprinkled with the pulsating lights of thousands of stars. The Milky Way stretched in a glowing band from one side to the other. As I looked, I recognized many old friends. There was the Big Dipper pointing upward to the North Star, and on the opposite side was Casseopeia. Orion was rising in the south, and the dagger like group of the Pleiedes was keeping it company. The air was warm and fresh, and through the tall trees I could see the towering masses of the great peaks, their summit snows faintly illuminated by starlight. And in the background of my consciousness I could hear the rush of fountains, as their crystal clear waters dashed seaward. It had indeed been a day to remember.

Don Campbell

The North Face of Mt. Bonney

Once upon a time I lay in the green meadows near the top of Mt. Abbott. It was a fine Selkirk day. I could see across into the north face of Mt. Bonney. I remember thinking what a fine climb the glacier might be. But this day I was not here to climb. Climbing was far from my mind. My companion and I were here to watch the clouds. To commune with nature. And to commune with each other,

When I returned to the Selkirks in July, Gary Colliver, Leif Patterson and Jerrel Wilkens came with me, lured by my tale of the fine route to be done. We paused together at the foot of the face and looked up at the narrow hanging glacier. "Dig the cornice up there." There were cornices all across the top, and beneath our cornice we could discern the silvery glint of ice in the morning sun. "Oh, it's going to be good."

Leif stepped across the bergschrund—the old master of snow this Norwegian. Front pointing up the smooth ice on the other side, placing a screw, calling for me to come up. As I stepped from it, the lower lip of the 'schrund broke off beneath my feet. We were on our way. Gary and Jerrel began climbing beside Leif and I. It was steep for awhile. Then the angle eased below the upper 'schrund. (The 'schrund with sun on it in the photograph.) Here there was a choice of exit routes. Leif and I decided to finish the climb on the left. The others encouraged us: "Oh, yes, steeper that way. And you guys will dig the cornice up there. We'll just bop off to the right here. See you on top."

Leif and I crossed the upper 'schrund and began working toward the exit. (Visible at upper right in the photo with sun on the snow beneath it). As promised the snow steepened immediately, then became ice. We went up the ice and into the shadow beneath the final cornice. "Cold up here. Big cornice, too." "Speak nicely to it."

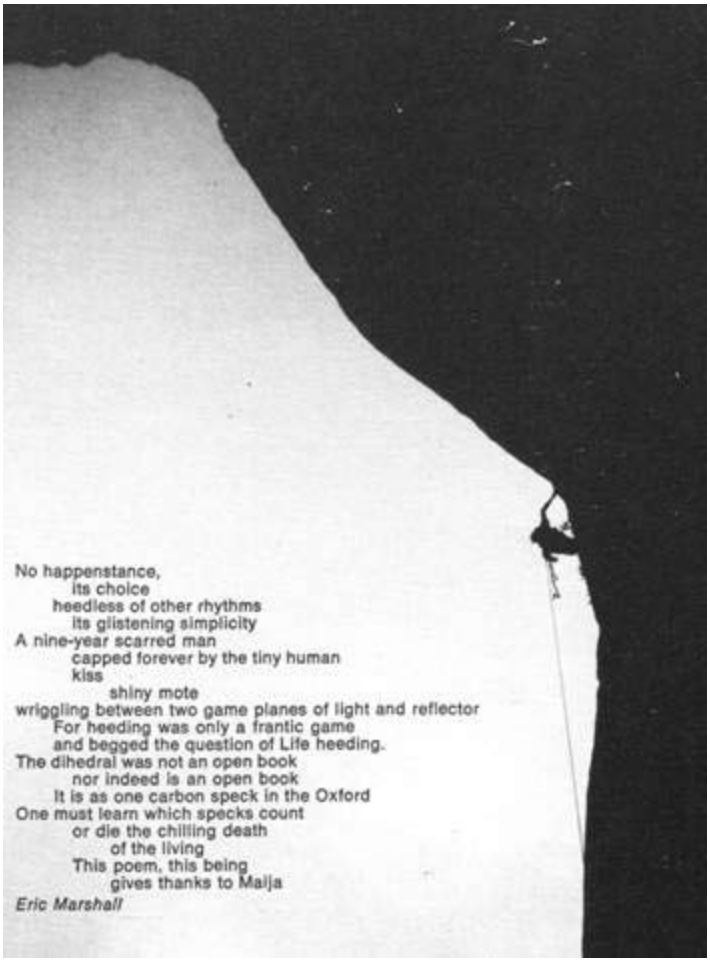
A big cornice indeed. Twenty feet high and vertical. I belayed from a screw underneath it. Leif began climbing up over my head. Delicately he scratched and thrutched. He cut small handholds. I watched the soles of his boots and shivered in the cold shadow. Leif got his axe over the summit. He pulled up on it. I wished I was someplace else. Then he was over the top.

Soon I felt the warm rays of the sun again. It was a fine climb.

Jim Jones

Mt. Bonney, north face *Ed Cooper*

Dihedral *Eric Marshall*



Yosemite

El Cap, Spring 71

Half a year of planning, psyching up, getting in shape and scraping together money. Finally its cruising time. A $150 grant from the Alpine Club of Canada buys more iron and ropes in Seattle. Another huge semi floats past a heap of soaked equipment

El Cap, attempting the new route *Steve Sutton*

and shivering bodies. Two days of miserable hitching, but finally we're swept into the Valley down a corridor of blue skies and 85 degree breezes.

After gazing at pictures for months, its finally there in front of you, tangible and twice as massive as you expected. A vertical desert, shimmering like a mirage in the heat waves pouring off the valley floor. You shake your head and look again, but its still there. An exquisite flow, continuous from the ground right through the glass-smooth, immense final headwall. We wonder why it hasn't long since been climbed but don't argue about it much and fix two leads instead. El Cap at sunset: a scarlet temple two weeks high. What an incredible trip it's going to be.

At 3 o'clock we wake abruptly to the sound of bursting water bottles. A typical valley bear is scrounging around in our haulbag for food. We're short some water but go on anyway. The haulbags just barely budge on the low angle slabs but the nailing's cake and we make good time.

Steve gets into some thin stuff and ends up ripping five pins. The fall gives us confidence and we start to settle down. On the second try he gets it. A few bolts then a steep pendulum from a wild corner. We're working in twilight now and still no ledges We string our hammocks and cram ourselves into the corner. It seems strange hammocking so uncomfortably so close to the ground but it feels good to be off.

The morning brings rain and low spirits. Steve does a long lead ending in some loose stuff to a tiny stance. We decide to pass up a hammocks in the rain scene while we still have the choice. We just barely make the ground with our four ropes. After getting together some more food and water we jumar back up in the morning.

Finally we're off! Over a small overhang, then some more borderline nailing to a new crack that heads skyward. A blank section that we were worried about takes six bolts horizontally right out of the top of the crack. The sun slowly creeps around the Nose and soon we're bathed in its golden glow. The sweet scents of pines and baytrees waft across the wall promising another warm spring day.

Steve places two more bolts before I lower him to attempt a pendulum. Numerous unsuccessful cliff-hanger catches and God knows what else pass before he gets his pin up under some loose flake by hitting it in on the run. Gale force winds spring up and whip our dangling ropes horizontally across the wall. It's really wild! Deep solution buckets unlike anything I've ever seen before go mostly free to Class 4 face climbing in a corner. Darkness rapidly sweeps the wall. Hammocks again. No ledges yet except the Class 4 jugs in our backs. We're super uncomfortable so instead of sleeping we eat popcorn and gaze down the wall all night. Drops of rain alternate with an unbelievable array of stars.

Dawn comes. Two long leads on strangely contoured rock leave us on the phenomenal Mammoth Terraces. We decide to pack it in for the day. Immediately we break into our bivy equipment specially carried for such dire circumstances! We explore our split level bivy ledge, our first haven from the vertical in three days. The sunset rises to a crescendo of scarlet then leaves us breathless

in a sea of brilliant stars. There's some saying about red skies at night so we aren't terrified by some harmless looking fleecy efforts collecting to the south west.

One minute you're gazing into infinite depths of space, an hour later you wake up in a blizzard. Quickly we pile our gear which is neatly distributed all over the ledge and haul out the rain tarp. Maybe Jimmie sabotaged our haulbag or something, but our 9' by 12' tarp is only 3' by 8'. It's worse than useless. Snow blasts in from all sides and the howling winds tear at us. We polish off our emergency bivy stash and try to stay warm.

Light comes agonizingly slowly but with it comes a lull in the storm. Everything is totally soaked and our iron and ropes are buried. After coming so far it's hard to admit defeat. We're screwed so bad it's almost funny. Getting down will be a problem in itself. We cram our unneeded down equipment and food into haulbag and give it the boot. Enviously we watch it float effortlessly to the ground unharmed. If only we had parachutes!

We aren't sure if there's a rap route down from Heart Ledge so we decide to retreat down the Salathe. That was a bad mistake! We shoulder the 40 pound packs and start rapping. Immediately it starts to hail furiously. The wind gusts to 50 and waves of hail sweep down the wall and over us. We have to place bolts hanging at the end of several rappels that end up in the middle of nowhere. Ropes jam and freeze up, jumars slip, and we freeze solid. Fingers seem like elbows when you're trying to get the brake bar setup on. Eventually we get close enough to reach the ground with our four ropes. Actually we're short by 30'. Steve strings all the etriers and slings together and we drop down the last bit off jumars on the end of the rope. We're so wrecked we can barely walk.

Hot showers are unreal. We return to El Cap to watch the progress of my brother John and Paul Piro descending from two days up on the N.A. Wall. They're totalled too, physically and mentally.

We returned next morning to retrieve our jumars, but some beautiful turdish creep relieved us of them overnight. So we split.

Hugh Burton

(The route was completed in May 1972 too late for inclusion in this issue)

Yosemite Report

Storms and rain persisted into May this year, which slowed down the spring climbing activity considerably. Many ambitious plans were thwarted by a heavy storm that hit in the first week of April. John Burton and Paul Piro (both from Vancouver) were forced to descend from half way up the North American Wall in a blizzard (a difficult task in the best of weather). Caught in the same blizzard Paul Eader (Jasper) and partner retreated from the Nose. Steve Sutton and Hugh Burton (Vancouver) attempting a new route between the Heart and Muir routes were forced to descend on their fifth day by the same storm.

Gordie Smaill, arriving a month later, caught the tail end of the bad weather, but managed to climb the strenuous West Buttress of El Cap. Later, Smaill took a 150' peel on Sacher's Crack. Unfortunately, he hit a passing ledge and broke his pelvis.

The fall season with its hot stable weather made up for the poor spring season. Eric Marshall and John Dill (both from Ontario) climbed the Dihedral Wall on El Cap in 31/2 days. Steve Sutton climbed the West Face of El Cap with Bill Westbay (Colorado). Sutton then went on to climb the North American Wall with an American partner in 4 days. Marshall and Dave Witherspoon (Ontario) climbed the Chouinard-Herbert on Sentinel.

This winter, Tim Auger (Vancouver) and Make Farrell (Berkeley) did the 1st winter ascent of the East Face of Washington Column, an extremely difficult climb in the best of weather.

Climbing activity in the Valley is accelerating at an amazing rate. Heavy activity on the big walls will certainly be the trend for the coming year.

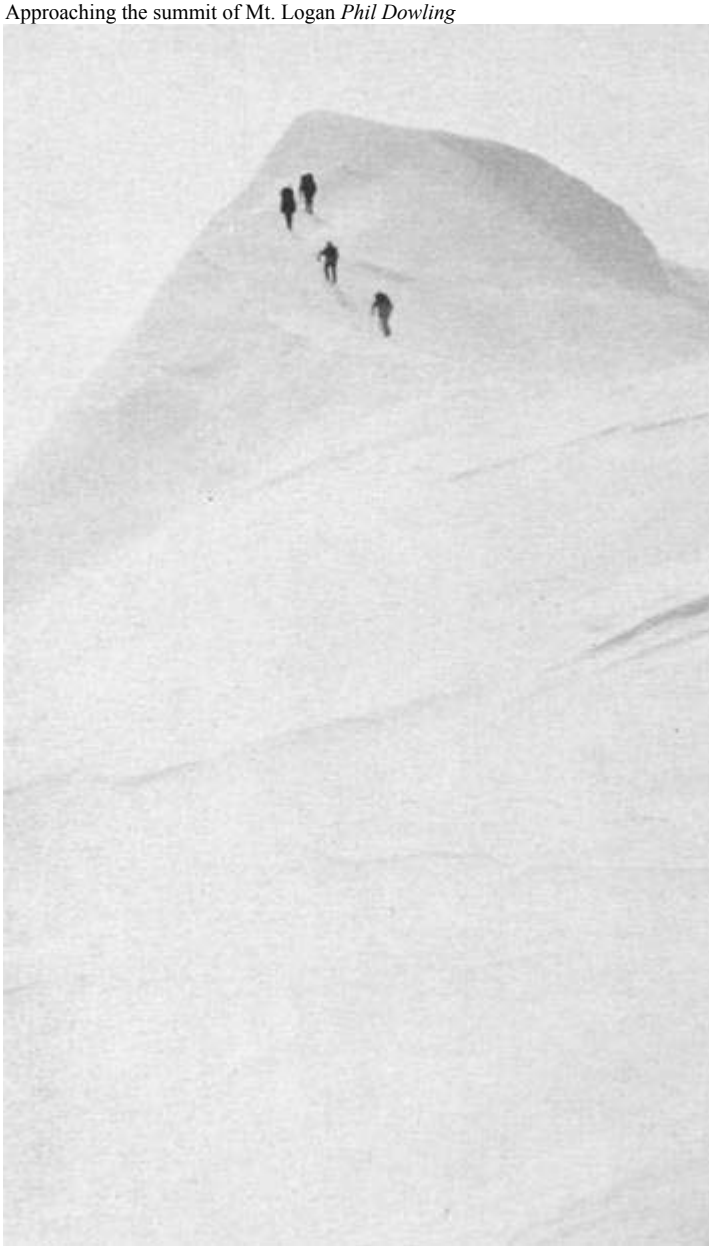
Hugh Burton

El Cap, Sutton leading

El Cap, hanging belay station *Hugh Burton*

El Cap, a long way to go, Hugh Burton leading *Steve Sutton*

Approaching the summit of Mt. Logan *Phil Dowling*



Schoening ridge with Queen Peak above and King Peak on the left, camps are marked *Bradford Washburn*

Mt. Logan via the Schoening Ridge

Expedition headquarters was located at the Capitol Hotel, the hostelry from which all Logan expeditions seem to start. Our contact in Whitehorse was Monty Alford, who was very cooperative in making local arrangements, including obtaining our license for scientific exploration in the St. Elias Range, which is issued by the Territorial Commissioner.

On 15 May Bob Cuthbert, Dave Jones, David Payne and Pete Robinson travelled by car to Kluane Lake and camped at the Icefield Rangers Research Project air strip. On 16 May Lloyd Gallagher and I met Lloyd Ryder at the Trans North Turbo Air hangar for a flight direct to the mountain. All our community gear and supplies were loaded in Beaver CF-MAS.

The expedition was very nearly lost on the ramp when the aircraft engine caught fire during ignition. Fortunately, Ryder knows how to handle such situations, and on re-starting, Lloyd and I stood by with the hangar fire extinguisher.

Flying time to the landing camp on the Seward was about 2 hours. We had hoped to be approximately 2 miles from the south west spur, but, unfortunately, the only suitable landing area was 61/2 miles from the beginning of our intended route, and 9 miles directly south west of the main summit.

During our flight, we had the opportunity of examining the south west spur from the air. Lloyd and I agreed that this approach would have to be abandoned. The upper portion of the ridge was fluted with thin, nearly vertical cornices which we considered were not negotiable with heavy packs, and Lloyd said that he could see holes through the cornices.

Alternately, the Great Ice Ramp route seemed feasible, but was considered to have much objective hazard due to overhanging ice and steep rock walls.

When the balance of the party arrived from Kluane Lake, they had with them a radio (Spillsbury and Tindall PRX-30) which had been loaned us by the Arctic Institute of North America. At the appointed transmission hour we were unable to raise Kluane Base. Ryder, in turn, tried his aircraft radio and was also unable to get through. We considered that the Logan massif was interrupting transmission so sent the radio out with Ryder. Late that day, we saw a very weakened Savannah sparrow fluttering around the camp looking for water.

The next 2 days were spent ferrying loads to camp 1 (7250') at the foot of the Schoening Ridge, 41/4 miles away. Snowshoes were used extensively over this portion of the route. Almost all members of the party had difficulty with them, resulting from inadequate harness fastenings, especially when traversing.

On 19 May Bob and I climbed into the cwm bordered by the Schoening Ridge on the west and the south west spur on the east. The purpose of our reconnaissance was to examine the approach to

Mt. Logan from the south west
Route follows valley behind King Peak, ascends Schoening ridge (hidden by clouds), crosses ridge of Aina Peak (centre) and goes up behind skyline to main summit at far right *Bradford Washburn*

the Great Ice Ramp which rose from 10,000' to 15,000'. Entry into the cwm was easily negotiable due to five avalanche fans which had filled the marginal crevasses on its west side. We stopped about 150 yards below the very broken upper ice fall. The ice on the ramp overhung its entire length in a shingle-like fashion. The preceding day we had seen an avalanche come down the south face and take out the bottom portion of the route. Bob and I returned with the opinion that this route was too hazardous an approach, as we would have to spend too long a time exposed to ice fall.

The next day, while Bob and I did a reconnaissance on the Schoening Ridge, Lloyd examined the ramp and returned confirming our opinion. On 20 May, we committed ourselves to our reserve route, the Schoening Ridge.

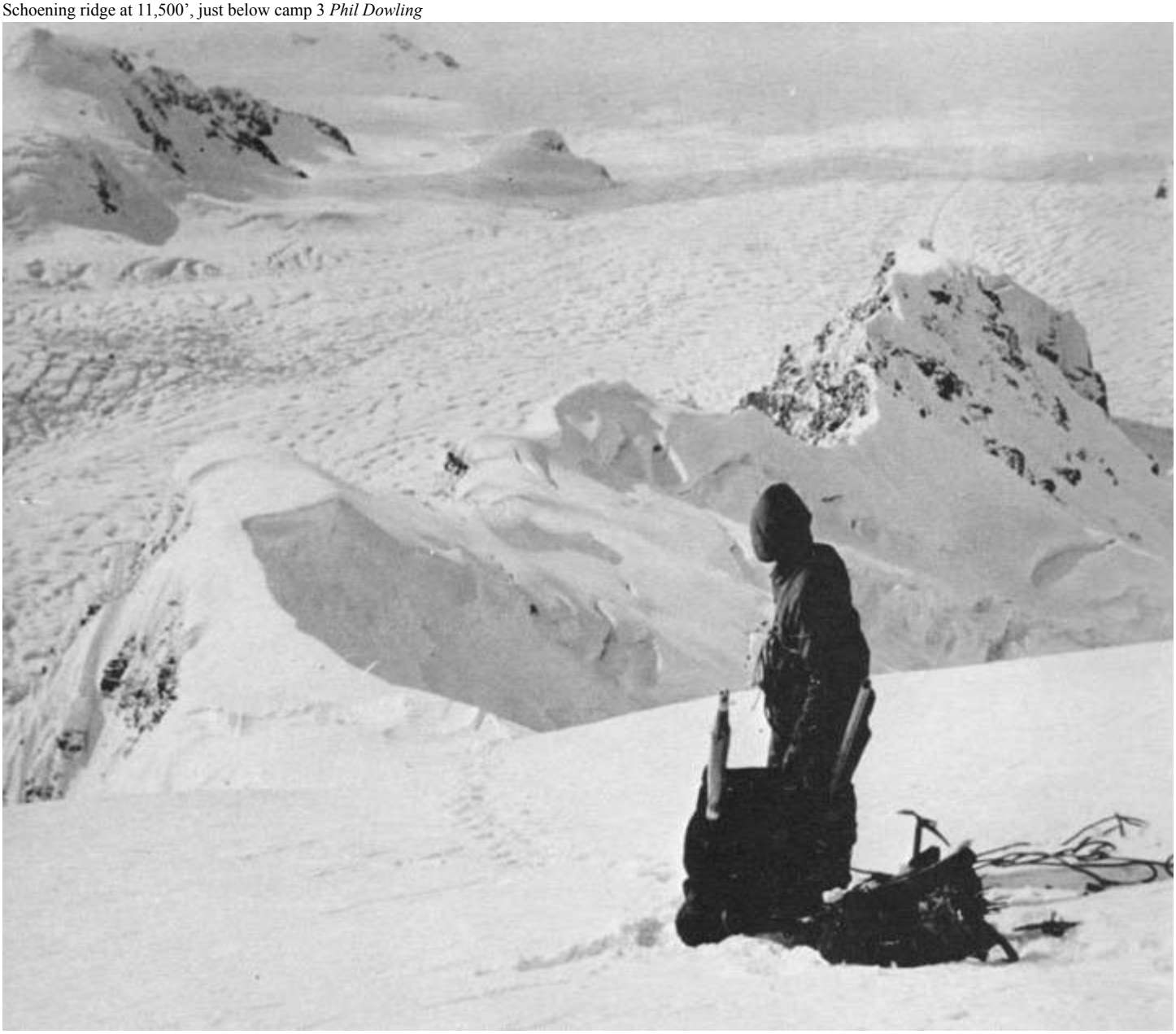
The following day, the entire party commenced route finding through the icefall west of the ridge. Snow conditions were found to be generally good, although heavy wanding was required to mark the route. Our first fixed ropes were set across the worst snow bridges. Our day's loads were dumped at approximately 9000', four members of the party continued to the site of camp 2 (9300'), and approximately 21/2 miles north of camp 1, and located at the bottom of a snow spur which appeared to lead to the top of the ridge.

On 23 May we excavated camp 1, and while four members of the party returned for additional loads, Bob and I made route to the ridge crest, approximately 2000' above camp 2. Snow conditions were excellent, and bucket steps, sun glazed in the heat of the afternoon, were frozen solid for the next morning. From the ridge crest, we could see our original intended routes on the south west spur, and they were clearly very dangerous.

About 10:30 that night, a cornice avalanche swept down from the ridge, cutting a swath about 1/4 mile wide across our route to camp 1.

By 25 May camp 3 was located at 11,850'. By relaying very

Schoening ridge at 11,500', just below camp 3 *Phil Dowling*



heavy loads, camp 2 was evacuated on this day. The party suffered in the extreme heat from the work which had to be done. Dave and I fixed ropes between the crest of the ridge to camp 3, in order to make a safe passage. The day before on this section of the route a snow bridge had collapsed under him, very close to the edge of the east face.

On 26 May Bob, Pete, Dave and Lloyd made route to 13,100' but had to return when snow reduced visibility. Our route at this point was on the west face of the ridge, some few 100' below the crest. On the same day, David and I brought up our last loads from a cache below camp 3. This day marked the beginning of a spell of bad weather and the party experienced some feeling of mountain sickness—lassitude and nausea.

On 27 May Bob, Pete, David and I took over the lead and put the route to 14,500', which we assumed to be above King Col but well to the south of it. This portion of the route was very steep, and we wore overboots and crampons for the first time. We formed a dump at this elevation and marked it heavily with wands. Fixed rope was placed in critical sections during the descent.

After 12 days of hard work, the party was in extremely good health. Light snow continued during the night. On 28 May storm conditions had developed with high winds and snow, which continued until 4 p.m. The day of rest which was welcomed by the entire party. We considered carefully our ability to reach the summit due to our distance from it. We had been 13 days on the mountain and were still below 12,000'. In addition, it became apparent that we could not reach King Col in one more lift, and we chose to establish camp 4 at 13,100'.

The following day, David and I climbed to 13,900' in order to re-establish the route which had blown in during the storm, while the balance of the party carried loads into camp 4.

The party was now feeling altitude and the amount of work to be done was requiring more effort. In addition, we were finding

our tents (4 man Holubar) barely adequate under storm conditions, and during warming periods snow was leaking through the roof. Maintaining our fluid balance was also becoming a problem. That night we recorded our first air temperatures below zero. Cheyne Stokes breathing was noticed for the first time among all members of the party. Nembutol and Valium started to be used on a regular basis to assist sleep.

By 31 May we had established a heavy dump at elevation 14,600'. The route finding between camp 4 and the dump was over very steep snow, and David and I found it difficult establishing the route through enormous crevasses. We had placed 2100' of fixed rope to this point. The dump was considered to be a few 100' below the crest of the ridge, but it was very difficult to tell because of storm conditions and the powder snow which continued to sweep the face. All day long we could hear the wind blowing like an express train over the ridge.

On 1 June the storm was at its height. With only 2 days food left in camp 4, it became imperative that we reach our cache regardless of the weather conditions. Carrying loads of approximately 55 pounds each, we evacuated the lower camp. The 1500' climb took 51/2 hours in terrible weather and snow conditions, including rime ice and winds gusting to about 40 mph. Snow drifts were up to our hips and we constantly changed the lead. Everyone suffered badly from the cold. Wands were half-buried and fixed ropes could only be found by probing with our ice axes and then pulling them free. On reaching the dump at 4 p.m., only 2 inches of our marking wands projected above the surface of the snow. We were indeed grateful that we had made the decision to move ahead that day! Without any argument, the dump at 14,600' became camp 5. There was a strong feeling of unity among the party members that night as a result of our mutual effort during the day.

Next morning. 2 June, the weather began to clear. With perseverance, the party carried all loads over the crest of the ridge. David and I established camp 6 at King Col 13,800'. Only four loads remained to be brought from a cache on the north side of the ridge. This was to become the dump camp for all surplus equipment not required for the summit attempt.

We were elated to be in the famed King Trench, which has to be seen to be believed. King Peak rose in great majesty above the Camp. Our discouragement of a few days earlier disappeared and we again began to believe in the possibility of reaching the summit.

On the morning of 3 June the party left King Col and headed for the summit plateau via the giant icefall at the head of King Trench. We now believed ourselves to be on the original 1925 route. We had approximately 5 days food to reach the summit, and 2 days for return to the dump.

Camp 7 was located on the south west shoulder of Queen Peak (14,800'). The weather broke in the late afternoon and our 7 days of bad weather was over. The following morning, Lloyd and Dave set out with the first loads in the hope of reaching the 16,000' col west of Queen Peak. Shortly before 8 a.m., while the rest of the party were clearing the camp site and packing was well-advanced, a slab avalanche swept in from above. First warning was given by Pete who, along with Bob and David, jumped into an unexplored crevasse immediately up-slope from the tent site.

I watched the avalanche approach the upper lip of the crevasse, which was at head level. By stepping forward under the lip, I was struck by only a few blocks and much loose snow.

The avalanche was over as quickly as it had begun. It lay about 50 yards downhill and about 150 yards across the slope. Approximately 80% of the campsite had been swept away, but about half of our belongings were in the unaffected area. Everything else was dumped and scattered. We immediately began to dig to recover our gear. My only thought during this episode was the loss of important food or equipment. We were all astonished as to how destructive a small avalanche could be.

We climbed into the cwm west of Queen Peak and were forced to make camp 8 at a similar site at 15,400'. The remaining 800' of slope to the summit plateau required fixed ropes. Everyone suffered badly from the heat.

About 7 p.m. Lloyd and Bob moved up to establish a route over which heavy loads could be carried. Three times that afternoon, we felt and heard settlement in the slope.

By 10 p.m., Lloyd and Bob were back at the tents, strongly advising an immediate descent. Snow conditions were discouraging. There were two surface layers, the upper of which comprised a few inches of sun-worked frazil ice and then about 10 inches of hard, old snow. Over a large part of the route they encountered extensive cavities below the second layer. Within 45 minutes we were packed and by midnight we had descended to a safe location, to make our second camp of the day at 14,510'. June 4 had been a very discouraging day.

Our reasons for abandoning the route were examined in detail next morning. Everyone was satisfied that this reversal in plans had been necessary, and we even felt we might have to abandon our objective. While Dave and I returned to the site of camp 7 to recover some unclaimed items that had been buried in the avalanche, the balance of the party reconnoitered a route on the south side of Queen Peak. When they returned to camp that evening, they reported that they had discovered a way to the summit plateau. We then realized that the route line shown on the Centennial Range map of 1967 was incorrectly placed, and the route we had found was in fact the original McCarthy-Foster route of 1925.

Having lost 2 days in the Queen's Cwm, we could afford no further delay, so Lloyd and Pete set out on the night of 5 June to establish a track to the high plateau. Early the next morning, the balance of the party cleared the lower camp and reached the leading rope before noon. The party had gained 2200' since the night before, and prepared camp 10 at 16,300'.

We planned to climb at night to avoid the heat of the day. We were experiencing some dizziness, and all climbers were now demonstrating Cheynes Stokes breathing. The weather was brilliant. From this point we could see the Malaspina Glacier and the Pacific Ocean.

At last, we were on the summit plateau. Our next objective was to cross Logan's back from the south to the north via Aina Col. Between 7 and 8 in the evening, Bob and David set out to make track. The second rope left within an hour to be followed by Lloyd and Pete who were now bringing up the rear. About midnight Dave and I found that we were suffering from numb feet. Dave said that he could not feel the bottom of his soles and I could not feel my toes whatever. We got into a bivouac sac and waited for Lloyd to bring the tent. By 1:30 a.m., camp 11 was pitched at 18,200'. The six of us spent a very tight night in our four-man tent.

The next morning was bright and windy. In a spectacular, hard-driving effort the party forced its way over Aina Pass and along the north slope of the summit ridge to make camp at 18,500', north west of the W. Peak. We had travelled the entire distance in 2 1/2 hours, and planned this to be our high camp. It was certainly a desolate location. The wind never ceased to blow and the snow was packed so hard that we had difficulty in driving our snow slats into its surface when erecting the tent. We could see our route clearly now to the summit. It still appeared to be a long way off, but very direct.

About 5 p.m., after an hour's preparation, we set off in an attempt to reach the main peak. Within a few 100 yards of the camp, however, the weather blew in and we lost all sense of direction. As our wand supply was extremely low, we had no alternative but to return.

The next day, 8 June, the route appeared clear, although there was a great deal of high cloud in the area. By 7:30 a.m., we left camp and climbed continuously in a cross wind which seemed unceasing. We first reached the false summit which we had seen from camp. Then central peak lay about a quarter of a mile beyond. This we reached about 10:30 a.m. We had been 24 days on the mountain.

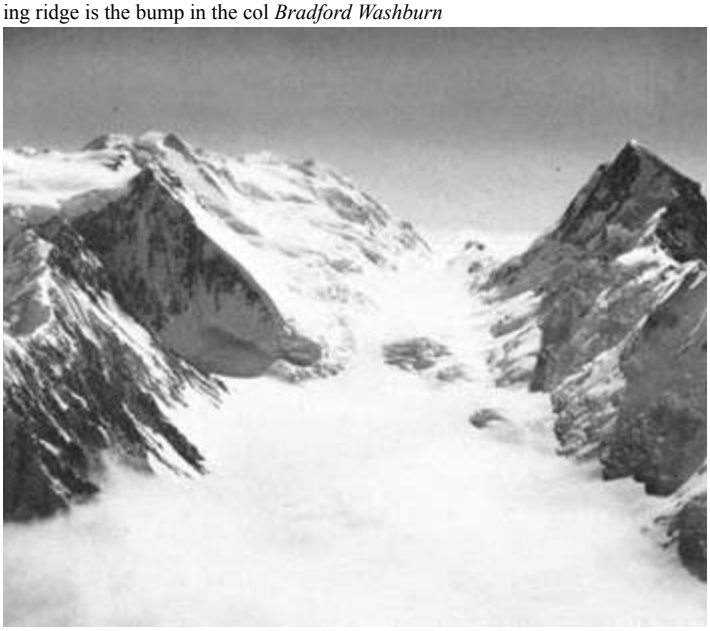
Reaching the highest point in Canada was an emotional moment. Dave Jones, our youngest, and I, went arm-in-arm to the summit. The wind blew at a steady 40 miles an hour and we estimated the temperature to be +10° F. Pictures were extremely difficult to take and we suffered from frostbite quickly.

We made a short stop below the summit, out of the wind. Then after a loose-gaited descent, we reached our high camp about noon. Thank God we had reached our objective at last. Now our only problem was evacuation. Pete was feeling nauseated and Bob and I suffered headaches. Our fuel supply was full of condensation and our stove was giving us great trouble. We had spent 3 nights with 6 men in our small tent. We planned to move down later the same day.

In the early evening we abandoned our high camp without regret. In 2 hours and 20 minutes we covered the distance to camp 11, south of Aina Pass. Lloyd and Dave made an extended circuit to visit the AINA hut on the plateau, which they found to be unmanned, with only 3' of the building projecting above the surface. Our good spirits were beginning to rise, and we were ready for home.

On 9 June we descended 4000' to our dump camp at King

King Trench, Mt. Logan on the left, King Peak on the right; summit of Schoening ridge is the bump in the col *Bradford Washburn*



On the Schoening Ridge *Phil Dowling*

Col. While descending in the mist through the giant icefall just above the camp, we thought we heard voices—women's voices This caused some joshing, for after 25 days in isolation, one has a tendency to get that way. Within minutes, we were dumbfounded when we realized the voices were real, and that by chance we had run into the Arctic Institute's ground party led by Joe Labelle. We exchanged news and invited them to our camp for tea. The seating arrangements on this occasion provided for one lady in each tent, there being two in the AINA party.

Later that afternoon, Joe Labelle radioed Kluane Lake and made arrangements for Lloyd Ryer to pick up our party in the Trench on the 12th. This would save us immeasurable effort. The evening was spent at the AINA Camp on the opposite side of the trench, near the icefall.

June 10, we ate our loads down to reasonable proportions and distributed left-over community gear between members of the party. On the 11th: we descended the trench to camp 13 at approximately 10,800', where the AINA party had left an igloo. The downward

journey did not take long but it was unpleasant because we were carrying all personal gear, food and community equipment. The igloo contained some food supplies, the likes of which we had not seen since leaving civilization. An orgy of pancakes and maple syrup soon followed.

That afternoon, a landing strip was wanded for Ryder's use. Light snow started around supper time. We had 3 full days rations left. On 12 June our scheduled evacuation date, the area was completely socked in. It developed into a day of gastronomic indulgence. The next day, at about 4:15 a.m., we were awakened by the engine blast of Ryder's Beaver. He made two passes over the camp and then landed about 1/4 mile west of our location. We were all pleased to see our pilot again. Bob, Dave and Pete formed the first load destined for Kluane Lake. The rough downhill take-off over sastrugi was spectacular. At about 8 o'clock the rest of the party flew out, arriving in Whitehorse 2 hours later, where after 29 days on the mountain we did some serious drinking.

The greatest strength of our expedition had been party unity and good planning. This, and every man contributing the best, was what gave us success.

Phil Dowling

High Mountain Anecdotes

Mountaineering is a many faceted activity, only one being the success on a major route or peak. Most of what one reads in the mountaineering literature are accounts of these triumphs, but many pleasurable memories are derived from minor events that seem insignificant at the time but linger on.

Intriguing incidents often occur during the planning and operational phases of an expedition. For the past few years we have been involved in many fascinating expeditions to the high peaks of the St. Elias Mountains, including climbs of Mts. Logan, Lucania, Steele, Bona, Tressider, and Vulcan Peak. The Mt. Logan venture included not only mountaineering ascents but also long stretches of living at high altitude, involved with research activities in high altitude human physiology and the environmental sciences. Many reminiscences arise from these activities, the setting down of which not only brings back pleasant memories, but may also elicit a grin from those who read this.

In early June of 1971 our group landed on the King Trench Glacier below the West Buttress of Mt. Logan for the annual ascent to the high research camp. After a couple of acclimatization days in the Trench, during which we built igloos, took pictures, and generally goofed off, we started upward. The first night was spent at about 13,000' in King Col. The following day, in thick fog, we started up the steep icefall that leads to the upper slopes of Mt. Logan. Visibility was no greater than a hundred yards, and often less. As we struggled upward through the deep snow, my rope, with Liz at its other end, was in the lead. Glancing upward occasionally in search of the route, which we knew pretty well from previous years, I suddenly spotted the vague form of a man descending a rope. At first I wondered if, in this fog in which there was little definition, I had become totally disoriented and was looking back at one of my own group. But no; I glanced back and there they were, plugging along. I stopped and yelled to Liz: "Look! Ahead there, above us!" She looked up, and with a squeal of delight dropped her pack, grabbed a harmonica from her pocket, and began to play a little ditty. The man we had spotted was perhaps a hundred yards away, and was rappelling down the steeper section of the icefall. The climber whom we had first seen expressed his astonishment when he suddenly hard a girl's voice in the mists. He thought he was going crazy! Then he heard the harmonica and was sure of it!

Who could it be? It occurred to us that it might be Phil Dowling's ACC expedition which had been attempting a route on the south side of Logan. They had expected to descend by Independence Ridge; could it indeed be them? The rest of the group came up, and in our excitement, the second of the girl's voices must have been heard. As the man above completed his rappel and heard the excitement below, he headed toward us as others followed. Soon the entire party had joined us, and we stood there in the snow, all chattering at once; it was indeed Phil Dowling's crew.

It was so good to see new faces that both parties decided to camp right there and fraternize. Our group set up on the spot; their's had cached equipment 200 yards further down in the col and camped there. We joined them and spent several hours drinking warm, sweet tea and swapping tales. They related how they had been forced off their original route by severe avalanche danger and instead had made the ascent by the Schoening Route, and the descent by the West Buttress.

Later that evening we returned to our camp for supper, expecting them for evening tea. Bob Cuthbert, carrying two billies of water to contribute to the tea effort, slipped into a crevasse up to his shoulders, yet didn't spill a drop!

We continued our conflab for hours that night, as if we hadn't seen other human beings for weeks. It had indeed been a month since they had left Kluane Lake base. That night we radioed to their pilot to pick them up in King Trench, as they had no radio. Next day we bid one another adieu and headed on our way, after a very pleasant interlude.

In 1968 an unusual incident occurred on Mt. Logan that has never been fully explained. At the end of the research season in early August the support team headed out for the main summit, at 19,850' some 2000' above us and several miles away. About 4 miles out, as we traversed the 18,000' slope of "West Peak", I spotted something sticking out of the snow a few feet ahead and picked it up. It was a postcard, and as I turned it over to read the address I practically fell over—it was addressed to me! Postmarked two months earlier, it had been sent to Kluane Lake.

Later, trying to figure out how the card got there, I discussed the possibilities with some of the people at Kluane Lake, including our pilot, Phil Upton, who carried mail to the mountain in his aircraft when shuttling supplies from base camp. I wondered if somehow the card could have blown out of the airplane as he was flying in the vicinity of the mountain. He said this was impossible as the doors and windows were shut and locked when in flight, besides which all mail was sealed tightly in a mail sack. Someone else wondered, without really believing it, if it could have fallen out of

the commercial mail plane on its way to the Yukon, and then been carried by the wind to this unlikely place. That certainly didn't seem likely. The only explanation that had any plausibility was that the card somehow escaped from the mail sack as it was being unloaded at the high camp, bound tightly though it was, and then blew the 4 miles to "West Peak". Whatever the explanation, the chances of running into the tiny object so far from camp and in the midst of this vast area of ice and snow were infinitesimal, yet it happened!

In 1969 a graphite pencil probably saved a life. A volunteer physiological subject flown directly to 17,500' from 2600' fell ill with cerebral oedema and lapsed into a coma. Oxygen was administered full strength but the subject showed little improvement. It was decided that evacuation was necessary. As the radio was activated to call the aircraft, it blew a cathode resistor in the final amplifier stage. In those early days of the project we had no backup radio or spare parts, and we began to rack our brains for a substitute. Finally Casey had a thought: how about a pencil lead? The resistor is only 8 ohms. Out came an Eberhard-Faber wood pencil and we sharpened both ends and tested it. Perfect— 8 ohms on the button! I soldered it into the set and we had a plane in a few hours. The subject recovered completely, beholden to a pencil that might have otherwise been used to complete some very unpleasant paperwork.

Air support for the Icefield Rangers Research Project, including Mt. Logan, is carried out by two Helio Courier STOL aircraft based at the Kluane Lake facility. Phil Upton is chief pilot, and Roger Eisinger, a 22 year old pilot, had his first bush season in 1969. Both aircraft are fitted with retractable skis, hydraulically lifted when the plane lands on the gravel at Kluane. One day Roger, after shuttling supplies to one of the snow camps in the mountains, returned to Kluane and forgot to retract the skis before setting down on the gravel, and hit with a terrible clatter. No damage was done except for scratches on the bottoms of the skis, and a red-faced pilot. After he parked the plane, with the skis cranked up again, Phil pulled Roger aside and gave him a minor dressing down about the incident.

That same afternoon Phil took off for Logan with supplies, returning some hours later. The first signal of his return was the sound of HIS unretracted skis clattering down the gravel strip. Roger, and others standing about, broke into great peals of laughter with tears streaming down their faces. Phil, cranking up the skis, parked the plane and came into the mess hall for dinner as if nothing had happened at all. And nary a word was said about the incident by anyone.

That year after the close of the Logan program in early August, several of us went over to Alaska for some short ascents in the Chugach Range near Valdez. Then we met some fellow climbers in Glenallen and flew to the Mt. Bona region in the western St. Elias Mountains. We did a successful ascent of Bona and, after returning to our 14,000' high camp, got settled in to cook supper. Gail, who had been on my rope during the climb, was quite exhausted as she went into her tent to get organized. She walked around for some time noticing wearily that her feet kept sticking to the floor, but paying it little attention. After 20 minutes of this she sat down and suddenly realized she still had on her crampons, and the tent floor looked like a sieve!

Later, three of us—A. J. Rick, and I—started on snowshoes up the Klutlan Glacier below the north face of Mt. Tressider for the first ascent of that peak by the west ridge. As we were moving below the wall, several 1000 tons of ice cascaded down at us from the summit region. Sure that we had cashed in our chips, A. J. and I, who were a couple of 100 yards ahead of Rick, began to run away from the face. I ran back along the snowshoe track toward Rick, and as I approached him with the avalanche cloud hot on my heels, I yelled: "Run Rick, its going to overtake us!" He had stood there taking outstanding pictures of the incident. As he turned to run, he tripped over the toes of his snowshoes and fell flat on his face! I looked around and saw that though the cloud would engulf us, we were well out of reach of any ice blocks. The 40 mph ice-choked wind finally overtook us and settled. A. J. who had run out across the glacier, was found covered with pulverized ice and looking like a snowman, but no worse for wear. It had been a close one; we found our tracks below the face completely buried under huge ice blocks.

At our base camp on upper Klutlan Glacier we one day had a visit from a tiny sparrow. He flitted into camp and spent some hours sitting on this or that tent guyline, watching us, but not allowing a near approach. Toward the day's end he seemed severely distressed by the cold. When someone eventually picked him up he trembled from cold and exhaustion. Sue took the bird and attempted to warm him in her hands for a while. We then gave him some cereal and bread crumbs. He consumed a little but continued to do rather poorly. That night Sue brought the bird into her tent and allowed him to stay in her down booty. But he was too debilitated to put out enough heat and died before morning. The following day another flock of birds found their way to our camp and seemed quite interested in our activities. That night we decided, since they had little chance of surviving on the open glacier, that we'd open our spare tent and allow them to use it. They remained inside all night and ate scattered bread crumbs. As you might imagine, they were not "housebroken," and the tent was a mess the next day.

For a few days we continued to allow them the freedom of the tent occasionally trying to catch one to warm it. All attempts were fruitless and eventually all the birds died in the snow near the camp. They seemed incapable of finding their way out of the glacier country back to the warm lowlands.

A similar event happened when, in 1971, we made ascents of Mts. Steele and Lucania. After climbing Steele we headed up Lucania and established our final camp at about 13,000' on its north slope. After returning from the summit, we took a rest day to relax before descending. That afternoon a bird flitted into camp and lighted on my ski pole. It sat there for some hours fluffed up and obviously not very comfortable, and toward the end of the day keeled over into the snow. Liz brought it into the warm tent and we let it flit about among us. At first it cowered in the corner, but eventually it became more confident of its surroundings. It seemed to revive quite well and we thought we had a chance of saving it. Sure that the bird would fail to put out enough heat to survive unprotected overnight. I brought the creature inside my sleeping bag and it seemed contented. I got very little sleep, trying not to roll over on it. Next day we headed down, and I carried the bird in

New route on Cap Trinlte *Andre Robert, Pierre Vezina*

a down booty suspended from my neck, leaving enough opening for fresh air. It was a beautiful day, and the warm sun beat down keeping the inside of the down booty quite comfortable. The bird was lively all day as we trudged along, but when we stopped to make camp that night, I set the booty down on the snow while we erected tents. When I retrieved the bird 20 minutes later, I found he had died in the interim. I still don't understand what got him.

We have often found the dead carcasses of birds on the high peaks and ridges of the St. Elias Mountains. They fly into the depth of the range on their way somewhere, and become lost or exhausted and unable to find their way out. Unfortunately, every attempt at bringing these birds out safely has failed.

Joseph C. LaBelle

Deux mots d'histoire ...[4]

. .. Au début tout tourne autour de Val David ou, en 1932, John Brett et ses fils ouvrent La Valse. Pendant dix ans, des grimpeurs isoles poursuivrait ('exploration de nos parois des Laurentides—tantôt a pied, tantôt a skis. En 1942, fondation de la section de Montréal de I'Alpine Club du Canada et, I'annee suivante, première de I'Arabesque au Césaire par M. Brett et sa femme. Pour I'Aiguille du Mont Condor, c'est en 1947 seulement due I' Américain Red Austin en réussit la première ascension.

II faut attendre 1949 et la fondation du Club de Montagne canadien, par Julien Labedan, pour voir des Québécois francophones s'intéresser a I'escalade. Peu-a-peu, entraines par des amis européens, ils y viennent. Le nom de Bernard Poisson reste accroche au Gran Toil du Mont King, le plus spectaculaire de nos surplombs. En 1956, arrivée au C.M.C. de Claude Lavallee et du grimpeur anglais John Turner, disciple du célèbre Joe Brown, qui réalisera en grand nombre d'importantes «premières» telle la Traversée du Mont King, Black Slab a Saint-Hilaire, etc. . . . Quant à Claude Lavallee, il ouvrira entre autres l'Amphithéâtre au King, Gemini (Césaire) et, plus récemment le magnifique Robert-Cartier au Mont Nixon.

Cependant, des enthousiastes de la région de Québec ne sont pas inactifs. Les années '60 voient I'apparition du Club d'Escalade Laurentien qui, sous la conduite de Jean Sylvain, ouvre des voies dans les grandes parois de St-Siméon et du Saguenay. Point culminant de ces efforts, la «directissime» du Cap Trinite en 1967.

Et I'histoire continue. Pour la plupart des grimpeurs, il s'agit moins de remporter des victoires que de se mesurer a la montagne, de suivre les difficiles chemins traces par les devanciers . . .

Tant qu'il y aura des parois qui sont autant de défis, il se trouvera des hommes et des femmes pour les affronter. Le dernier chapitre de cette histoire ne s'ecrira jamais.

4 Extrait du livre Escalades. Guide des parois, région de Montréal, de Bernard Poisson.

Cap Trinite

A new route was put up on the steep 1000' face of Cape Trinité on the Saguenay river by Pierre Vezina and Andre Robert. The route lies to the left of the Diretissima, a direct line followed by the same two climbers in the company of Jean Sylvain in 1967. The pair started their new route on the 25th of July and reached the summit at 11:30 a.m. Friday the 30th, They were well equipped with 200 pounds of gear and apparently were in no hurry, taking their time and enjoying every inch of the way. They were greeted by their friends on the summit.

François Garneau

The Vowell and Conrad Groups

Although originally scheduled for supply by helicopter, the ACC Alpine Climbing Camp arrangements had to be changed when the transfer of the Bugaboo igloos was postponed until

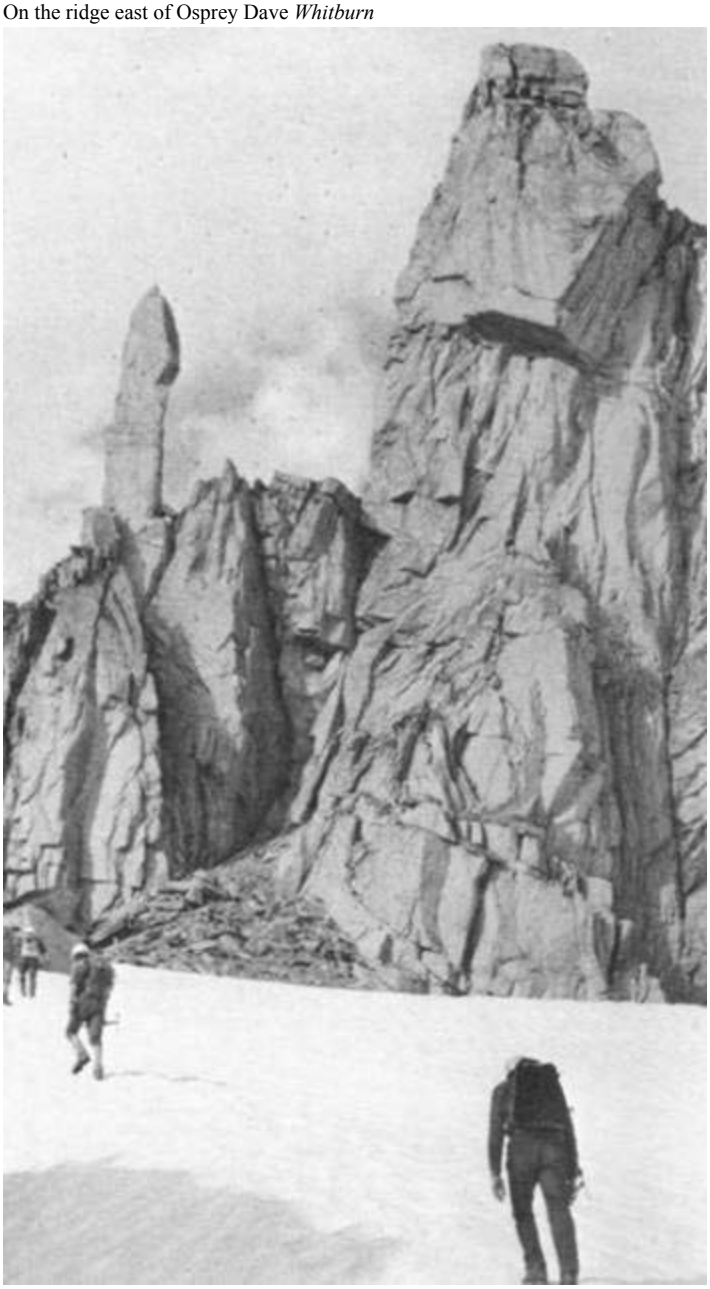
1972, as this would have meant a prohibitively high ferry charge to bring the machine all the way from Golden, rather than just from Bugaboo Lodge. This in turn necessitated more careful and time consuming planning of food, equipment, and access route. In spite of considerable time and effort to reduce the total weight, an incredible pile remained, beyond which no further weight paring was possible. In order to reduce the total weight to be carried into camp, Jim and Lorna Dell of the Calgary Section along with myself carried a considerable amount of gear up to a cache on Conrad Creek during a reconnaissance a few days before the camp. On this recce we did not find the crossing which led up Vowell Creek, so settled on Conrad Creek instead. However, after all 11 of the camp personnel met at Parson, B.C. on 1 August and found that the approach was now twice as long as originally planned, I had a small mutiny on my hands.

Some rapid checking at the local sawmill by Robin Lidstone solved (satisfactorily!) the question of the missing bridge. The correct crossing was found, with the road quite good for the first 35 miles. The last 10 miles were a bit rougher, with several fallen trees blocking the road. Just before the road end we chose a lower fork and promptly got my Travelall stuck in a mudhole. It was not freed until late Sunday morning, after which the upper fork led to a non-drivable ford directly across from our access valley. This valley is the same one used by Englehard in 1939 (CAJ 1939, p.29).

Setting off at 1 p.m. we were not able to reach camp before dark, so we stopped at a nice spot at the beginning of the moraine. Another half day put us at the head of the glacier, all the while looking at the sheer north face of West Peak. This unclimbed face is a 1000' high overhanging diamond with an easier sloping crack at its west edge. A quick descent down the other side put us at our camp at Shaft #7, a natural cave under a huge boulder, and the proposed site for one of the Bugaboo igloos, located on a slabby outcropping at the base of Osprey's south west ridge, looking across at its unclimbed west face. Five of us climbed Osprey that afternoon after resting from our 70 pound loads. Our route went up the slabby eastern side rather than traversing the slabs to the north ridge of the original ascent.

On Tuesday, Mt. Conrad was climbed by seven people led by Dave Whitburn, who chose a steep challenging shortcut on the normal north east route. They apparently traversed under a spectacular cornice, which fell shortly after everyone had crossed. John Burcombe, Jan Smith and I set off for Thorington via the Conrad Icefield, rather than the Malloy icefall of the 1st ascent. This névé route is best done when there is a good snow cover since a steep 300' section of crevassed glacier must be descended to get around the north end of Conrad. Thereafter the route up Thorington is straightforward and quite easy. After crossing to the north side of the Icefield, we were unable to descend safely into the valley of Conrad Creek to fetch the cache I left there the previous week. The way is blocked by steep cliffs and wet mossy slabs, which means Conrad Creek is impracticable as an approach route to this area. On our return the next day, we traversed from Thorington to Conrad including the previously unclimbed Conrad west peak which they climbed via the 1939 route up its south side, a very long route. Since we were somewhat short of fuel, Jan, Mary Read and I descended 1000' below camp and collected enough firewood

On the ridge east of Osprey Dave *Whitburn*

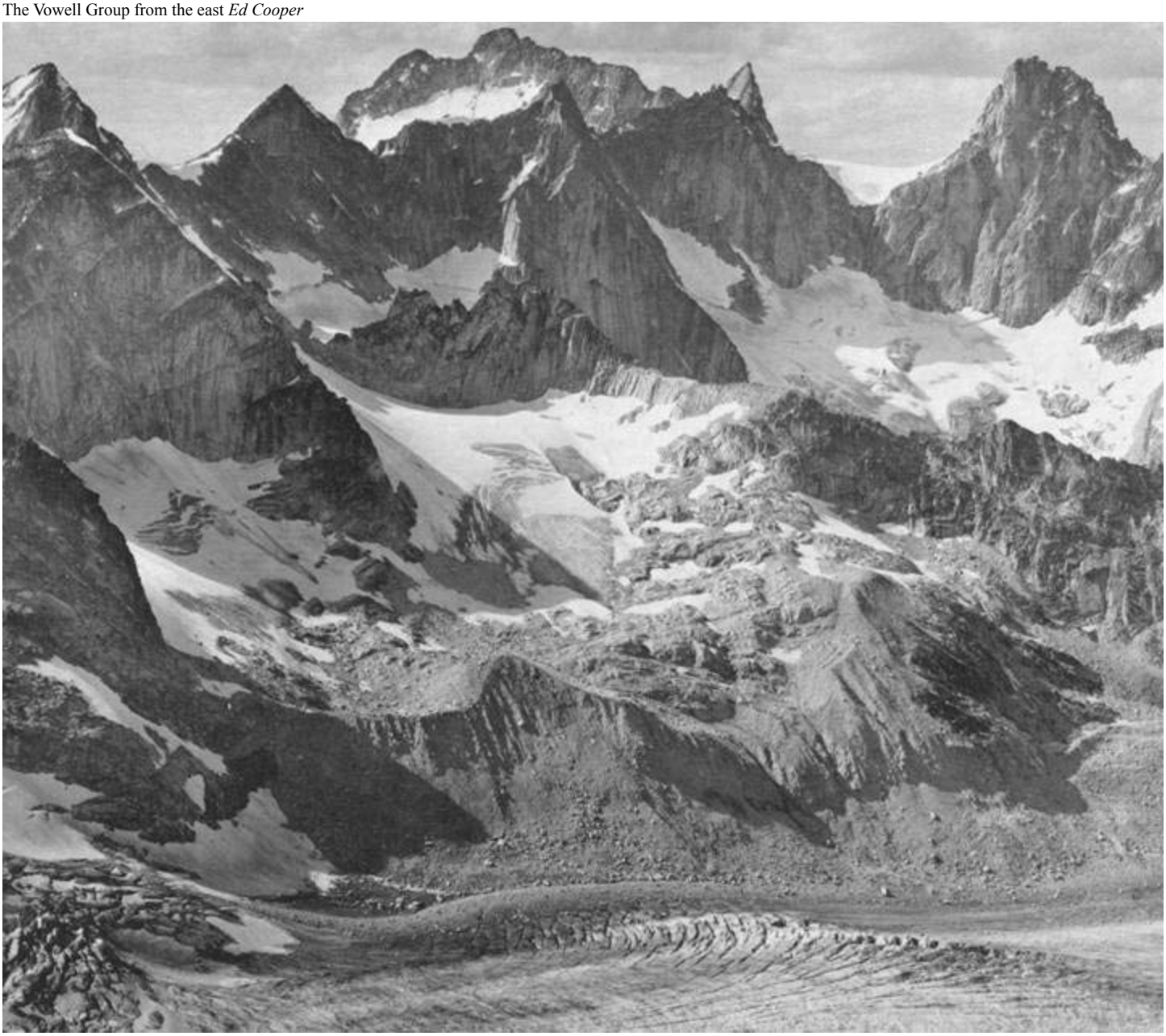


to supplement our gas supply for the remainder of camp.

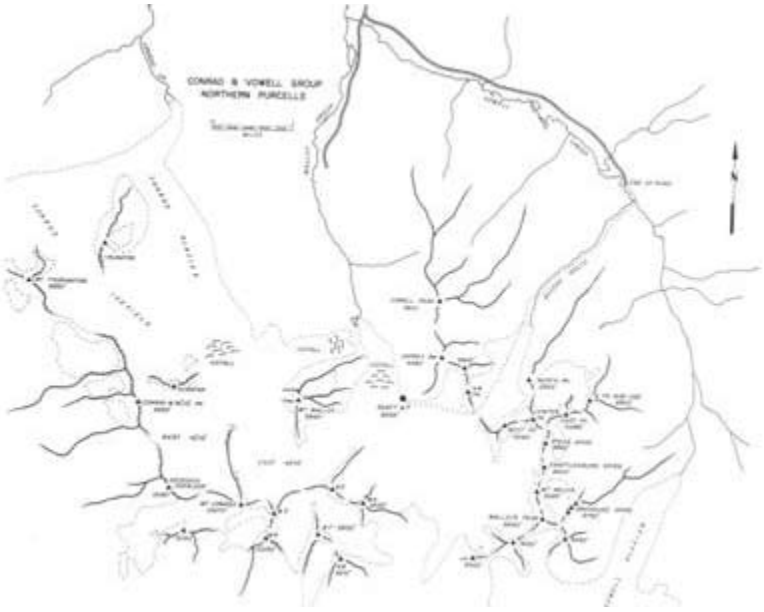
Robin, Mary, Jan, Dan Hale, Howard Bible and myself set off for North Peak on Thursday while lan Saxton, Wally Joyce, and Dave prepared to hike out. Our two rope teams climbed a variation on the north west side, gaining the ridge used by the 1939 party about half way up, and following it to the summit. The climb was up to Grade IV+ a few places, but was very enjoyable climbing on exceptionally sound rock. After an easy descent to the glacier, Robin and Dan also went out to join the three others on successful climbs of Sir Donald and Assiniboine.

The next day John, Howard and myself attempted a new route up a snow couloir on Conrad's south east face. An attempt at a direct crossing of the 'schrund led to ignominious defeat, due to the back wall being composed of overhanging slush. An end run around the 'schrund was settled for, but then traversing back to the couloir proved too dangerous due to wet snow overlaying hard ice. Going directly up the rock was quite easy, but care was required not to send down loose blocks resting on the steep

The Vowell Group from the east *Ed Cooper*



On the east side of Conrad *Dave Whitburn*



slope. John led the only hard pitch just before gaining the crest of the south ridge. Several pitches of easy scrambling led to the top for a new rock route. We were not able to try the still unclimbed West Peak of Conrad since the first storm of the camp was coming in. We raced back to camp, not quite making it before the rain.

Saturday morning was beautiful, with cloudless skies. All the men walked out for more supplies with Howard continuing to Assiniboine. While Jan and John went back up that afternoon, in 6 hours, I had to fetch the gear cached up Conrad Creek. A fantastic lightning display lit the sky most of the late evening.

After waiting for the second week's group to show, but to no avail, I hiked back to Shaft #7 on Sunday with the last supplies. Apparently, the road had been closed due to fires burning in the area, so no one could get in for the second week.

Pat Smith, Jan, John and Mary climbed peaks #6 and 5, and then Malloy by a new but easy route up its south ridge, on Monday, making a complete "skyline traverse" of the peaks closest to camp. Considerable smoke haze had developed by this time, making evening visibility quite poor. The next day Jan, John and I climbed to the Wallace-Kelvin col, then traversed the east side of the ridge to Kelvin. Some fantastic looking faces can be seen on the east side of this group. We descended the north ridge to the Snafflehound Col but did not have enough time to continue. An easy snow descent led to the glacier on the west side. Rather than returning via our ascent route of the west glacier, we continued northerly to the North-Center Col and thence back up our access glacier to camp.

Wednesday was a rest day for all hands. Some bouldering was done and a recce of the "chockstone chimney" on the south west ridge of Osprey. The main west face is still unclimbed, and would be about 1500' of very hard climbing.

Mary, Pat, John and myself climbed East Peak on Thursday via the original 1939 route. This was a good climb up moderately steep faces and narrow chimneys. Our descent was via rappel between the two summits, which appeared to be the exit used by Bob Kruszyna's 1964 party.

Jan, Pat and Mary left for home on Friday, our last day, leaving only John and myself at camp. We climbed up to the base of the chockstone on Osprey, but by-passing it looked to be hard aid climbing, so we tried further left toward the main face. At the first break we climbed up directly to the crest of the ridge. Although harder variations are possible our route was nowhere harder than IV + . An easy walk led to the summit for another new route completed.

Saturday the last two climbers leave for home, regretting only that so many new routes had to be left unexplored due to lack of personnel and time. I for one am going back next summer (1972), to try some of the dozen more obvious possibilities. With an igloo being transferred to Shaft #7 the area will not retain its unclimbed character for long. I strongly recommend the Vowell group to those looking for challenging climbs on very good quality granite, in a relatively unknown, uncrowded area.

Skip King

Patagonia—The Northern Icecap

The Patagonian icecaps have been described as ice age remnants; they display in miniature many of the features found in Antarctica. One hundred and fifty miles north of Punta Arenas, the Paine group marks the start of the Southern Icecap which averages 20 miles in width and stretches northward for another 150 miles. Half way along its eastern edge lies the Fitzroy-Torre group, easily accessible from the Argentinean pampas. Beyond the icecap the Andean chain is broken by the Rio Baker, draining Lago General Carerra (or Lago Buenos Aires if you are on the Argentinean side of the border).

The Northern Icecap has indefinite boundaries but from the summit of San Valentin in the north to Arenales in the south measures 44 miles, and the average width of the ice is about 25 miles. Here, glaciers calve into the sea 47 degrees from the Equator, closer than any others in the world. The Pacific coast is heavily indented with fiords. It can be considered the southern equivalent of the coast of Washington and British Columbia, but is infinitely more remote.

Habitation is restricted to a few isolated groups of pioneer settlers wresting a living from the dense bush. Above the glaciers the icecap rises gently towards the main divide, culminating in San Valentin, 13,310' and the highest peak in Patagonia. To the east, glaciers tumble down steep scarps, often calving into lakes shaped by earlier ice. The tremendous glaciation is caused by the north west storms that constantly sweep in from the Pacific and are a dominant factor in all mountaineering activities.

Exploration of the icecap began half a century ago. In 1921 Dr. Friedrich Reichart led a party from the seaward side at Laguna San Rafael and reached a point midway across the icecap. In 1939 he explored the Leon Valley but the steep sided lakes at its head barred further progress. The next season he used the western approach again, and with skiis gained a low point on the eastern rim of the icecap, overlooking Lago Fiero.

At the same time a Swiss geologist, Dr. Arnold Heim, led another party from the Leon side. They crossed Lago Leon (officially "Leones") in a small boat and ascended some distance up the glaciers which fell into the western end of the lake, before turning back in persistent bad weather. Hess, one of Helm's companions, led the next expedition in 1941-42 from the west. Bad weather prevented them from going further than the col between San Valentin and the peak we called Taraua (ca. 12,700'). In 1945 Heim repeated his attack from Lago Leon. His party gained the icecap from the east by a col (Portezuelo Leon) between Cristal (ca. 9000') and Tornco (ca. 7900') and ascended the latter peak on skis.

All these expeditions intended climbing San Valentin but none, it seems, had sufficient reserves of food or adequate equipment to outlast the spells of driving rain and snow. In December 1952, however, an expedition from the Club Andino Bariloche reached the icecap from Laguna San Rafael. Aided by skis, and blessed with a long period of fine weather, they made short work of cross-

ing the icecap and climbed San Valentin from immediately below the col reached by Hess. Arenales was climbed in March 1958 by a large Chilean-Japanese expedition.

Pride of place must go to Eric Shipton's party which crossed the icecap from Laguna San Rafael in the north west to Lago Colonia the south east during the 1963-64 season. They climbed Cerro Arco (9479') and repeated the ascent of Arenales.

The Leon, in the meantime, had seen few visitors. We know of only two groups (from Buenos Aires in 1959) which explored with boats in the vicinity of Lagos Fiero, Leon and Sur. without gaining the icecap.

The idea of Patagonia was born in a rush hour traffic jam. Dave Launder and Theo Tobler had been reading Shipton's "Land of Tempest" and had decided that the exploratory mountaineering offered by the icecap appealed. Their intentions were to approach the icecap by Heim's route above Lago Leon. This route gave reasonable access to San Valentin as well as a number of un-climbed peaks, and even offered the possibility of access to the fantastic corridor of peaks first reported by Shipton.

When they put the proposition to my brother Ray and myself we willingly agreed to come. Most of the preliminary work was done when the great blow fell. Ray and Teo had an accident on Mount Tasman and Theo was killed.

Around Ray's hospital bed we decided we were still going. Soon after we became the 50th Anniversary Expedition of our club, the Tararua Tramping Club, and augmented our ranks by including Alan Bibby (then living in Vancouver), Paddy Gresham, Bob Gunn and John Nankervis.

Success or failure in Patagonia seemed to a large extent dependent on the ability of the party of five in wet, stormy conditions, so we spent much time designing and testing equipment. Eventually we took specially strengthened Mead tents, air mattresses and ensolite sponge. Our outerwear consisted of specially designed cagoules, lightweight over-trousers, ventile parkas and a host of greasy wool knitwear. The problem of storing food in wet conditions was solved by packing eight-man day rations into 4 gallon tins and soldering the lids. The biggest item of equipment consisted of a 15' inflatable Zodiac rescue-craft and a 9 hp outboard, necessary to ensure mobility on stormy Lago Leon. In the tradition of New Zealand expeditions we canvassed manufacturers for food and equipment and organizations for financial support; eventually our cost was $350.00 each, including one way fares.

The expedition came to be a total experience as all our time was consumed by it. Club members held wine and cheese evenings and auctions and volunteer sewers made equipment which we tested under wintertime conditions. Even our climbing was done with a view to its relevance to Patagonia.

Six expedition members sailed from Auckland on 18 October 1969, with three touring wives. Ray and John were to follow by air after finishing their university exams.

After an anticlimactic ten days the gaunt teeth of Patagonia

Rappel from Cerro Cristal *John Nankervis*

Summit ridge of Siniolchu *Alan Bibby*

Horses near Lago Leon *Alan Bibby*

appeared over the rim of the sea looking at least as wild and lonely as our imagining had made them. Within hours of sighting land we had passed by the awful Cabo de Pilar, and were negotiating the Strait of Magellan.

The softly spoken courteousness of the Chileans was welcome after the worldly sophistication of the Italian cruise-ship crew, and we were soon enjoying the hospitality for which Patagonia is justly famous. On the dock we were met by Claudio Lucero, our Chilean member, and were delighted to find him compatible in outlook and philosophy. He had several expeditions to his credit and had visited the Northern Icecap with the Japanese. He loved to tell an anecdote, and often charmed concessions from his countrymen with his glib Spanish tongue, that we could not even have asked for. We were to find that his boundless energy seldom left him, and his immaculate appearance never.

Punta Arenas' customs presented no problem but our remaining $500.00 was sorely stretched to cover the costs of transporting the expedition to Lago General Carerra, 500 miles to the north. Time passed and living costs mounted while negotiations with multitudes of truck operators became more involved until suddenly and mysteriously, LAN Chile could fly us, complete with 2 tons of baggage, to Balmaceda for about $250.00.

At Balmaceda the carabineros arranged a truck to take us the last 50 miles to Puerto Ibanez on the shores of the lake. The Carabineros de Chile must be the best cops in the world, and gave us all the help they could. They play a major part in the rural Patagonian communities, going far beyond the normal duties of law keeping; their civilized gentility contrasts with the loutish police of some of the more "advanced" countries.

The truck wended through snow-filled passes with tantalizing views of the spectacular Castillo Range. The wives huddled in the cab, while on the tray we became acquainted with the perpetual Patagonian wind. We wondered how any climbing could be accomplished in this, but later concluded that there were far more calm days on the icecap than on the pampas. In the valley where the bright green spring grass was dotted with tiny farm houses of hand-split shakes, a silent campesino clad only in trousers and battered sports coat sprang onto the truck for the trip to town. We shivered inside our Patagonion parkas and were impressed by his hardiness.

We were given use of a shed on the waterfront at Ibanez in which to store our equipment. Next day the "Aysen" arrived and the owner arranged to take us down the lake to the mouth of the Loen River on his return from a short trip to Chile Chico. Meantime, he graciously loaned us his little white adobe cottage, which was just as well because strong winds prevented him from returning for 12 days.

We put the time to good use, however, as many last minute jobs on our clothing and equipment remained to be done. While we worked the local children clustered around the shed in droves trying their English on us and taking an intense interest in our activities. Their sheer numbers cut down the already poor light, and every expedition member moved with an accompanying cluster of chattering satellites. Outside, thirsty gauchos in baggy

trousers and great black riding ponchos rode past on their way to the bar, the eternal wind sending the dust swirling from the horses' hooves. Food was scarce after the hard winter, so we appreciated the gifts of salmon and mutton we received, which along with what we could purchase helped conserve the expedition food for the icecap.

At last the "Aysen" returned and we sailed for Chile Chico. the ancient gasoline engine being aided by a monstrous black flapping sail. Trips to the toilet were made difficult by the necessity to dodge a large bowl of fresh salmon on the floor and a carcass of mutton swinging from the ceiling. These formed the basis of the food presented to passengers and crew by the cheerful cook.

Chile Chico was a pleasant town, larger and more prosperous than Ibanez. Again we were welcomed by the carabineros who had heard of our coming by carabinaros radio. Here we bid farewell to our wives and began the 50 mile journey up the lake. It was a rare day of perfect weather and we marvelled at range after range of fairy tale peaks, which although small, had been eroded into the most fantastic shapes. As we neared Guadal, San Valentin and the lower peaks appeared silhouetted by the setting sun. A great moment!

We slept on the wharf at Guadal and crossed next day to the Leon Valley. Now came a bad moment when we realized that Claudio, Al and Paddy, who were making the journey in the inflatable boat, had not arrived and we had to tell the villainous looking captain of our vessel, that the "dinero" was in the "bote inflatable". The crew of four laughed long at our embarrassment as the "Aysen" was beached and the gear ferried ashore in the ancient tar-covered boat.

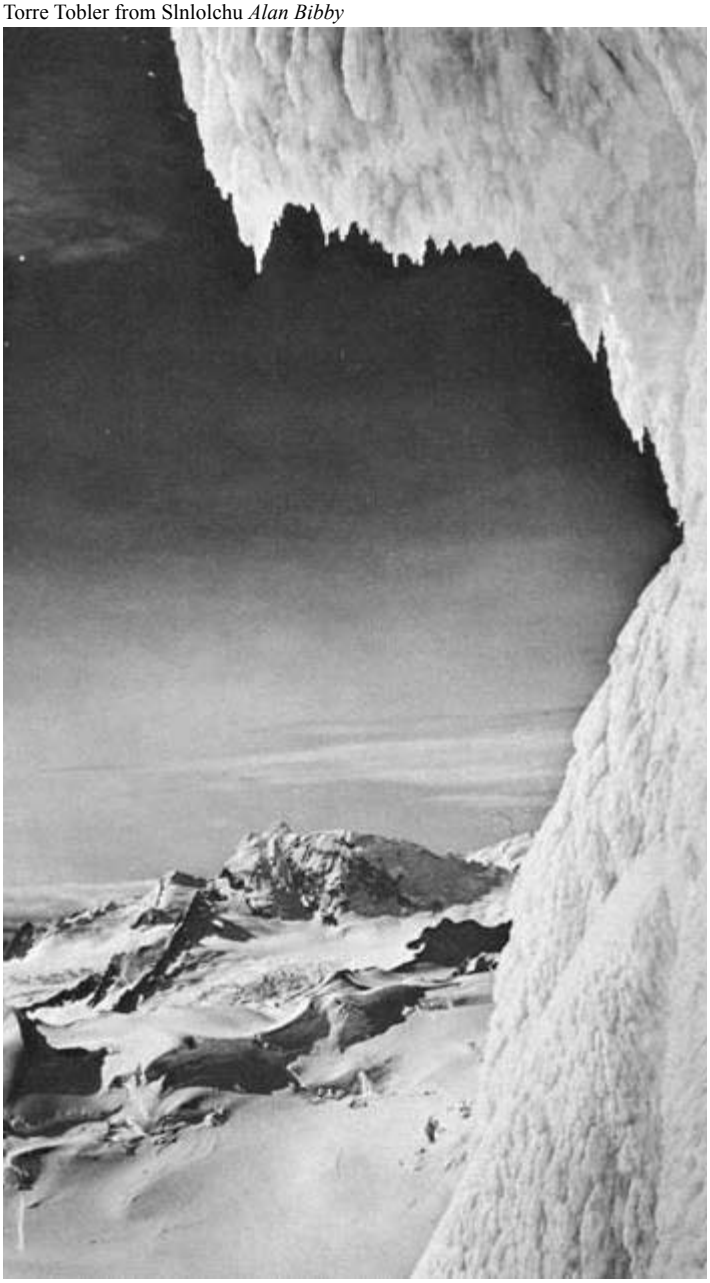
The others arrived late that afternoon with tales of battling 6' seas. That morning they had hitched a ride in a mining company boat across the worst stretch of water after spending the previous night at Puerto Crystal.

We had imagined the Leon Valley to be barren and windswept, but in reality it was idyllic. Claudio soon arranged for two great oxcarts. Each was loaded with a ton of equipment and crashed off, only approximately following the crude track. We were shown how to catch fish by smacking the shallow water with long poles, and hundreds of wild ducks took flight as we walked. Occasionally the carts stuck in sandtraps and streams giving rise to much pushing and colourful Spanish, but most of the time they just rolled relentlessly onward.

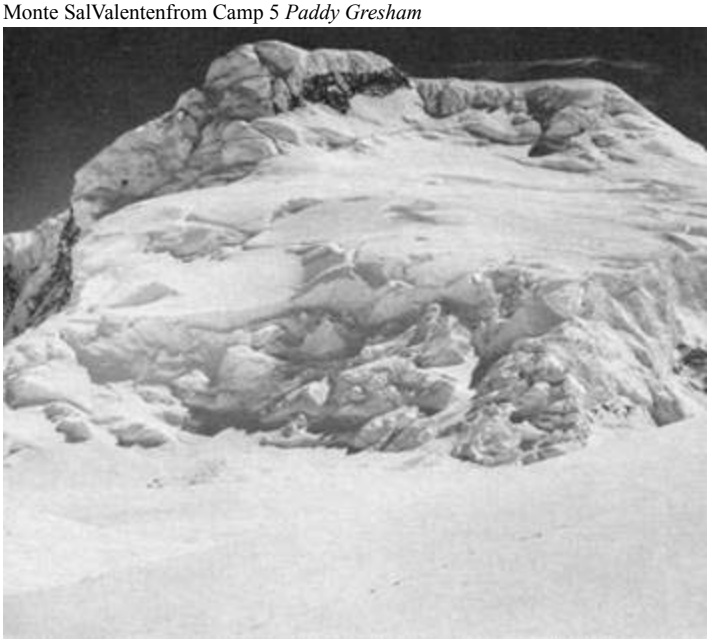
The first night we sat around a smoky fire avoiding rainshowers under a crude iron shelter. A young gallant rode in on his way home, and soon his bottle of fiery Pisco was passing from lip to lip. He marvelled at seeing so many blue eyed gringos with their strange "equipo", and we in turn coveted his magnificent black poncho. The Patagonian poncho is made of a heavy woollen material and keeps the rider warm and dry even in heavy rain. Throughout South America the poncho can be seen adapted to the needs of the region, the pattern becoming more colourful and the weave lighter as one travels north.

As we continued up the valley many stops had to be made at

Torre Tobler from Slnlolchu *Alan Bibby*



Monte SalValentenfrom Camp 5 *Paddy Gresham*



the adobe or shake-covered houses for warm spiced milk or the traditional mate tea. The kitchen is kept warm and homey by an iron stove constantly tended by the woman of the house. The guests are seated on wooden benches while the host fills the cherished gourd with green mate leaves. Water, kept at exactly the correct temperature, is added, and the "bombilla" or filtered silver tube is thrust in. The guests suck the gourd dry in turn, the host refilling it each time. Eventually, the host has his turn and the round starts again. Someone once made the mistake of filling the gourd for himself and Claudio gently explained that this was not done.

Horses were used in the last section of the valley before Lago Leon as the cart-track had petered out. We made two trips a day, the horses with 200 pounds and us with 60 pounds. For the return trip we used rope bridles, and suffered a painful semi-controlled canter and two terrifying crossings of the swollen Leon River.

We celebrated the end of load carrying with a leg of lamb roasted over the fire in true Patagonian style. The carrying had been a community effort, as horses, oxen and carts had been borrowed from all the farms. There was no talk of money, but our gifts of old climbing rope were welcome and we promised to bring as many food tins back as possible.

When the last load had been carried we camped under a giant trog at the outlet of the lake. Before us in vivid colour, lay the view we had first seen in the dingy photos taken by Heim, 30 years before.

On the morning of 21 November, we loaded the boat with a few days food and some gear. We planned to make a short trip up the lake and establish whether our proposed route onto the icecap, first found by Heim 30 years before, would be useable. The weather was perfect and after a 40 minute journey we landed below a 200' moraine terrace on which we hoped to site base camp. At the top of the terrace paradise awaited us. The park-like forest was threaded with tiny meltwater streams tinkling through the grass. We sucked nectar from bright red flowers and gnawed the stems of 8' high rhubarb plants for refreshing juices. However every Eden has its serpent—in this case in the form of thousands of huge horseflies hungry for blood! We located the remains of Helm's basecamp nearby and from this point, another of his photos sprang to life.

The tents were hastily erected and parties dispatched for a preliminary reconnoitre. Alan, Claudio and I took the boat to the glacier snout where the lines of icebergs began their majestic parade. Here the ice was chaotic. To reach the icecap would involve long hours of tedious packing. Meanwhile Bob and Paddy found their way through the bush to the névé of the north branch of the glacier, where they found another of Heim's camps, the 6' windbreak of stones still intact.

In the days that followed a comfortable base camp was built against rocks, and a trail cut through the bush to camp 1. Stocking this camp was well under way when we saw the signal that indictated Ray's and John's arrival. They were picked up the next morning impatient at having waited a day. We spent the afternoon swapping experiences and discussing the adequacy of our signal system.

On 30 November, four of us attempted to reach the 6000' col used by Heim to gain the icecap. Dave and Al reported that this col was cut off by 'schrunds, but Bob and Claudio successfully ascended the 7000' col to the north of Cerro Cristal. On the other side, they reported an 8 mile "ski run" would land us at the foot of the Salud Glacier. We decided to place two well stocked snow-caves on the col from which we could make sorties onto the icecap.

Every stage of load carrying had its compensations. On the haul through the bush it had been rum and Tang cocktails with genuine glacier ice, which we sipped around the fire to the continual roar of bergs calving off the glacier snout. From camp 1, we carried on skiis to a dump at the foot of the col. Then followed a fast exciting slalom round the crevasses back to camp. In the afternoons we bathed in the sun warmed waters of a melt-pool. The weather was not always good, however, and our first Patagonian blow forced us to re-site tents and build higher walls.

By 7 November, we were installed in two snowcaves about 1000' below the col. Further plans were delayed when a really bad storm struck, confining us to the caves for 4 days. The entrances were soon closed by drift but we were comfortable and secure while the wind roared outside.

On the fifth day the weather made a typically dramatic clearance, and by 3 p.m. the sun shone from a clear sky. The remainder of the afternoon was spent carrying 12 days food to the top of the col and trying out a makeshift sledge formed from an opened out food tin. As a result of the test seven more sledges were constructed by the next morning. We set off a brilliant red sunrise, loading the sledges at the food dump and heading down a steep sastrugi slope. The roughly cut edges of the tins earned them the name "sledges of a thousand knives", and fingers and lashings suffered numerous lacerations. The sledges enabled us to carry over 100 pounds each but progress was slow and frustrating as loads often shifted, causing frequent overturning. By 3 p.m. the heat was intense, so we stopped by a curious little lake in the ice which we named the "waterhole", blew up our air mattresses and went to sleep.

We left the waterhole at 5 p.m. and from the top of a rise could see the foot of the Salud Glacier, which we reached in 3 hours. Here we camped on the ice shores of a glacial lake and crashed, exhausted by sledge hauling. Those few who woke during the night reported heavy rain and wind, but the rest of us were only aware of the blue sky we woke at 9 a.m. Typically the storm had vanished as fast as it had come.

The sledges were no longer useful on the glacier, and we still had twelve loads, so it was decided that four would establish a climbing camp on the Salud Glacier névé, the other four bringing up the extra loads and returning the next day to stay. Dusk and increasing murk caught us in the middle of a huge icefall, no place to dig a snowcave and not high enough to climb from. We retreated to a little platform and at Claudio's suggestion built a snow house. In 2 hours a respectable shelter with rafters of skiis and a roof of nylon tarpaulins was finished. The others departed saying that they would be up the next day unless the weather was really bad.

When they had not reappeared after 3 days we became a little

alarmed. The weather had been indifferent, but in partial clearances we had located an airy snowbridge and formed a small food dump at 7000'. We could not imagine why they had not come up, but we had yet to learn of the localized violence of Patagonian weather. Claudio and I donned skiis, and an hour later were hearing stories of terrible gales and rising waters that had flooded the tents. We were almost disbelieving, until we remembered the uncanny roaring sounds we had heard from the direction of Torre Tobler—also the lake was now 12' higher than before!

Anyway the Torre corner boys packed immediately and pitched the tents next to the shelter that night. Murk persisted next day, but after dinner the mist lifted in great streamers from the peaks; probably the most beautiful thing we had seen in Patagonia. A complicated day of double packing, roping across the airy bridge and picking up food and equipment from dumps along the way followed, but we ate our evening meal at camp 5 at 8500', surrounded by a majestic panorama from the nameless and numberless peaks in the Corridor to the far south, to the ice colossus of Valentin in the north. We had thought the description a bit overdone, but from this distance the peak was certainly impressive. Ray, Claudio, Al and I elected to tackle the unclimbed south west ridge of Valentin, while the others were to look at Tararua and Fiero. The sunset and photography kept us from our early night, but we still left by 5:30 a.m.

Our first climbing day, it was 19 December, about one and a half months after the "80 days" of the Expedition started. A sure demonstration of how much time and effort an expedition spends getting there and getting home again.

We quickly skinned up to the col at the foot of our ridge, where we donned crampons and reached about 11,200' on a small face. Here we were forced on the ridge which consisted of the most incredibly hard ice. 2000' of this just wasn't on. We retreated and looked at the Argentinean route through a sérac field but thought it dangerous. Then I remembered a possible route that I'd seen from down valley. We ran around the corner trailing an exceedingly dejected Claudio, who could see the only climbing day and only opportunity slipping away.

We hurried on now realizing that it was a long way through soft snow and we should have brought our skiis. But yes, there was the ridge that should take us to the north peak, from where we could turn south to the main peak. But it seemed to consist of the same hard green ice all the way along. We turned harder left as we saw a steep snow face sandwiched between active ice cliffs at the head of the cul-de-sac between this ridge and the east face of the mountain.

Lateness, (it was 11 a.m.) urged us to hurry on, but we were panting with the altitude. We stopped for a quick feed and then carried on at a more rational pace as distances were deceptive. However, now we had a plan, and even Claudio cheered up as we plugged on, up through soft powder and ice avalanche debris. The wind had risen slightly and we were annoyed to see 15 minutes later the Tararua had developed a huge hogsback. At the bottom of the snow slope the altimeter showed us to be back at the same altitude we had reached on the south west ridge.

By 1.30 p.m. we had reached the col between the north peak and the main peak only to realise we had lost the mountain for this day. Most of the icecap had disappeared under a sea of tumultuous cloud, and the first black billows were boiling down the summit ridge towards us. We plodded on to the north peak (ca. 12,700') anyway, as it was only 20 minutes away, believing we would be the first to reach it.

Summit formalities were short and we groped our way back to the col. The billowing clouds contained ice particles which coated us and abraded uncovered eyes. Retreat was far from pleasant as the snow slope was very steep with slots at the bottom, and the wind was strong. Below this we had to stumble halfway round the mountain to our skiis, after which followed hours of careful navigation over the huge and featureless névé of the glacier. By 8.30 p.m. we were in a maze of slots that we could cross on skiis, but that opened out below so that you felt your stomach clench as you looked into the blue depths. However, we reckoned we were at the same altitude as camp, and eventually roused the others with shouts.

We were pleased to hear that they had split into two groups and climbed Tararua (ca. 12,700') and Fiero (ca. 11,200'). Paddy and Dave had cramponned to the summit of Tararua, second highest peak in Patagonia, and were returning when they met the other two. Bob and John had quickly cramponned to the vast summit plateau of Fiero where they lost one another for an hour. The climb had been short, so they decided to return to the col between Tararua and Fiero and attempt Tararua. The storm struck before they reached the summit. The two parties groped their way back to camp where they had been for some time when we arrived.

Again we waited for the weather, but on the 23rd Dave woke us just after midnight to say that the weather was good but looked as if it would not hold for long. Dave, Alan, John and Bob set off to Torre Tobler (ca. 9600') with hopes of filming the ascent; Paddy and I set off for Valentin by the eastern route, while Ray and Claudio went to try the south west ridge again, hoping it to be in better condition. After our last experience we all took full bivvy equipment and extra food.

As Paddy and I proceeded up the now familiar route the hogsbacks could again be seen on the distant peaks, but this time we were just a little ahead of the storm. Ray and Claudio appeared below us, having decided to join us for the inevitable difficult return. The race with the storm was on again, it being important for me to reach the top in clear weather to make various mapping observations.

Several 100' below the summit the first wisps appeared, and we arrived on the summit mushroom simultaneously with the unusual masses of cloud. Ray and Claudio arrived a few minutes later and we waited while Claudio buried flags and cards from the Expedition. We then impatiently dragged him down complaining that he had not had time to savour the summit. Amends were made once we had found the route off the summit ridge, when we stopped for food and a round of hearty abrazos.

Descent followed the familiar pattern, except that we came out of the cloud at 10,000' and had an enjoyable run back to camp. The

others weren't there so we retired to catch up on lost sleep.

At 5 p.m. I was awakened by the wind tugging at the tent and the sudden feeling that the other four were not back. Finally they arrived out of the storm exhausted at 7 p.m., having been away 16 hours.

In order to reach the saddle between Fiero and Torre they had turned south high on the névé of the Salud Glacier. Crevassed regions had forced them to climb nearly as high as the peak during this detour. They reached the saddle after a long exciting ski run through the moonlight, the frozen snow rasping on their skis.

The ridge had given enjoyable exposed climbing until the final summit cap was reached. Here a wall of cauliflower ice blocked further progress. This obstacle appeared to be surmountable by a slanting gulley but several attempts on it were unsuccessful. The cauliflowers consist of a soft, fragile deposit over hard ice, which breaks away and causes enough difficulty, but a further problem is created by the fact that it absorbs all sound, making communication impossible. At last Bob hacked his way up an enclosed tube of ice, a lead which was inevitably called the Gun Barrel. The storm caught them as they started to descend, and when they reached the glacier they were not favoured with a partial clearance as we had been. A navigational error landed them in a hopeless maze of slots, but eventually they backtracked and were able to locate the camp.

Alan's filming had been a success and provided a complete record of one of the ascents made by the expedition. Eventually the footage was made into a 50 minute television documentary film by the CBC.

With one day's food left we now had to withdraw, but the day was again fine (as were most of our packing days) and we were tempted by the sight of Pamir (ca. 10,800') just above our camp, the only unclimbed peak remaining. Finally we decided to send Ray and Claudio off while we broke camp and packed their packs.

As we approached our snow bridge we saw them on the summit. An hour was spent crossing the slot as the bridge had collapsed; in fact the glacier was so bad that we hardly dared step off our skiis into the porridge. They caught us up at Torre Corner, where we all rested from the exhausting business of skiing with 80 pound packs and ate our remaining tin of food. As the evening was fine we carried on to the Waterhole, which we reached at midnight.

After a minimal breakfast the next morning we started the long plug up to the col. Fortunately the sky was overcast and the snow stayed reasonably hard, but that same sky was a lurid apricot colour; we felt we were leaving the icecap just in time. The prospect of finding the col in a whiteout did not appeal.

We reached the cave site by 2 p.m., but much digging was necessary to locate the caves. The food was welcome but the caves did not tempt us to stay, as the roofs had been reduced to half the former height and the air smelt dank. The exhaustion of the party showed in every move as we slipped and slithered down the rocks, then wearily skied the last stretch of the glacier to camp 1. We arrived at base camp at dusk, glad to enjoy its luxuries again.

Christmas dinner was eaten one day late, leaving most of the members literally groaning after a surfeit of tinned goodies and wine. There was even enough left over for Boxing day dinner as well.

An aura of accomplishment had killed the pre-Christmas fire of the party. Now the pressure to fulfill our obligations was off, so we looked to the second half of the trip as more of a climbing holiday. During our stay in base camp the weather had been stormy, but on the 31 December it showed signs of improving, so we split into two parties. Claudio, Paddy, Ray and myself went down valley with mail, while the others went back to the snow caves to finish filming the climbing sequences. When we returned we recced the south west corner of the lake for climbs of Aguda and Hyades, as well as the possibility of crossing a col to the Rio Soler.

One day in the south west corner of the lake fired our enthusiasm for more. Ascending a ridge on the south side of the Leon Glacier we had located another of Heim's camps. The prospect of climbing Hyades from there seemed poor, but the rock spire of Aguda, reflected in a thousand tarns, beckoned us. We radioed the others and arranged to clear all surplus gear from higher camps, and leave them to do the trip south on the icecap.

This was accomplished on two indifferent days by which time they were camped "somewhere near" Siniolchu. They climbed Cristal from camp 2, filming most of the ascent. It was an unusual peak, bulky when seen from the north, but a thin ice blade from the west. They climbed on the north face, finding a hidden route through the major difficulties in the steep wall of a huge crevasse. They also climbed Mocha the same day.

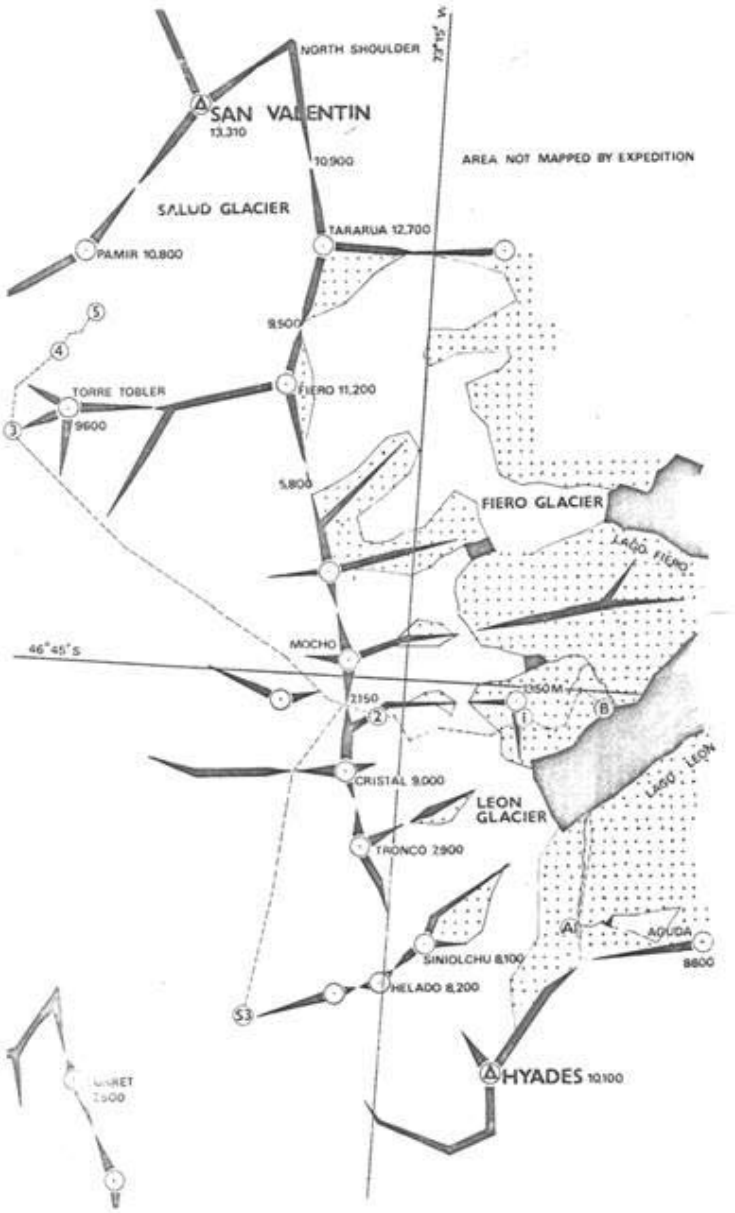
Meanwhile we were moving to a campsite in the Aguda stream that we had seen from our recce. The site was the best we had stayed in yet. The morrow dawned a little misty but we set off knowing we had a long day ahead, as the peak was 6000' above us. Steep exposed snow slopes brought us to the west ridge by 10 a.m., but still the murk prevailed. We ate and trundled huge boulders until at 1 p.m., when the mist suddenly lifted and the day was perfect.

We had scrambled up the first step in the ridge, now we tackled the much more formidable second step. Snow filled gullies on the south side took Ray and I onto the top of the step while Claudio and Paddy continued up a snow gulley on the south side. From the top of this step a sloping ledge took us onto the middle of the north face where we made fast time up a series of gullies and ledges.

The climb was now all we could wish with firm rock, exhilarating exposure and grandstand views of the main divide. As we reached the top of the gully system the other two appeared below, having abandoned their gully by making an extremely exposed traverse across the ridge.

We now took to a rib to the right which we found extremely difficult, so we moved left along a tiny ledge. As I moved to join Ray my foothold broke away in a sickening manner but I managed to hang on. A few moments later Paddy shouted up that Claudio had been hit. Ray and I immediately rappelled down the difficult section we had just climbed, then carried on carefully down the

Leon Glaciers from Lago Leon *Alan Bibby*



gully to the others who were about 300' below.

We found that Claudio had been hit just above the knee. His leg appeared bruised and he could only stand on it with great difficulty. An x-ray taken much later showed that the knee had been dislocated but had fortunately relocated itself. Swiftly, as it was now 6 p.m., we arranged rappels, and many rope lengths later we were off the peak. It was now 9.30, but we carried on slowly down the easy rock to the snow.

By midnight the long Patagonian twilight expired so we crawled under some large boulders to sleep. The weather held, but our bivvy was not comfortable enough to stop us from carrying on down at first light, to arrive in camp tired and hungry at about 10 a.m. Claudio had done very well with one leg stiff and painful. We ate breakfast and crawled under boulders to sleep because, ironically enough, we were now sweltering under the blazing sun.

We made radio contact with the others that night. They had climbed Helado (ca. 8200') and Hyades (10,100'). They had finally established the position of their camp when the mists lifted on the afternoon of the day after their arrival. They left at 3.15 p.m., for an attempt on Siniolchu, skinning east to a col on the ridge. From the col 700' of delightful crampon climbing took them to a summit of about 7200'. Here they realized they had climbed the peak we called Helado. Siniolchu lay a 1/2 mile to the east. The descent was a memorable ski run of over a 1000' and finishing at the camp.

One of the main objectives of the southern excursion was the ascent of Hyadas, the only officially named peak in the area apart from San Valentin. (All other names in this article are unofficial). On the 7 January, they rounded the western end of the Siniolchu Ridge and skiied into the vast area where the icecap merges into the southern branch of the Leon Glacier. Leaving their skiis at the foot of the peak they made a fast crampon ascent of the mountain. On the summit the inevitable storm struck and it was back to the familiar compass plod through the whiteout.

We had been lulled into thinking the weather had broken, so were surprised to wake late and find a perfect day. Paddy, Ray and I breakfasted at top speed and shot off for the south ridge of Aguda. We made fast time up the steps of two days before, then crossed the névé from the west to the south ridges. The rock began at 7800' and carried on interspersed with snow arêtes to the summit, which we now measured as 8600'. This meant we were only 300' below the summit two days before. We made a photographic panorama from the summit which commanded a view over most of the northern part of the main divide, then hurried down.

Attempts at communicating with the other party were frustrated by poor radio conditions. Later we found they had ascended Siniolchu (ca. 8100'), the last major peak in the area, and made an exploratory ascent of Turret (ca 7500') the peak on the northern-most end of the corridor.

Bob and Allan had been put through their paces on some of the most severe ice climbing they had encountered. Sidling under Helado they gained the west ridge of Siniolchu by a steep face on its northern side. The summit seemed surrounded by ice overhangs, but they found a weakness in the form of a corkscrew series of delicate ramps. They completed the top section on the face above Lago Leon, then traversed by descending the north ridge to the top of a rock step. From here they regained their skiis by a steep drop on the northern face.

Meanwhile John and Dave skiied south west on the icecap to climb Turret, and gain our best view to the south. The peaks looked beautiful and demanding and the corridor was accentuated by a carpet of mist on its floor. On the return they made a wide arc to the south to confirm that there was a low level route to the corridor from the Rio Soler, which we had decided would be the easiest approach to this area. We set out to return to base camp that afternoon, moving very slowly with Claudio across a large bush covered moraine terrace. The forest was enchanting, with huge trees completely devoid of undergrowth apart from lush grass, and thousands of Patagonian orchids. We prolonged the trip back across the lake by drifting with the currents until the horse flies had gone for the day.

On 12 January we dismantled base camp and took a boatload of gear to the bottom of the lake. The others, who had been at camp 1 doing final work for the film, came down the same day and were picked up by Paddy for a farewell tour of the lake. An attempt next day to take some final shots from the lake resulted in the loss of our faithful Zodiac boat when we ran aground on a sharp spike of moraine. Before coming into our service she had spent some years as a rescue craft at Nandi Airport, Fiji. Due to her unsinkable construction the Zodiac was able to limp back to the trog where she was drawn up on the beach for the last time.

We were well received by the Poblete family, who once again provided horses to carry our gear. On the evening that the oxcart arrived we had a grand feast, and a sheep and much bread disappeared. The valley was now rich with produce as the summer crops were ready, and wild fruit grew everywhere. The mutton was accompanied by an enormous salad and rough red wine mixed with wild strawberries. Throughout the festivities storms again raged on the icecap. Was the weather really always that much better than we had expected or were we just lucky?

The trip down valley was much less eventful than expected, largely due to the skill of the oxen driver. Senor Sanderval made a striking figure mounted proudly on his horse, the long bamboo drover's pole carried with all the dignity of a medieval knight. We made many stops at the little farms while Claudio told tales of fresh adventures and we all drank the inevitable mate tea. The people were most surprised and not a little unbelieving when they were told San Valentin was not a volcano as the often present snow plume had led them to believe. We were lucky to board the "Aysen" the day after reaching the river mouth, thus having a few days to do wind-up work in Chile Chico where the expedition finally disbanded.

Gordon Vickers

(In the summer 1971-72. a New Zealand party led by Dave Launder and including Bob Gunn reached the icecap by the Rio Soler and Nef Glacier, and climbed three peaks to the south of Cerro Turret on the only three fine days in the 70 they spent in the area.)

Squamish Blues

Too many weeks of routine living, or perhaps not-living, in the city. Countless climbing trips to Squamish that shade, fall and dig as they turn into grandiose drunks. One eventually comes to that inevitable realization.

It had been an age since we'd tied a bowline or wore a klet other than in the stupor of drunken bouldering. We ravaged Squamish, squandering at the sides of her buildings, searching for her ultimate boulder problem.

The weekends became routine, almost monotony; a glass of beer wired like some sickening prostituted boulder problem everyone gets when they're hard up for a booster shot in the ego. Soon you're inside a smooth tin bucket scraping the sides for a way out, away up man! But every day a sort of grim reaper keeps putting the bucket out in the outhouse and soon you've taken all the shit you can handle. The realization is upon you now. It's time. The one we saved for weeks, saved more meticulously than that last gram of eastern gold. Casually you meet your climbing partner, a destined accident? It was like on some weird spiritual level as eye's met and the words pour out like some acid "next weekend".

First three pitches are fixed—you know, get the bullshit out of the way. The only excitement was a hairy, black and red demonous creature. I remember it possessively wallowing in the next pin hole. Truly that creep was epitome of my worst horrors. The spider attacks—a pseudo fall as I jump out of my etriers; I got the cold shakes waiting for the creature to leave. John's down below, laughs at my dilemma. He's losing his battle against the starved mosquitoes.

The third pitch is awkward to clean, John gets totally wasted. We realized how out of shape we really were. The sun beats down on our heads, we talk, look at what's ahead, then rap out for the

cool, mellow, pools at the creek.

The push? As usual we're at the top of our fixed ropes at 11. I reminisce on last night's party, warm old style, shit wine and little sleep. John nails the big roof, smooth with few hassles. I shoot a roll of film. I remember tying the rope off close, cleaning it. The second roof goes. Remember a few cliff hangers. The roofs were more submissive than the horror stories. Two mixed aid and free pitches, a few hissing black rocks and we were at the cave.

We rest easy, watch the sunset, and curse the miserable smoke in the valley. Our first night ever in hammocks. Again, John is inevitably struck with the first pitch in the morning The exit out of the caves seems grim at first glance. It's a paradox, looking at it and knowing it goes. Those things are always good to sleep on. He nails up the overhanging wall. A hard pitch taking some time. While belaying I speed read through "A Guide to the Gay Life", the only book in the cave library. I couldn't help but laugh between philosophical thoughts of "to each his own".

I just scraped through the next pitch, with one fall conveniently timed with a lot of slack in the rope. One doesn't really realise how overhung that wall out of the cave is. I must have hung 5 or 6' out from the wall after falling.

John climbs the last pitch, gets himself into a bit of hairy irreversible free climbing probably in the wrong direction. Soon it was over with; I hastily cleaned.

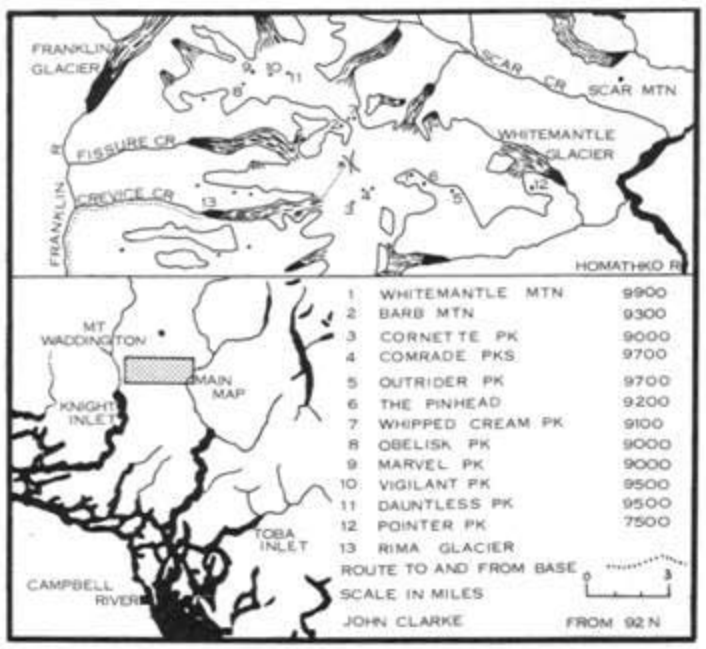
The afternoon sun was getting to us and we were making familiar tracks across Bellygood, cursing Sunday, realizing we'll have to settle for the cool, mellow water at the creek again.

Paul Piro

Whitemantle Ski Expedition

Fantastic skiing, fine peaks and shining glaciers—these are some of the memories we have of our 1971 BCMC ski expedition to the Whitemantle Range in the Coast Mountains of B.C. Lying just 15 miles south of Mt. Waddington, it covers 200 square miles of heavily glaciated country between the heads of Bute and Knight Inlets. Our plan was for everyone to assemble at Campbell River, fly to the head of Knight Inlet, and from there make the airdrop on the Whitecape Glacier some 2 miles west of Mt. Whitemantle. Previous plans to enter the region via Fissure Creek were changed when a reconnaissance flight by Martin Kafer (the leader) and Roy Mason showed it was a very wild valley with two icefalls on the glacier.

When we arrived at the logging camp at the mouth of the Klinaklini River, the weather was too poor to make the drop, and arrangements were made to have it done while we were walking in. Sunday morning, after a ride up the Franklin River 2 miles past Stanton Creek (a slide had blocked the road), we shouldered our loads and marched off towards Crevice Creek, our approach route.



The first 2000' up the creek were very steep, but the upper valley afforded easier travelling—at least the skiis were transferred from the packs to our feet. After 2 hours of sinuous travelling around trees, boulders and avalanche tracks, Crevice Creek was crossed on a huge avalanche cone and we made camp.

Next day, we were away early in fine weather and moved another 6 miles up the valley, well onto the Rima Glacier; and on the third day in early afternoon the airdrop site was reached. Not a box to be seen! We looked first at each other and then at the surrounding glaciers for any evidence of the food and equipment boxes. After a few side trips failed to find them we imagined the boxes sitting in a neat row on some unknown glacier at least 50 miles away!

A snowhouse was built for the night, and next morning we split into two parties to take another look. Nick Schwabe and Roy Yates set off for "Cornette Peak," a gentle 9000' snow peak south of camp, while Esther Kafer, Martin and myself headed towards Whitemantle Mountain, the ascent of which was completed in the course of the search. It was a pleasant trip on a series of gentle undulating slopes, and skiis were taken within 30' of the summit. Perched up at nearly 10,000' we could see every glacier for miles around, and each dark spot on their surface was thought to be a box of food. We must get back to camp—maybe the others have found it! Anyway, the sun kept shining and the 2 mile run back was what we needed to recharge spirits.

When everyone was assembled at the snowhouse again, a short excursion to the north disclosed the boxes spread across the broad pass south of Barb Mtn. (Later we learned from the pilot that it was a safer place for him to make the drop.) What a scene— everyone scrambling around putting the boxes in a pile, tents popping up, a real kitchen dug out of the glacier, and most important, a good meal—we were running a bit short of luxuries.

Next day, we were out after sunrise heading north for Barb Mtn. At first skis were carried, as it was easier to crampon up a few

steep slopes. Just as Roy stopped to put his skiis on, he heard a noise, and a mouse appeared out of a 'schrund, ran across the skis and back down the 'schrund. This amazed us, as the rocks nearby were surrounded by miles of glaciers in every direction.

Skiis were left at the base of Barb's east ridge and we moved up through a mixture of loose rock and snow—a tower being avoided on the south. A few pitches on the very rotten Class 3 ridge put us on Barb's east peak, which is separated from the summit by the row of pinnacles for which the mountain is named. We had reached our limit! To continue along the ridge would require a rappel, and leaving a rope in position to get back. Since the following needles might require similar tactics, we were chased off.

Barb Mountain was climbed by its west ridge the next day. An exposed fixed-line traverse followed by a narrow loose ridge were the only difficulties. From the peak, distant ranges floated like lost continents, since the big valleys were filled with cloud—a condition which persisted almost throughout our stay.

The Comrade Peaks which dominated the skyline south of camp were the chief attraction now, so Saturday morning all five of us set out and gained the main divide just east of the eastern Comrade (the higher summit). The top was an easy scramble, and once again we lazed on the summit and gazed at the immensity of snow and valley and sky.

The western Comrade gave a fine mixed snow and rock climb on the north side. Even though the sun was in full glare, an hour slipped by on the peak scanning the horizons beyond the giant corridors of the Klinaklini and Homathko Rivers. To the north, Mt. Waddington appeared to float above its many satellites. To the south, Mt. Stanton stood in the centre of a confusing array of mounting ridges and radiating glaciers. We then plunge-stepped down the face, jumped across the bergschrund and put on our skiis. Soon we were looping our way down the lower part of the mountain past a big ice block that had tumbled off the face, and minutes later emerged onto the broad expanse of snowfield around camp.

Everyone agreed it was now time to climb 9700' "Outrider Peak" 2 miles beyond Whitemantle Mtn., which was ascended for the second time. Skiis were left here since the descent of the south east ridge of Whitemantle was on rock. It was a blustery day and the ridge crest beyond was a fine skyline hike on firm snow. A few steep snow slopes and a short rock scramble brought us to the top of this remarkable peak, whose summit block was completely flat, and tilted as if it had been cleaved off with a knife. Everyone took turns looking over the greatly overhanging east side. Pointer Peak, a dark "sugar loaf" formation, thrust out of the clouds which filled the mighty Homathko Valley. It had been like a navigational beacon to the Mundays as they relayed their packs up the Homathko River in the summer of 1926. The mist-filled void below reminded us of the long vanished Indian trails, the Alfred Waddington party, the Mundays, and the many trappers, woodsmen and adventurers who have travelled this river and fought its bush.

Too soon it was time to go. After scrambling down the rocks, we hiked back along the ridge toward Whitemantle Mtn., climbing a small but steep and impressive peak dubbed "The Pinhead" which had been passed earlier in the day. Protection from above was provided for the one airy move at the top by running the rope over part of the summit block and belaying from the other side. We then scrambled down and started up the south east ridge of Whitemantle. It was windy and starting to snow on arrival at the peak, and this was our third and last visit to this lonely place. We then had a wild ski run in strong wind and flying cloud back down to camp and a night's rest.

Monday was a whiteout. The rest day was welcome and the day was spent cooking, excavating a deeper kitchen out of the glacier, reading or just dozing. A foot of wind-driven snow came down and the storm lasted for 24 hours.

On 9 June the sun came out, but since the peaks were plastered after the storm, we called this our "ski day" and had a very enjoyable run to camp from a trip to the ridge crest south west of the Comrade Peaks.

Just north east of Barb Mtn. was a peak called Whipped Cream, whose name we could not understand, the side facing us being pure rock. We left the skiis and had a pleasant climb over the solid Class 3 east ridge to the summit. The view down the north side revealed the reason for the peak's name—fantastic ice flutings and the billowy upper reaches of the Jambeau Glacier. After regaining the skis, a visit was made to neighbouring "Strawberry Hill" where everyone lingered as long as possible, this being our last climb of the expedition.

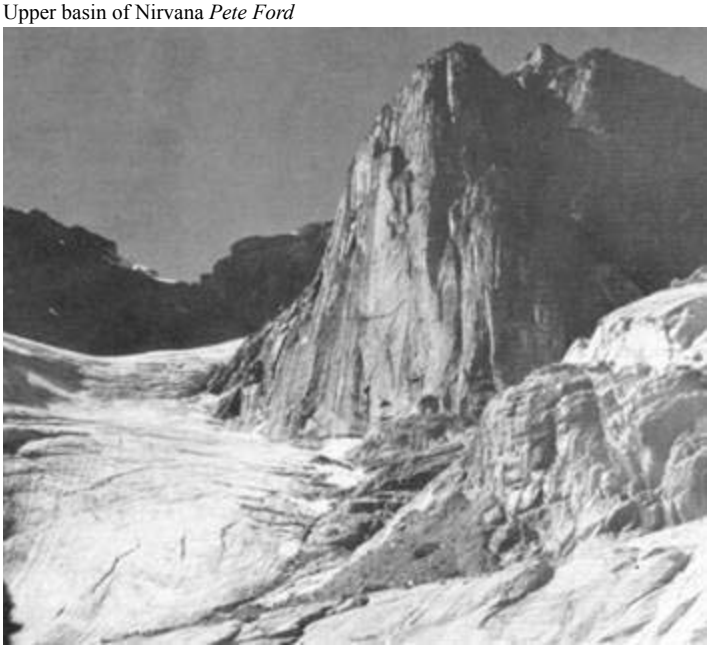
Another day passed reading and dozing, while a storm swept across our glacier, but on Friday morning, in still unsettled weather, we broke camp and headed for home with the usual monster packs. To avoid the sérac route used on the way up, we travelled down the middle of the glacier. When a hole appeared under someone's ski and mist rolled in again, Martin and Nick decided to ski roped and lead the way through. On the lower part of the glacier, visibility and skiing improved.

Once off the glacier and into the alder bushes, the reason for bringing skiis one can throw away became apparent, with the difficulty of either wearing or carrying them. Camp was made in the first band of big timber, and our campfire burned well into the night fuelled by many pairs of skiis, the plastic base making a very durable flame.

The last day of travel was a flight through undergrowth, much of which had been snow-covered on the walk-in. At one point, the valley narrowed, but no one could hear the creek, even though we knew it was not far away. Everyone dropped their packs and hiked over to investigate. There was the creek—boiling and churning with a terrific roar at the bottom of a crevice 150' deep whose walls were laced with the greenest ferns and moss. A huge angular block had fallen in and wedged itself across the chasm and formed a natural bridge.

We continued down and a few hours later everyone stumbled out onto the logging road. We walked the few miles down to where the logging company had kindly left us a truck to get back to the camp at the Klinaklini River mouth.

Upper basin of Nirvana *Pete Ford*



The Whitemantle Range did not challenge us with many technical difficulties in climbing the peaks, but rather gave us a home for 2 weeks in wild and snowy alpine country which the climber finds in the rambling isolated ranges of the Coast Mountains.

John Clarke

The Southern Logans

"my ideal ..... that I should discover the Alps, fortified by present day techniques and equipment, close to my ideal.... to go and climb .... in the Logan mountains."

(Mike Banks: Mountaincraft, Summer, 1964, p. 4; AJ 1971, p. 23)

Traditional access to the Logans has been by float plane and, more recently, by helicopter. At Watson Lake (Yukon Territory) we confirmed that we could use the helicopter based at the mining town of Tungsten (North West Territories). Bob Howell and I arrived there after 30 hours driving from Edmonton. Two days later we were still there; the helicopter was having serious engine trouble. Then a small helicopter, on charter to Bob Garret of the geological survey, flew in. Within an hour we had negotiated its use, helped the pilot, Doug Schrieber, load up, and were in the air.

We map read avidly whilst in the air, and after landing in the valley east of Mt. Nirvana, made what we hoped was an animal proof dump of food and gear on top of a boulder. Doug then flew us to a small valley to the north west of an 8822' high peak. The valley contained a lake, unique in our experience, the scree descending as steeply into it as above it. We roared in to land, regretting the two panic stricken goats fleeing from us, and were soon unloaded and on our own. We found a large boulder under which we could shelter. I told Bob of a promising slot beneath a boulder which I had fleetingly seen as we descended to make our dump. It must have been at least 2' high and 12' long. A veritable hotel, we hoped, and ready made for us when we got back there.

A 8 p.m., after soup and tea, we went to take a look at the western cwm of peak 8822. The granite we saw there, and later, has a very black appearance as a result of the dried out lichen on it. The lower quarter of the steep faces were almost white, indicating a recent nearly permanent cover of ice or snow. We disturbed ptarmigan here, which uncharacteristically, flew off with great screaming cries. Peak 8822 has a north west ridge which rises to an outlying peak, and continues north beyond it. This, together with the north east ridge, encloses the north glacier.

The following day we climbed a snow couloir to reach the crest of the north ridge, which we followed easily to a notch, above which the climbing looked good and difficult. We reluctantly decided this would take too long, and cramponed down the rather fine snow gully onto the north glacier. Here soft snow over concealed crevasses made us grateful for rock belays along the upper margin of the glacier. About 1000' below, steep cliffs brought us to the easier snow slopes and rock of the east face of the outlier. A 60' ice gully from the highest snow landed us on the face, up which we each found our way independently to the crest of the north ridge.

The impressive array of pinnacles and gendarmes would make the north ridge a fine undertaking in its entirety. We roped down 40' from one to an icy saddle, and then climbed three pitches to the summit. The ridge to peak 8822 was good rock but presented no difficulty, and we were soon on the summit, where we spent some time looking around us. Continuing along the south ridge gave rather more interesting scrambling, and the rock bump at the end looked to be good rock climbing, but to save time we took to a gully system instead. Roping off four times got us down, but the rope hung up on the last one. Bob went back up to free it, really hairy and exhausting. So at 11 that night we started down the western cwm, and were back at our boulder base by 2 a.m. still in 'daylight!

Peaks were appearing and disappearing in the clouds in the valley the next day, giving us a fine outlook from beneath our snug boulder whenever we woke. The day after was fine, and we left to go up the Nightwind creek valley. Fur and bones and bear droppings along the game trails in the willows encouraged us to make a bear scarer by rattling stones in one of the empty tins we had. We certainly scared a ptarmigan, and the only fauna we saw after that was an orange banded bumble bee. About 5 hours brought us to Nightwind Lake, and a surfeit of possible shelters. We chose a cave with running water. After dinner we packed the sack for a reconnaissance of the route over to our dump the next day. This left us with enough food for one more day of climbing. Despite Milton's, solo first ascent (CAJ 1962, p.36) we decided Mt. Savage was too much for us, and we would go for peak 24 just south of it, instead (all peak numbers refer to Buckingham's map, AAJ 66, p. 33). We reached Milton's pass easily, though not as easily as the goat ahead. The glacier on the north side was a proven but long route to our dump. We had only brought rock climbing gear with us that day, so we circled back to the east side of the south ridge from peak 24. We avoided the rugged crest of the ridge, with a 10' high block standing on only half of its 4' square base, by following an undulating route over ridges and gullies, and along the top edge of an ice slope for a short way. This brought us to the couloir which goes up between peak 24 and its forepeak to the south. The "via della penitente" continues, and is a possible approach to the peak

24/Mt. Savage col.

We roped up for the last 200' of the gully to the left of the smooth couloir, and scrambled several 100' from the col up the recess of peak 24. Four pitches of fine climbing on good steep rock brought us out on the summit plateau, a fine vantage point for Savage and the surrounding peaks. From the col, on the descent, we romped along to the summit of the forepeak in three long easy pitches. Bob had been suffering from too much chili con carne, but did his share of leading, despite this. Partly urged on by pride he said, but also, I think, not to disappoint me.

The next day we followed the route we had picked out on our reconnaissance, and soon reached the notch in the enclosing ridge. Milton's description, "A vertical 1500 foot wall, with an exposed blue-green glacier crawling from its base," had not been encouraging, but it did not look too unreasonable. After roping down into the gully I was forced to cower below some boulders while rumbling rocks descended. Bob did not escape completely either as he had to descend on a partially cut rope. With our previous carefree attitude shattered, we spent the next hour inspecting and hacking up our precious rope. One more 150' rope off would have reached the gully bottom easily, but left with only 90' of rope we had to climb down the face alongside. From the bottom we could see at least a 1000' of clean steep granite going to the summit of the tower we had climbed from the other side, on our reconnaissance.

After our rather discouraging setback, we were fortunate enough to have only 5 hours of tramping and one tricky unmapped river to cross, before arriving at camp in the dark. It was untouched, and the conserving of food, which we had both privately practiced, was happily abandoned. We were treated to a searchlight display by the northern lights as we relaxed on the genuine grass of the sanctuary. Unfortunately the genuine mosquitoes were active, even though it was dark.

On the ensuing rest day we were disturbed by the alarm signals of the local snaffle hounds .A short while later we heard and saw a distant helicopter. Later it reappeared and came in to land. Bob Garrett went off with his sledge hammer to collect rock samples while we chatted with Doug. Later in the day we checked on the shelter stone seen from the air. It was four times bigger than I had guessed. The floor is mainly boulders too large to move, but it still gives lots of undercover standing and sitting room.

The next day we set out to check the next section of our route back to Tungsten. Our aim was to try to connect with the route used by Buckingham and Surdam after the 1st ascent of Nirvana. We crossed, in beautiful sunshine, to the next but one valley to the south, and continued up it on the glacier. We had, luckily, lost one page of Buckingham's article, where he declares "there was no practical route," and proceeded up the rightmost of the three couloirs, as it appeared easiest. Some deep snow near the top made us move onto the rock, and we were soon in the warm sun again. To the west was the welcome sight of what Bob called "a glacier highway" toward the site of Buckingham and Surdam's camp. We also had an impressive view of the surrounding mountains.

We were attracted particularly to peak 31 and Mt. Eurydice across the snowfield to the south. Still wearing crampons, we swung around above the bergschrund to the col between them. I broke a crampon front point on the hard ice of the Eurydice ridge and had to be more cautious thereafter. Sound high grade rock scrambling brought us to the summit, a fine grandstand. On the way back we went up the snow and a loosish gully to the ridge of peak 31. A delightful route led behind an enormous flake for 50', then we chimneyed up to the top of it, leaving only scrambling to the summit.

Back at the top of the ascent couloir we made a track down the now not quite so soft upper section. We hoped that this might freeze by the time we had to climb it with heavy loads. It rained on the way down the glacier, but we did not get very wet.

The eastern side of Nirvana consisted of a face enclosed by two ridges, from which a glacier descended towards our base. All of the interesting possibilities were too serious for the two of us, with only 90' of rope, to attempt. Nonetheless an exploratory trip was made up the glacier to the upper glacial basin. There appeared to be a reasonable way through to the face or the ridges, but the early afternoon sun was still on the menacing icefall and urged a retreat.

It was 2 weeks since we had left Edmonton, and we packed to start back. We were away early the next day, and over the Charon-Meduso col by midday. Our old steps in the 1000' couloir helped a lot as we had all our climbing gear with us, as well as a week's food. The descent consisted of glacier, then scree and grassy meadows and rushing river crossings, with the impressive south west wall of Nirvana off to the right. We cut over the end of a ridge, and up a long desolate valley to an even longer glacier plod.

Much later, as we approached the broken ridges at the head of the icefield, the sun was blocked out by a great livid cloud which swept over in about 5 minutes. On the crest of the ridge I stripped off my soaked socks, and warmed up my feet in my down bootees. I had been having trouble with cold feet on snow and ice all along. The new boots that I had bought because my old ones leaked slightly, leaked like sieves through the welts. Bob uncomplainingly did all the trail breaking on snow and ice. As we continued up the broken ridge white flakes started drifting down, and caused alarmist thoughts of a descent in a snowstorm. However disaster was more distant. The white flakes were ash from the remote forest fire that had caused the livid cloud.

After 12 hours on the move, a dip between the ridge and the snowfield and a meltwater pool, were too much of a temptation, and despite the 7000' altitude we decided to bivouac. It was a serenely peaceful experience to awake during the night and see the sweep of the snowfield and the ridges—perhaps the most pleasant night out that I can remember.

The next day we traversed over Buckingham's "crumbling summit of Woollaga" to the col beyond. I was loath to stay on the glacier because of my useless Italian boots, and Bob was reluctant to continue along the ridges because of a gashed and bruised knee. We tried traversing along the hillside above tree level, but a deep side valley forced us down into the Flat River forest. Then followed one of the most exhausting experiences I can remember. I blundered through the tangled undergrowth as best I could, trying

to keep Bob in sight. We took nearly 10 hours to cover about 7 miles. We slept where darkness overtook us, and were pleasantly surprised to reach the logging road in about an 1/2 hour the next day, and Tungsten 6 hours later; a welcome transformation.

ASCENTS (IN CHRONOLOGICAL ORDER)

21 July. The outlier was named "Gahk Peak". Traversed from north to south east, only about 400' of climbing. About 7 hours from boulder base to summit. NCCS 11 F2. Peak 8822 was re-named "Yahk Peak" (Pete has this thing for rhymes). Traversed from north west to south. (An ascent by the descent route might be NCCS 1 F3.) The combined traverse and descent took 15 hours.

July. Peak 24 was named "Windbreaker" Our gully to the col is about F4, but the snow gully from the west glacier is probably easier. Then up south face NCCS 1 F4, on good rock, also climbed the forepeak from the col, F3. Time for combined ascent and return, 16 hours.

July. Descent of the "Chopper" gully. Not recommended(but perhaps not as bad as we think).

28 July. Mt. Eurydice, by the north east ridge; ice and then rock. NCCS 11, F2 and F3.

Peak 31 was named "Mt. Charon". Round trip from the Sanctuary took 11 hours. NCCS 1, F4 to F5 (but quite safe).

28 and 31 July. Styx Pass; the important route from the Sanctuary to join Buckingham and Surdam's route to Tungsten. Four hours to the pass. The 1000' couloir seemed a safe route, but might well vary from year to year.

1 August. Wollaga. 2nd ascent by Buckinham and Surdam's route.

Pete Ford.

A Traverse of Mt. Bryce

As I tugged on the laces of my boot and groped in the darkness of our bivouac for the other one I said to myself "What am I doing here?" and I'm sure the others asked themselves the same question. The answers fell into line as the day sped on. I was answering the call that pushes each mountaineer from one peak to the conquest of another—where does it end? For most, never. The lure, the inducement, the attraction is there forever. When age takes its toll there are a million memories of meadows, lakes, bubbling creeks, fluffy clouds, glistening snows, the hardships, the companions, and yet, the summits with breathless views of endless peaks as far as the eye can see to lift you up and delight you. Some trips stand out more than others; such was a trip I made with Don Forest and Murray Toft this past summer. We started up the Saskatchewan Glacier snout at mid-morning on 7 August. It was one of those hot days, but a slightly cool breeze on the glacier made it very pleasant travelling over the rippled surface. Nearing Mt. Castleguard we were slowed by crevasses, which we had to zig-zag to by-pass.

At noon we mounted the black moraine to the Castleguard meadows; after another hour we reached the highest point and stopped to eat lunch beside a creek. The meadows were grand, larger than I had imagined; my mind wandered back to the days when men like Peyto, Outram, Simpson, Thorington and Kain had trod this way. Soon we were off again on our merry way, and shortly arrived at the rim of the Castleguard valley where an excellent but dusty trail lead down to the Castleguard River. We arrived at the river around 4 p.m. and were shocked by what we saw. It was the colour of coffee with a bit of cream added; rampaging at a rate which scared us, boulders clattering along its bed. We each looked at the others in dismay, no one wanting to speak. Slowly we peeled from the waist down, and donned our runners which we brought for this purpose. The first try was a complete failure, and it took us a while to get the circulation back in our feet. Maybe we could camp here and in the morning the water would be lower. Don was persistent, so we walked a few 100 yards downstream and surveyed the situation. It did look better, with an island in the middle to give us a break.

On this try we peeled off everything, and in our union suits, one by one, we reached the far shore, all still upright. I did take a slight dunking, but Don's strong arm caught and saved me from a complete submarine manoeuvre. This performance had cost us 2 hours, so supper had to wait. On we went up the trail to Thompson Pass, passing charming Watchman Lake, and arriving at Cinema Lake at 7:30 p.m. What a beautiful setting, a still green lake sitting amongst thinly spaced spruce trees, with open meadows here and there.

We unpacked hurriedly and set about making a large supper and preparing a bivouac before it got dark. Engrossed in our meal we were surprised by a lighting storm and high winds which came in very quickly over Thompson Pass. We weren't long retiring to our bivouac, which consisted of Don's light nylon sheet stretched over a lean-to of an old tent pole located nearby and a fallen dead tree. The storm hit us with all its fury just as we were getting the last of our belongings under the shelter. It lasted only 10 or 15 minutes, but by the time it moved on we were well settled, each in

On the east ridge of centre peak *Glen Boles*

Near the snout of the Saskatchewan Glacier *Glen Boles*

Crossing the Castleguard River *Glen Boles*

Campsite on Cinema Lake. Mt. Spring rice behind *Glen Boles*

elephants' foot and duvet.

At 3 a.m. I got up to check the weather but no one else stirred. We ended up voting 3 to 0 to take a rest day; sleep in and then move up to high camp in the afternoon. It was nice to go back to sleep, and we finally awoke at 10 with the sun high in the sky. The morning was warm, our only grievance being the continued harassment of the horseflies.

The lure of Mt. Bryce drew us away from Cinema Lake at 12.30. Leaving a cache of gear and food, we climbed steadily up through the lush meadows carpeted with flowers and broken by clumps of spruce, to the talus slopes north of Thompson Pass where we turned west and contoured around a ridge, then dropped slightly through dwarfed spruce trees to a boulder strewn basin below a glacier on the south east side of Mt. Bryce. We took separate ways over the scree, talus snow patches and a rib east of the glacier, finally crossing the upper edge of the glacier to the low point on what could be termed the east ridge. This provided easy walking to a rock platform (3.50 p.m.) sheltered by the termination of two snow ridges, both about 30' high. Here we bivouaced at approximately 9200'.

From our perch we looked directly across at a ghostly Mt. Castleguard, the only peak clear in the smoky air. We made a rockwall on three sides and covered it with the nylon sheet. Then our curiosity got the better of us, so we climbed up the snow to where we could see some of the mountain; in the smoky light the north side looked awesome. Supper was next, then any early retreat to our bivouac where we spent a fairly comfortable night.

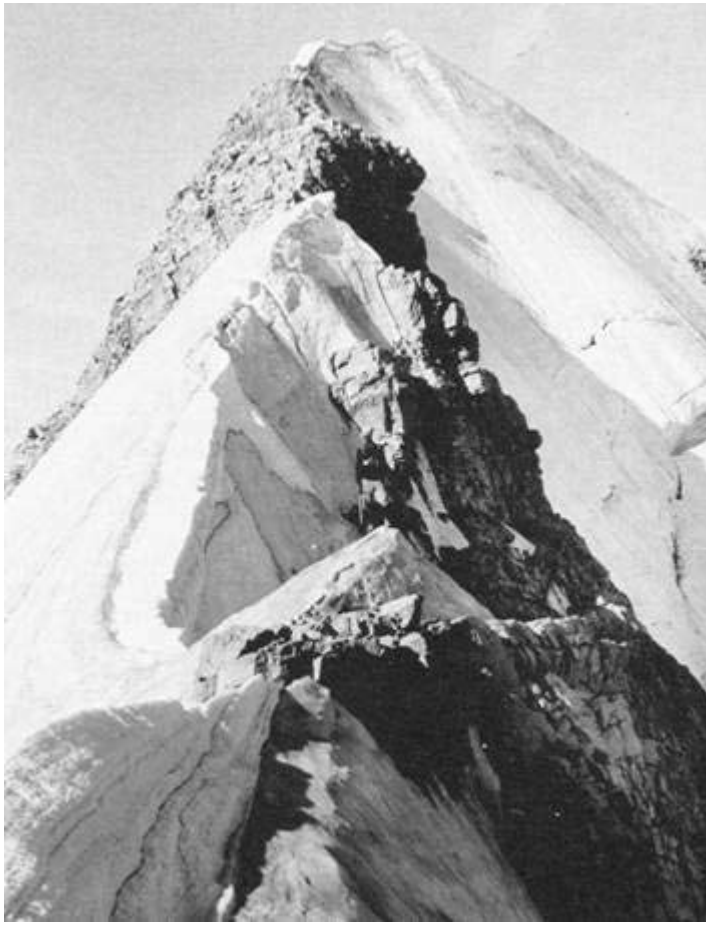
At 4 a.m. we were up. We ate little. In the semi-darkness we climbed the short scramble above our bivouac, coming out on a level ridge. We walked on until we came to a shattered hump, which we by-passed by dropping north about 150' onto a scree slope. We then crossed a small glacier which dropped to the north. South it formed a cornice, then dropped sharply to the basin by which we approached the mountain. This is the lowest point on the north east ridge and seems to be the place, mentioned in Outram's account of the 1st ascent, at which he and Christian Kaufman came out.

Murray, Don and I continued gingerly across the glacier, slipping and sliding, looking intensely at a very rotten grey face confronting us. We traversed to the right (north) around the corner from the face, shed a few clothes, climbed over very rotten ledges for about 200', and came out on the top of the ridge. Above, another very rotten hump presented itself, so we went south and up a rotten scree gully for 200' or so. The ridge was easy for another short scramble, then there it was, a smooth grey buttress which looked unclimbable. Don had climbed the east and west peaks the year before by the same route, and had told us that, except for what we might encounter on the centre peak this was the crux of the climb. Outram describes this wall quite vividly in his book.

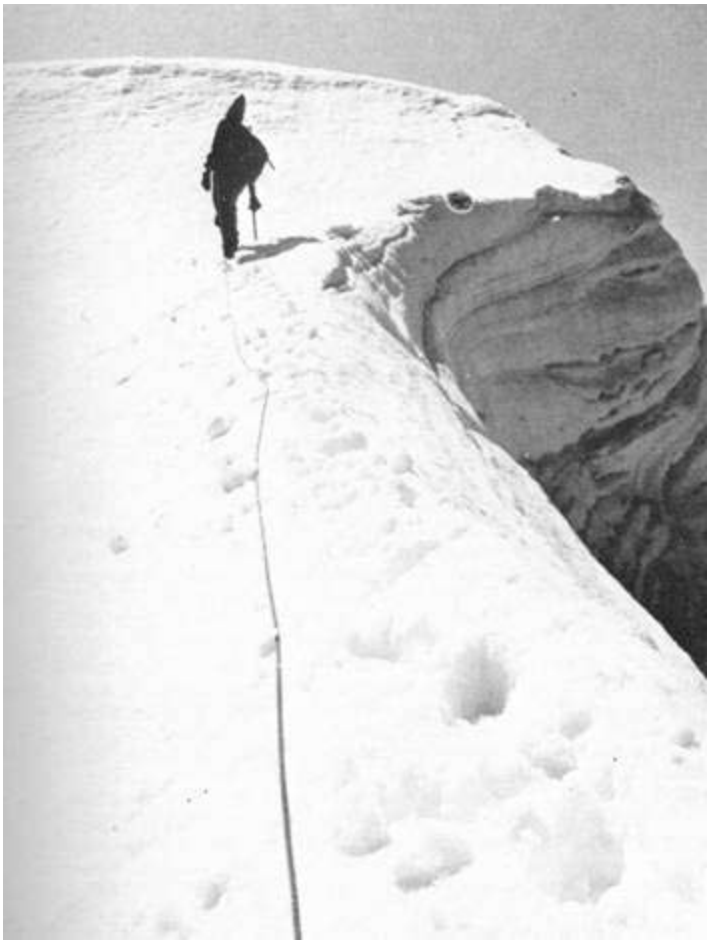
We stopped to put on the rope and have a look at the alpenglow on Mt. Columbia. About 20' to the left of the ridge, Don and I huddled in close to the base of the wall, while Murray started up slowly and expertly on the very small holds. As he got higher the rock got worse, but he seemed to have no trouble. Then Don

Cornice Hole *Glen Boles*

East ridge of the centre peak *Glen Boles*

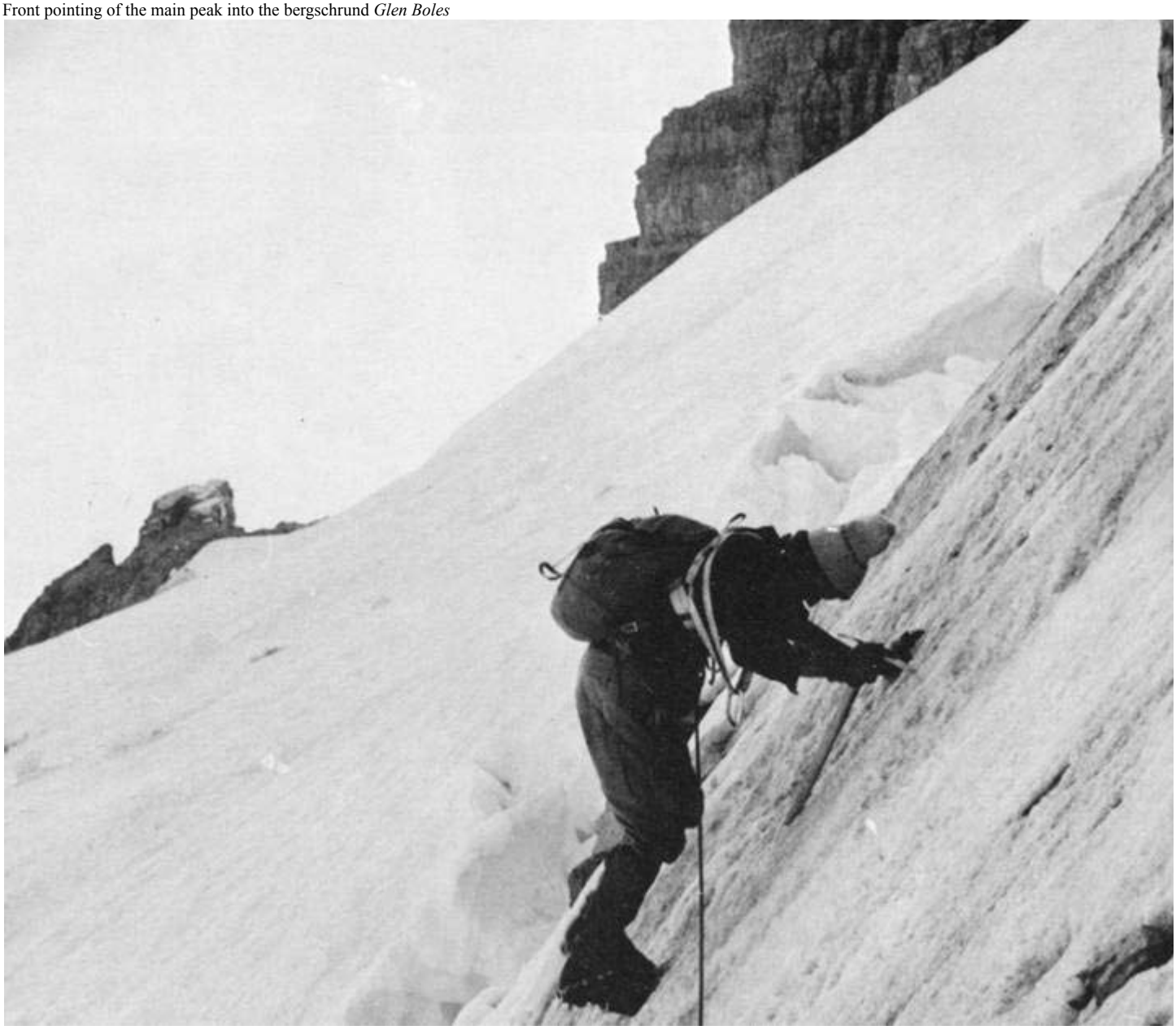


Near the summit *Glen Boles*



Mt. Bryce from Andromeda *Dave Whitburn*

Front pointing of the main peak into the bergschrund *Glen Boles*



and I took our turns on the 75' pitch. We then climbed a fairly steep but crumbly part of the ridge to a point where it leveled out, curving slightly to the right. There were sharp ice ridges between rock humps and it ended in a small pyramid, the east summit. The face, dropping sheer on the north side, left us breathless. Although most of the peaks around us were visible, the smoke haze took the edge off our view. The wind had died and a warm sun and blue sky made our spirits rise. What a day it was to be. We took the rope off and started along the flat ridge, this giving way to broken rock, in places very narrow. The first interlude was fairly long, walking on the flat between the cornice snow and the ice which dropped away to the north, but the next sharp ice ridges required crampons. Getting into the routine which lasted all day, we had them on and off three times before we got to the summit pyramid. A short scramble brought us to the summit at 7:40.

The centre peak looked very good. We climbed down over the fractured rock to the col, an ice saddle where we put on the rope and crampons. The ice ridge steepened as we got higher, more so near the top. At a small rock buttress we took off our crampons and clambered up on the rock only to find another very sharp ice bridge. We installed crampons three times before we reached the final ridge, which proved to be quite enjoyable, good rock and bad. For the most part we kept to the left, gaining the summit at 9:45. The top was crowned with an icy crest, and after taking pictures we dropped down to the rock to the east and relaxed by the cairn built by Jo Kato and party in 1961.

We had an hour of sheer pleasure on the summit, but time was passing so we moved off, taking a shade over a 1/2 hour to descend to the next col. Often I found myself looking at the impressiveness of the main peak and I gulped each time my gaze dropped down the north face. This col was also an ice saddle, and we stopped only long enough to put on our crampons. We started climbing up an ice ridge which gave way to snow, ever steepening to rock. The middle third of the ridge was all rock and fairly easy going but the last third was capped with snow and ice.

At the last bit of rock we put on crampons again and climbed straight up to a crevasse which divided the ice from the snow on top of the ridge. We walked the lower edge of the crevasse until it petered out, then climbed to within 20' of the cornice's crest and

followed it in the wet snow. As we moved along the snow hissed and slid away, cascading over the rock to the glacier below giving one an odd feeling. At a notch in the ridge I looked down across the north face to Bryce Creek, a hairline far below. Later I checked it on the map, its contour reading just under 4000', a long way down!

Farther along the cornices disappeared, the ridge got sharper and curved gently to the left, and before we knew it a crevasse blocked our way. We went down into it and climbed out the other side, not realizing we were on the summit which was split in two! At last our final ecstatic destination, we thumped each other and shook hands, a summit I'll not likely forget. We retired to the rocks below and lolled in the sun. We stayed for 45 minutes looking over peaks to the south and west but the details were hidden in the haze. The escarpment to the west made us feel insignificant, for that side of the mountain dropped away to Bush River, 8000' below.

We retraced our steps down the ridge to the rock where we decided to follow a prominent rib straight down to the glacier—a good decision, as it was steep but easy to descend. The rock ended 200' above the bergschrund so on went the crampons. On hard ice we front pointed down to a narrow crevasse that provided us with a stance, then down another 100' to the snow; a jump across the 'schrund and we were on the glacier.

This was the part of the trip we thought might be a drag, but aside from a few soft snow bridges we made good time. We bypassed the centre peak on the névé, then climbed the snow to within 300' of the east peak. At 6:15 p.m. we unroped and left the glacier to scramble over the south east ridge, using the crampons once more before we arrived at the steep grey wall. This we rappelled.

We scrambled on. When we got back to the rotten grey wall above the small glacier we were going so well we came straight down it, running, sliding and jumping from one scree ledge to the next. We crossed the glacier to the scree but it seemed to take an eternity to get a back up to the ridge, and daylight was fading quickly.

Once on the ridge we were treated to a show none of us will forget —the sun, a crimson ball suspended above the horizon, behind a huge bank of smoke and clouds. It lit the heavens in a kaleidoscope of colour. I stood in awe, not even thinking to take a picture.

Soon we were sliding down the snow to our bivouac. It was 9 o'clock, the end of a magnificent day, everything a mountaineer could want. We ate all the food we had left, which wasn't much, then spent a fairly good night.

The next morning we left at 6:45 for our cache at Cinema Lake. We arrived there at 8, ate a huge meal, lay in the sun and talked, had a swim in the lake then packed up. It was soon time to leave and three happy companions started out down the trail to the Castleguard River, and beyond it more adventure.

Glen Boles

The Complete North Arête

I had never realized just what a chunk of the North Arête we had omitted from the lower section when we'd made the 1st ascent back in '62. But there it was sure enough. It was true that it was somewhat concealed in its lower reaches, dropping as it does into the near primeval jungle around its base. But that was hardly an excuse, for there were always the nagging reminders from Sinclair that it was really only half a climb. Jim, the self-appointed warden-cum-historian of the Squamish Chief. If he said it still had to be done all the way through from top to bottom, "to kind of clean it up," then you can be sure it was probably true. For with the critical eye of the museum curator that Jim has in his self-appointed role of guardian, I suspect the incompleteness of the North Arête was a source of some discomfort to him.

Incomplete and disjointed it was. Not only had Beckey taken a stab at the bottom section one time, and climbed some in the middle on another occasion, but Culbert and Woodsworth, like thieves in the night, had sneaked across the path from the gully in 1961 and climbed the two beautiful pinnacles on the arête, the Acrophobes.

When Mather and I teamed up to climb the arête with Fred in 1962 we reached this step on the wall at dusk on the first day, after having started some way up the ridge by climbing in from the gully.

I remember distinctly asking Fred if it would be possible to traverse off the ridge into the gully. "Not a chance," he said. We shrugged and slept the night, perched on a tiny ledge, roped to a tree, and awoke the next day to finish off the top section. It was some lime later that I realized that he knew perfectly well that all you had to do was walk around the corner and find yourself in the wide spacious North Gully. After all he'd done just that only a few weeks previously with Bjornstad. There was a cave, and still is, to sleep 40 thieves, let alone three, and water in abundance. Puritanical Fred had us bivouac on the wall all night—I never understood that, perhaps he was afraid we'd keep walking down the gully and go home if he told us there was an exit!

So the North Arête needed to be completed, and my annual penance was due—in the form of leading a trip once a year. A small penance mind you, considering the sins you get to commit in lieu of it! I would recommend it to those with pangs of conscience ···

I have always maintained that the level of club trips should be elevated to give the more ambitious members a crack at something more serious than the average weekend trek. Psychological barriers can build up in climbers towards real, or imagined, difficulties—barriers which bar them from some of the most satisfying experiences in the mountaineering spectrum, and in many cases without good reason.

So it was that early in the month a group was gathered together that had had no previous experience on the steeper walls, and some who had never climbed before. We agreed to train as rigorously as time and energy permitted and then select a team by the end of the

month, based on performance. This group, with the help of some more experienced leaders spotted here and there down the rope would try for a complete North Arête as a 2 day climb and club trip.

And train we did. Fingers that normally pushed pencils, or scratched the nape of the neck as their most energetic exercise during the course of the average day, were soon reduced to the tender limp digits, aching in every pore with unaccustomed pain. As the original shock wore off, the same fingers eventually felt their way up most of the climbs at the Quarry and Point Atkinson, with routes on the Apron at Squamish thrown in for good measure. We even made a new finish variation to "Starfish" at Point Atkinson, which we promptly named "Holy Mackerel", in keeping with the pescatorial flavour of the other practice routes there.

The week before the climb was scheduled it rained without pause, and reluctantly we conceded that it would be folly to proceed. Three of us went up on the Saturday night anyway, just to look— to trace new lines with the eyes to sleep in the cave, and drink our Beaujolais anyway!

We had just nestled down out of the rain, and were drifting off into troubled sleep, when we were awakened by the return of the lads who had been to the oasis in Squamish. Alas the Cacu-demos cave resembled a loggers' boarding house Saturday nights! They claimed to have been to the billiard hall, but didn't look steady enough for that—a bout with the shuffle board more likely.

The flat monochrome morning was heralded by every bird from Pemberton to Brittania, who seemed to have gathered in the spacious cave entrance, and were shrieking with a racket that no poet could ever wax lyrical about.

Once when camping with some French climbers near a river, we found some real frogs, the kind whose legs you can eat. We hastened to de-culotte them in the traditional way, dropping the legs into the sizzling frying pan, and casting the remains away.

Early the next morning we were awakened by the same kind of inhuman shrieking. A ring of frogs surrounded our tents, all limbless, and seemingly cried out to be united again with their by now long digested legs.

We hastened out of the cave in the morning drizzle, enquiring en-route of an ill tempered and no longer sleeping Tony Cousins if he would like to have a bash at the North Arête after all. Alas, he was oblivious to the birds and rain and appeared to be suffering from his hellish bout with the billiards still.

So the brushing wet jungle walk to the foot of the arête committed us to the climb—too early to go home, too late to sleep—and soon only the damp rock was all that mattered in the world. David Turner, very fit, with all of a months serious rock climbing experience; Jan Atlung, originally Norwegian, coach of the Indian-Eskimo cross-country ski team from Innuvik, another 4 week veteran; and myself.

Jan had taken the bug seriously, and during our training had plunged into it with characteristic frenzy. One evening I got a call from his wife Charlotte, I hastened to the Quarry, to find him pinned up on the highest part of the cliff in the pitch dark, all alone, trying to figure out how to get down through the maze of ropes, pitons, carabiners and slings.

Short apprenticeship over, it was now Sunday morning, the rain was easing, and the sorely depleted but keen club trip was off and climbing. The curving wide crack at the start which leans outwards towards the ever-present gully was strenuous, and brought us up above the gully proper. The gully noises are more frightening than its looks—every dislodged stone argues and bickers its way down the bed.

The arête is long for one day, so we avoided the use of pegs wherever decency, common-sense or lack of ability didn't make them necessity. Only time will tell how successful we were in that respect. Time was important to us, we hurried slowly. I thought of one of those childhood poems they drum into your head, the one about Jon's carrying the good news to Ghent—"I climbed, he climbed, we climbed, all three".

I admire the way in which climbers describe long parts of a route in detail. I don't know how. For me the passages go past, even the ones that take hours, like the gates in a downhill ski race— the whole is always vivid, but the detail obtuse. Crack, slab, undercut, wedge—and yet how the hands of the watch spin. Why don't they move that way during the week at work?

The welcome sight of the Acrophobes loomed into view above, they looked so different from underneath, they must be heavy. We gazed for a long time at the most symmetrical chimney I've ever seen. About 100' high, leaning back just a little, 2' wide perhaps, with edges square and smooth to the top—only bongs as big as garbage cans would fit that. Might it go free? The very thought sent one of those shudders down into the stomach, and further, at the audacity of the very idea. I meekly beat a slinking traverse around it, assuring my two neophyte partners, who had begun by now to show interest that it was indeed a piece of cake, but not today as we were in a hurry...

By 6 p.m. we arrived at the escape ledge and a bivouac site of times past, but this time with two beginners, and we'd come almost twice as far. Beginners never complain and rarely notice your errors. Nor do they ask for the lead, and then bitch when they can't have it as Fred had 10 years before. We had told him he was a guest in our country, but he hadn't bought that—at least it was one climb of a thousand that he couldn't claim!

And those two bolts on the crack above the ledge, how could you, whoever you are? David and Jan came through like veterans, somewhat unnerved by the exposure that wells up and around as one steps out across the wall there. Looking down past the circling ravens we could make out a clutch of wives, kids, and dogs on the road below anxiously honking horns, then mercifully drifting off, bored, for milk shakes and home. Magnone once told me that when they were doing the 1st ascent of the West Face of the Dru his mother heard about it on the radio in Paris. She came to Chamonix next day with a basket of food, hoping to pass it up to them on the climb. When will those mothers and wives ever understand us? Or do they, all to well!

The final piton crack, around the corner and over the gully again, was completed in total darkness, with Jan unwilling to leave his chromolys behind in the crack. On the flat mattress of blackberry bushes we loosened off laces, let the blood flow again to the feet, and laughed, free again from the imprisoning verticality of the wall below. For David and Jan a baptism in the joy of the long route, not terribly hard or tedious, and bound to be made a lot freerer and swifter yet I hope. But 16 hours is still a long day. Which way down? With visions of walking over the grand wall in the dark, I opted for the gully. It will be quicker too. Every experience in life, and every book I had ever read on climbing said it wasn't, and it wasn't! We slipped, slithered, cursed and bumped into each other all the way down. I commandeered the flashlight as the leader of the trip, and was the only one who fell badly—over a waterfall and onto my head.

At midnight the clouds cleared briefly and the moon shone dramatically against the white grey-granite of the Zodiac Wall. The primaeval atmosphere which that section of the Chief has was very strong at that moment, as the three of us halted like men of that era—wet, tired, engaged in an obscure struggle, said naught and stumbled on through the boulders.

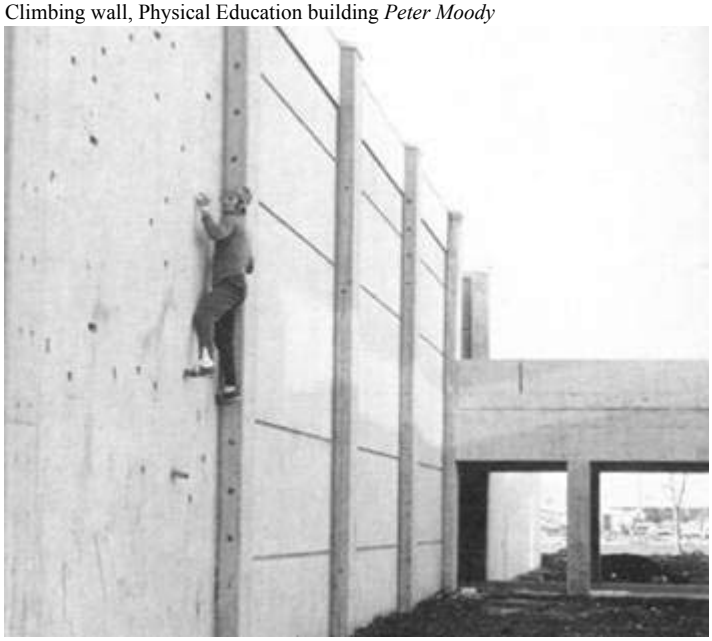
Jan was killed shortly after, whilst climbing in the Interior Ranges. We had planned so many things together, including a new route on that moonlit wall. We even had the name—"The Paris Commune", in honour of its 100th anniversary that summer of '71. Like the "Peasants' Route" which Jim Baldwin and I had begun in distant '58, the complete North Arête will serve as a memory, not just as another day of fine climbing, but rather for another youth who found himself, however briefly, in the mountains.

Les MacDonald

Bringing the Mountain to Mohammed?

One suggestion made to the User's Committee on the new physical education facilities to be built at the University of British Columbia was that an artificial rock climbing wall should be included in the design. Several reasons were advanced for this suggestion: (1) it would supply the physical plant for instructing a recreational activity new to campus. A climbing wall could be made available to such groups as the Varsity Outdoor Club for recreational exercise or as a means of introducing club members to the sport of rock climbing. (2) a wall would make it possible to offer "Introduction to Rock Climbing" as an activity course in the school of Physical Education. (3) a climbing wall would be a facility unique in this most mountainous of provinces. It seems that "artificial waters" in the form of swimming pools encourages the recreational use of our natural water resources, so why not "artificial rock faces" to encourage a greater recreational use of our mountains? (4) money normally allocated to decorating the exterior of the building could be spent on the construction of a climbing wall, if such a wall was an integral part of the facilities construction. In this way the appearance of the building would be enhanced in a very practical way that would also help identify

Climbing wall, Physical Education building *Peter Moody*



the purpose of the building. (5) the inclusion of rock climbing as an optional course in Bachelor of P.E. and Physical Education teacher programmes would encourage the adoption of the activity in schools, especially in those schools with suitable nearby natural rock faces. (6) both indoor and outdoor artificial climbing walls are almost commonplace in Britain and other European countries.

Typically, in the case of the outdoor climbing walls, projections and crevices are included as integral parts of the structural walls of the parent building. In this way the actual cost of the climbing facility is considerably reduced. In the case of the proposed $500,000 UBC facility, an extra $1000 would provide for the inclusion of an (extra) innovative activity, one in which about 16 people could participate at any time. Such facility would be available year-round for very little maintenance cost. Surely too good an opportunity to miss?

The arguments presented above were sufficient to gain the approval of the User's Committee for the concept of a climbing wall, but it was given a low priority rating. As the plans for the building of the facility moved ahead, the promise of a climbing wall receded. But then, after actual clearing and building on the site had begun, it was discovered that somehow provision had been made for the inclusion of some 24 climbing holds on the exterior of two of the 18' by 22' concrete wall panels. At this point the writer, being the original proposer of the climbing wall concept, was approached for further guidance in design.

Unfortunately this writer is not a rock-climber, and more expert advice was needed. This was readily forthcoming in the person of Les MacDonald, well known veteran climber from North Vancouver, who gave unstintingly of his time, enthusiasm drive and advice in promoting the cause.

Other climbers were consulted (including Hank Mather and Tony Cousins), reference was made to books, and slide photographs of European climbing walls were examined. Suggestions were made to the architects and rejected on the grounds of expense. The architects were asked for a figure to guide the formulation of wall

designs, and initial intimations that upwards of $1000 might be available were soon changed to "maybe a few hundred dollars or so," and eventually to "no way ..." Having come this far, however, the climbing wall protagonists were not about to quit!

There was support on campus from members of the original User's Committee; the project architect was most sympathetic; and the construction company's site foreman was downright helpful. The only hangups were expense and time. No money to do what was really wanted, and no time left to try to raise the money. Compromise and prompt action were obviously called for.

The concrete walls were due to be poured. The construction method entailed pouring the concrete into horizontal forms for eventual raising into place by a 60 ton crane. If anything was to be done about the climbing aspect of the wall, it had to be done before the walls were poured. And so, at 6 p.m., on Wednesday 11 August, Les MacDonald, Hank Mather, Tony Stevens and I met at the building site of Phase II of NEC's new Physical Education complex. Three hours later, as darkness descended, the quartet stood back and looked at the 115 marks representing projections, crevices and pitons that they had drawn on the form foundations of the new walls.

It is to be regretted that no equipment was available to adequately record the antics and conversation of the three climb-design experts as they plotted their holds. But the total results of their efforts provide for 144' of continuous traversing at four different heights, and eight basic 20' vertical climbs to inserted pitons. When the wall is complete it is planned to have Les, Hank and Tony come back to christen their basic climbs, and by a system of colour coding to classify climbs of varying difficulty.

Before the wall will be climbable, however, more money will have to be found. The $303 currently allotted has already been spent on cutting and placing styrofoam blocks in the forms for the pouring of the concrete. When the walls are vertical, the styrofoam will be removed leaving 3 1/2 inch deep holes dotted over the wall surface. These holds will then be fitted with strengthened concrete "bricks", which will protrude from the wall surface to lengths varying up to 7 inches. The making and grouting of the bricks will cost a further $720, which sum has not been budgeted in the building costs. There is some hope that sufficient funds will be left over to complete the climbing wall, but if this is not the case then other means of raising the money will be found.

Bringing the mountain to Mohammed? —well, not quite. But we are hopeful that the climbing wall, when complete, will be made available to on-campus and off-campus groups, and to some degree may become a "Mecca" for rock climbers in the Vancouver area, and a means of increasing the number of the Faithful.

Peter Moody

The Southern Battle Range

A Nemo Holiday

The possibility of a Toronto Section mountaineering expedition had been talked about for the past few years. Jim White brought it to a head, and with the assistance of Dave Fisher decided on the Battle Range as a good locale. It promised some granite rock faces, snow and ice, and had only been visited a few times. From the beginning the nature of the outing suggested a holiday in the mountains rather than an expedition, and 20 of us had a most enjoyable one, in spite of the considerable inclement weather. Access was via the Spillamacheen River Road from Parson, B.C., on Highway 95 to near the junction of the McMurdo Creek, from where Derrick Ellis lifted us to base camp via Silent Pass in his Bell 47 Super J2A.

The activities of the next 12 days, although not as ambitious as our many planning sessions had envisioned, were productive when the weather permitted, and many new routes were attempted and completed

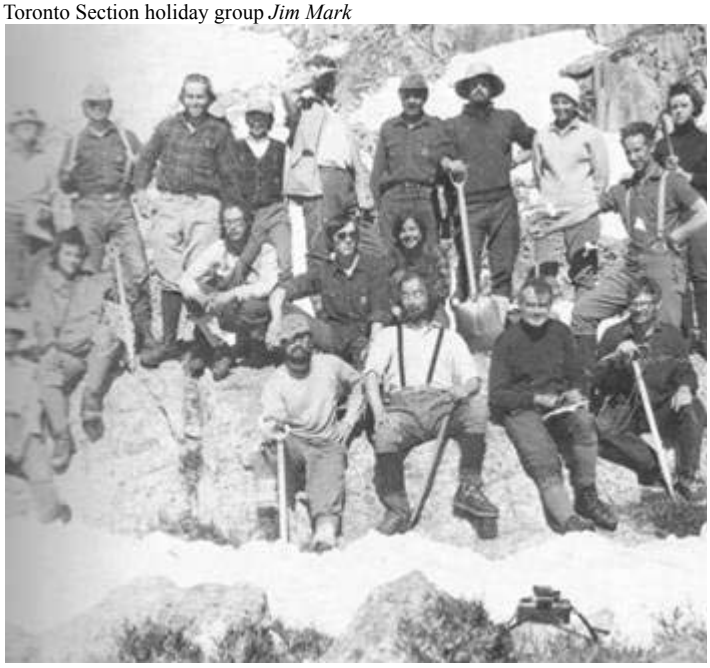
Mount Mazinaw

The very wet and quite normal Selkirk weather made the first few days somewhat disappointing for the more eager members of the group. Still, rain and wet snow did not keep everyone festering in their sleeping bags like this writer, and the eager group pushed a 2 mile trail from our base camp round the shoulder of Mt. Nemo to the steep open mountain side below the Nemo basin. This route was essential to give us access to the mountains around the basin and next day we ferried food and equipment over the shoulders and through the boulder fields and avalanche chutes of Mt. Nemo. A high camp was set up on the steep slope below a lateral moraine of Nemo Glacier. Each tent site had to be constructed by carving a scoop out of the mountain and building a ledge of the scooped out material. So far we had had lots of back packing and whacking and excavation, but very little climbing, so we took a rest from the diggings and hiked up into the basin. The clouds lifted for a while at about 2 p.m., and enthusiasm was raised sharply by the sight of snow peaks and steep clean granite walls and ridges. Plans and schemes started to form, and we rushed back to base camp to collect our gear and prepare for an early start.

The next day we were frustrated again by very poor weather, but in the evening the sky cleared and the temperature dropped, so all was prepared for the morning. At last on 8 July we got a climbing day, but we were in the wrong place, and really needed to get round to the advanced site below Nemo Basin. We packed round with our loaded packframes, reached the advanced camp at about 6:30 a.m., dumped the excess gear, switched to day packs, had a quick bite to eat and were moving up into the Basin by about 7:15.

Our rope of four, Walter Robinson, Michiko Morii, Dick Vernon and I, had decided to attempt an unnamed peak which rises on the south side of Nemo Basin north east of Mt. Nautilus. Although it was late to be starting on the floor of the Basin we were fortunate

Toronto Section holiday group *Jim Mark*



The Nemo Group from the south west, Thumb Spire in the centre *Bernie Schiesser*

to find the snow still crisp and firm. The glacier started to rise quite steeply, but we made good time on crampons to the foot of a steep couloir which rose to the west between Mt. Nautilus and our unnamed peak. This looked an interesting route, if only we could trust that there would be no falling stones bouncing down the chutes which joined the couloir about 200' above the bergschrund.

The couloir was north facing, still in shadow all the way to the top, and the snow was firm so we started up. The bergschrund was crossed on a thin snow bridge but above this the going was steady, with the crampons continuing to bite well until an exit fork branched to the right. This fork led onto a snow rib which gave onto the ridge but before this was obtained we had the only anxious moment of the day, as the snow turned to deep unstable powder and granules on top of ice. Arrest would have been difficult had the leader slid at this point, so the party halted to give him a belay while he gingerly edged over to the firmer looking rib. The crampons were a great asset as the front claws and two forward points just got into the underlying ice for those few critical steps. The snow poured down on Walter heavily enough to stifle any protest during these moves, and a secure spot on the snow rib was quickly reached. Once all were past we could move together again, and were soon on the ridge in bright sunshine. From this point we could clearly see the east side of Mt. Nautilus and the rock ridge climbed by the Sam Silverstein party in 1959 (CAJ 1960, pp. 37-51). It was certainly a magnificent looking route, although iced in many sections at this time. To the south, along towards Iron Ridge, a long steep corniced snow ridge ran up in a great sweep to the Nautilus ridge from the névé below us. What an ascent that would be if only it could be reached early enough for the snow conditions to be good!

We pressed on to our summit, arriving at about 11:15 after an easy climb between rocks and boulders. We named the peak "Mount Mazinaw", after Lake Mazinaw in Ontario, location of Bon Echo rock, our most popular climbing area. Here we ate lunch and built a cairn. The estimated elevation was 9900' and we believe this was the 1st ascent.

The traverse along the summit crest to the east summit presented no difficulty apart from avoiding stepping through the cornice, and we descended on now softening snow on the other side. Dick's knee was giving some trouble going down so our descent was slowed, but we picked a gully which led onto a fan of snow and gained the glacier floor without trouble. By 3 p.m., we were drinking tea at the high camp, before returning to our excavations.

Jim White.

Nemo: North Face

On the second day of the camp, to rid ourselves of the feel of city pavements so recently left behind, Michiko Morii, Alex Norman and I set off over the nearest rib of Nemo to skirt her north face— not Eigerish, but steep snow and jagged rock—impressive in the afternoon light. It was a short recce, but it stirred the blood, with our first views of the summit of Feather Spire and the snow face of Nemo before us.

Next morning, 8 July, Alex Norman and I set out at a good pace over perfect snow at 5:15. Our route led over the north north-east ridge to emerge on the north snow slopes and included an ascending traverse toward a small snow chute, a quarter way up the face. By this point the snow had deteriorated into tiny airy granules overlying ice, so where possible we stuck to rock out-croppings. Continuing almost straight up from this obvious snow chute and occasionally traversing right, we reached the north east ridge just below the final snow face leading to Nemo's summit. A small depression in the ridge, with a magnificent hanging cornice, gave us a sunny breather and a chance to admire the panorama of the Melville group.

The last slopes were ascended in a quick spurt, and we curled up among the summit rocks to watch the advance of a foreboding weather front moving rapidly in from the south. Rating: difficult, though depends on snow and ice conditions. Time: ascent from base camp 5 hours, with vertical rise 2300'. A rapid descent with superb long glissades via the original ascent route, brought us out near the newly established high camp below the Nemo Basin.

Judy Cook

A First peak climbed
B, C, D, E Peaks climbed by Schiesser and Howard
F, G Peaks climbed by Vockeroth and Le Mond *Moira Irvine*

Mount Nautilus

The summit of Mazinaw had given us a good view revealing a long snow ridge splitting the east face of Nautilus: an obvious objective. Bad weather thwarted ambitions, but eventually the sun reappeared and plans were made. An immediate setback was caused by a general bout of oversleeping, so the party did not leave camp until 5 a.m.; too late for Nautilus but we could at least explore a route across the long spur running down from Mazinaw, which lay between the camp and the base of the climb. A fine couloir cut this ridge and although quite steep provided no problems, but it did introduce several of the party to the noble art of crossing bergschrunds. Fortunately, at the top the party traversed on to some rocks on the left—the couloir ending in a hidden cornice of doubtful strength. From here easy rock ledges led down towards an as yet unexplored glacier. Roger Parson found a gully down to the snow. From this point easy snow slopes lead back to another gap in the ridge, and then to the descent route from Mazinaw, providing easy routes to and from the intended climb.

The following morning, 14 July the alarm was heard, so Roger Parsons, Mike Kingsley and I left high camp at 3 a.m.! The glacier and then the top of the col were rapidly attained, the snow being frozen hard. Down the rocks and onto the second glacier, but by now the sun was rising fast and the surface was becoming soft, slowing the pace a little. By the time we reached the foot of the climb it was a case of bucket steps. A short, steep slope of poor snow provided access to the ridge, where the angle relented initially before steepening below the cornice. For this final section Roger and Mike belayed while I found a way through the cornice via some blocks of rock. All that was left to the summit was an easy-angled boulder slope. This was crossed with the aid of glucose tablets supplied by Roger, and so to the summit, where once again Roger came to the rescue with a tin of fruit salad borrowed from the food store a few days previously.

The descent involved an exciting traverse across a steep snow slope above a large bergschrund to regain the glacier from the ridge, then miles of super soggy snow, before a triumphal return to camp.

Dick Vernon

Feather Spire

Judy Cook and I saw the peak on our first recce up the north face of Nemo. The name fits the mountain. Clouds, fog and snow came. The group had split, one party in high camp whiling away time with "Knees up Mother Brown" and "Ring around the Roses", the other heavy with intellect solving all the problems of the universe. Three days in a row I got up at 3 a.m., looked around, saw nothing, said 50 Hail Mary's and went back into my bag. On the fourth day, 13 July, I felt "What have we to lose?" We packed up and the four of us, Judy Cook, Jim Mark, Bill Snider and I left late in the afternoon for high camp.

Anxious enquiries that evening of the one person still up—"Has the peak been climbed?" "No" "Hurry!"

Found a bivouac site by the Nemo Basin; a comfortable night and away at 5 a.m. A quick trip across the Nemo Basin and onto the north east snow ridge. It all looked very steep and formidable. It turned into a most enjoyable morning. Three pitches of 120' across a rising traverse between 50 to 60 degrees in snow and ice interspersed with rock, in parts pretty thin. Reached the summit by 10 a.m., had something to eat, built a monument to our victory, took photos, etc. Rating, severe, but will depend on snow and ice conditions. Time: 10 hours return. Three unpleasant rappels brought us back to the snow ridge. Descending at a good clip, we collected our bivouac gear and set out for high camp.

Alex Norman

South Face Of Mt. Evening To South Peak

"We were up at 3, no time for tea
There was a route to be sought and won,
With mi' Joe Brown hat, and Cloggy gear,
We were off to have some fun!"

I couldn't help wondering what was going to be in store high up on that big south face of Mt. Evening. I tried to convince myself that it was only like three Clogwyn du'r Arddus piled on top of one another. But then the thought passed through my mind that if it were three Cloggys high, the route could be something like three Woubits Left Hand or three Vembers!

John Osborn and I wandered over some easy snow patches, and soloed up terraces following a gully to a ridge on the right. This came to an abrupt end at the foot of a huge wall that blended into the steep face on our left. It was cold up there although the cloud was high. Bad weather seemed to be in store for us, towards the middle of the afternoon it became gloriously warm.

John led the first pitch, a slightly descending traverse left then around the corner and out of sight. It was a marvellous feeling to be high up in the mountain again, and I remembered my first

Alpine route in Chamonix. My mate and I had thought the route was only as high as Cloggy, and when the weather caught us we had a forced bivouac in an electric storm. All our food, duvets and equipment were in the sack at the bottom. Well this time they were—still at the bottom—in the tent! A jerk on the rope and John saying "Climb lad" shook me out of my daydream. I reached him after a pleasant traverse of about 130'. Leading through, I ventured further left till the rope ran out (150') and belayed. We climbed this way throughout the whole climb leading through for efficiency and speed. We started to ascend a series of beautiful flakes and cracks, generally climbing high up to the left for about 300'. The rock on these pitches was really good granite, but now we were going straight up, following steep cracks and chimneys for 350', and it was getting loose in places. It had been a long time since I'd bridged so much, and the enjoyment was fantastic.

By now the hard stuff started, and John led an overhanging crack. He spent most of the time trying to stay in, while at the same time trying to climb up. Above the crack the climbing was harder still, a very hard move beneath a roof led to a crack traversing slightly right to his stance. I grabbed his leg as a finishing move—best hold on the pitch! Then I led through an overhang using no aid, up a steep crack, ending with a short hand traverse left finishing with a semi-mantleshelf move. Those two pitches of about 90' each were about hard V.S. and the hardest on the whole climb.

Here things relaxed a little, and we climbed directly to the South Summit of Evening and were very pleased to note that it was higher than the northern one. The route had involved 1400' of roped climbing on a 2000' face, had taken us 7 hours, and could be classed as severe except for the two pitches mentioned above. We ate some food, built a cairn, took some photos and set off down a scree-snow gully way to the left of the main face. When we reached the bottom 3 hours later we were wet through, but 13 July had been an ACE day!

Dave Read

Those were the firsts, the climbs that will be remembered, but the many other holidayers were not idle. For some it was their first trip to the mountains and those first days of snow and rain cast a gloom over the camp. Dotch Peck cheered us up saying "one good day in the mountains will erase the memory of all the bad days", and indeed we were rewarded during the final days. Everyone was busy, with Nemo and Mazinaw the favourite destinations.

For the last evening a gourmet dinner was prepared by Michiko Morii, Beryl Brown and Rose Bukovac, and as everyone feasted voraciously stories began to be told that would undoubtedly survive many retellings over the years ahead. It had been the first Toronto Section holiday, and each of us realized it would not be the last.

Walter Robinson

The Southwestern Nemo Group

The Battle Range has always had a very special meaning for me, ever since I first head the name in my childhood days. In June of 1971, Don Vockeroth, Doug LeMond, John Howard and I had the opportunity of seeing and exploring part of this remote, rugged granite wilderness.

Of course a big part of any expedition consists of organization and planning. For several days I plodded through food lists, menus, equipment lists, helicopter and auto pickups and a myriad other details. Finally, on 11 June, we left Revelstoke by helicopter and flew via the Incomappleux, Kellie Creek, over the Wrong Glacier to the south fork of Houston Creek, and to our campsite, on the ridge separating the south fork of Houston Creek from Nemo Creek.

The first morning; a clear and warm spring day. We set up camp against a high boulder in the most protected place available, and finishing this by 9 a.m., we climbed the peak to the south of the pass. It proved to be an interesting, but easy, snow and rock ridge climb. From it, the Battle Range in all its immensity unfolded before us. North of us lay the Nemo Group, which immediately caught our attention. It was the highest and most spectacular group for miles around. Within an easy day of camp lay its southernmost peak. Thumb Spire. Truly a spire, it appeared to offer difficult climbing from all sides. Further east and north were several more peaks along the ridge leading to Nautilus, the nearest climbed peak. Directly west lay two major peaks, and beyond them lay Wrong Peak and the group surrounding Oasis Lake. South of us lay the Westfall River, (see map; CAJ 1960, p. 38). Beautiful views in every direction and no trace of man—what more could one want?

We returned to camp, wildly enthusiastic, and planned to make our objective for the next day the peaks just beyond Thumb-Spire. An early start saw us leave camp at 5 a.m., drop down about 500' toward Nemo Creek, and across a big meadow to the base of Thumb Spire. At the edge of a small lake in the meadow we saw three goats who just stood and watched us go by. They had obviously never seen humans before and they almost became our mascots, as they watched us all week. We then climbed up to a point east of Thumb Spire and were going to go further along the ridge when it started to snow lightly. The weather had been getting progressively worse since we got up so we decided to turn back.

We got back to camp and the storm got steadily worse. It was now snowing heavily and blowing very hard. We took turns getting up and knocking snow off the tents and our poly fly sheet, so that we would not be snowed under. Our location proved to be good, in that the huge boulder we camped against acted as a wind break. Later that day we strengthened our position by cutting some poles to reinforce the plastic fly sheet, as the wind seemed to be even stronger. This was the first day of four we were to spend in camp because of the storm. The next day we decided to dig a snow cave in case the wind got worse and also to give us something to do. This project kept us busy off and on for two days, while we waited for the storm to end.

Finally, on the fifth day, when we decided time was running short and we would have to leave soon, the storm ended. To get the most out of the next days, we split into two groups of two—Don with Doug and John with myself. Don and Doug went to the Nemo group, where we had been turned back, and John and I went to the peaks in the west.

We crossed a high basin at the head of the south fork of Houston Creek, climbed up the glacier to the east of our objectives, and

climbed to the col via a steep snow chute. It had snowed about 21/2', and the going was tough. Luckily we had brought snowshoes with us, and they made the trip possible. As we came to the moraine, we found the wind had rolled rocks as large as eggs across a 15' flat spot and up an incline for about 2'. This was the first time we realized the force of the storm.

From the col, we climbed the southernmost of the two peaks and then traversed north across two minor peaks to the north summit of the group. All four of the peaks were of clean solid granite, with pleasant but wet climbing due to the fresh snow. We descended from the col to the glacier in the centre of the four peaks. Because of the sun's heat on the new snow we spent about 20 minutes knocking all the snow out of the chute before we entered it. From here it was a tiring walk back across the basin and up to camp.

Don and Doug did not get back until later. They had found a good route past Thumb Spire to the base of the next peak east on the ridge. The route up this peak offered some strenuous rock climbing, made even more difficult by fresh snow. They got to the first summit early and decided to go on to the next peak. The intervening ridge (north) turned out to be very sharp; exposed to the east, and vertical to the west. They got across the ridge and found the next peak offered even more difficulty than the first. They climbed it and returned via the same ridge route.

Don had to leave the next day, so Doug volunteered to go with him on the trek out—26 miles to the old mine road up McMurdo Creek. John and I elected to stay another day and try Thumb Spire. The previous warm day had melted most of the new snow on the southern exposure so we felt the best route would be on the south face. After an early start, we found the lower meadows and open slopes an easy way to gain altitude after the deep snow of the previous day. At about 7500' we got on to easy slabs of granite and worked up on the obvious weaknesses angling to the west. The higher we got the steeper the climbing became, but the rock was excellent and the protection good. On the last six rope lengths we used 3 to 4 pegs or slings on each. We arrived on the summit in the early afternoon, and started a descent soon after via the east ridge, as this seemed to offer the least steepness. It proved much harder than we anticipated, requiring six rappels, as well as some difficult down climbing. We arrived in camp after 13 hours of strenuous climbing.

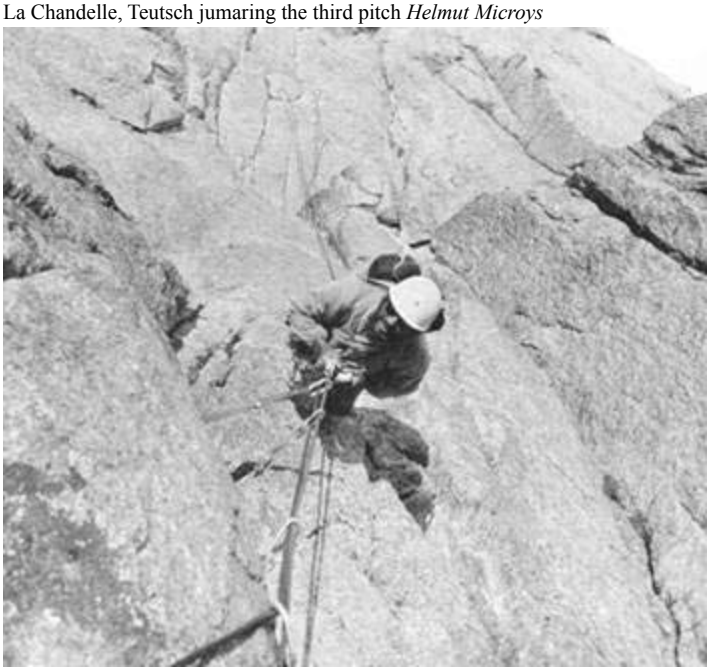
The next day we broke camp and started the long bushwhack out. With 75 pound packs we staggered out over the 26 miles in 3 days, or 29 hours of walking. After 3 days of B.C. bush we were glad to see the deserted old mine road in McMurdo Creek torn into the edge of wilderness and signifying the end of the alders, deadfalls, swamps .. and finally, our truck waiting nonchalantly for us.

Bernie Schiesser

La Chandelle 3561

It rained in Chamonix while we packed. Visibility was zero and it snowed when we walked towards the Laboratoire at the Col du Midi, after having made another teleferique ascent of the Aiguille

La Chandelle, Teutsch jumaring the third pitch *Helmut Microys*



du Midi. Some old tracks made sure we found our destination. However, good weather had been forecast, although only for the next day and Georges and I were intent on making the best of this opportunity.

A superb pinnacle, just off the ridge joining the Clocher and the Triden. First, and only, ascent by Walter Bonatti and Roberto Gallieni, 3-4 Aug, 1960 by the following route.

East Face. A short but very difficult free and artificial route, similar to the E. Face of the Grand Capucin.[4]

Bonatti and Gallieni had taken 22 hours to climb the Chandelle. There were no confirmed repeats, although somebody mumbled something about a winter ascent. Georges and I were attracted to this climb because we thought that the amount of fixed iron on the route should be minimal. As to doing it in one day, we felt confident — having done the Gervasutti Pillar easily in one day just a week before — that we could do it.

The day started out brilliantly clear and cold. So cold in fact that once on our way we no longer regretted the fact that we were woken up 2 hours later than we had planned. We took our sweet time getting to the climb hoping that the sun would warm the rock a little. An additional bonus was the fiery sunrise when we entered the Maudit — Tacul glacier bay. All the towers and pinnacles on fire, the giant flame of the Grand Capucin scratching the blue ice of the sky above.

The sun was on the face when I started on the first pitch. It did not have the verticality which characterizes the rest of the climb but it made up for it with snow and verglas. It was still cold, the verglas a definite handicap, and my glasses kept fogging up. Cleaning them crudely with the thumb of my gloved hand, I finally

4 *Selected Climbs in the Mont Blanc Range,* vol. 1. Translated from the Guide Vallot. Robin G. Collomb and Peter Crew, The Alpine Club, London, 1967.

popped a lens out. It stayed in my hand just long enough to give me exasperating doubts about my dexterity, then dropped, glanced off the rock and sailed to the glacier below.

Cold, insecure and one-eyed, I moved higher. But our troubles had just begun. Farther on, eager for protection, I jammed an angle into a crack reached for my hammer, raised my arm, aimed at the piton . . . dang! . . . diinng! it sang, on its way to the glacier below. I had not noticed the ice deeper in the crack. It did not take the somewhat warm piton very long, only jammed into ice, to thaw out and depart. The next belay was reached without further losses.

Georges, with groans and much rattlings of hardware, muscled himself higher in an overhanging open book. A high reach for a pin, pulling up on the carabiner and vroom! Georges came down jingling like a merry Santa Claus. I had him stopped without trouble but the jingle went on — two carbiners and the fixed pin, now rather loose, riding through the snow of the lower pitch to the glacier below. After some venting of his mind Georges went back to the business at hand, while I did some quick calculations to find out by which pitch we were going to be out of gear.

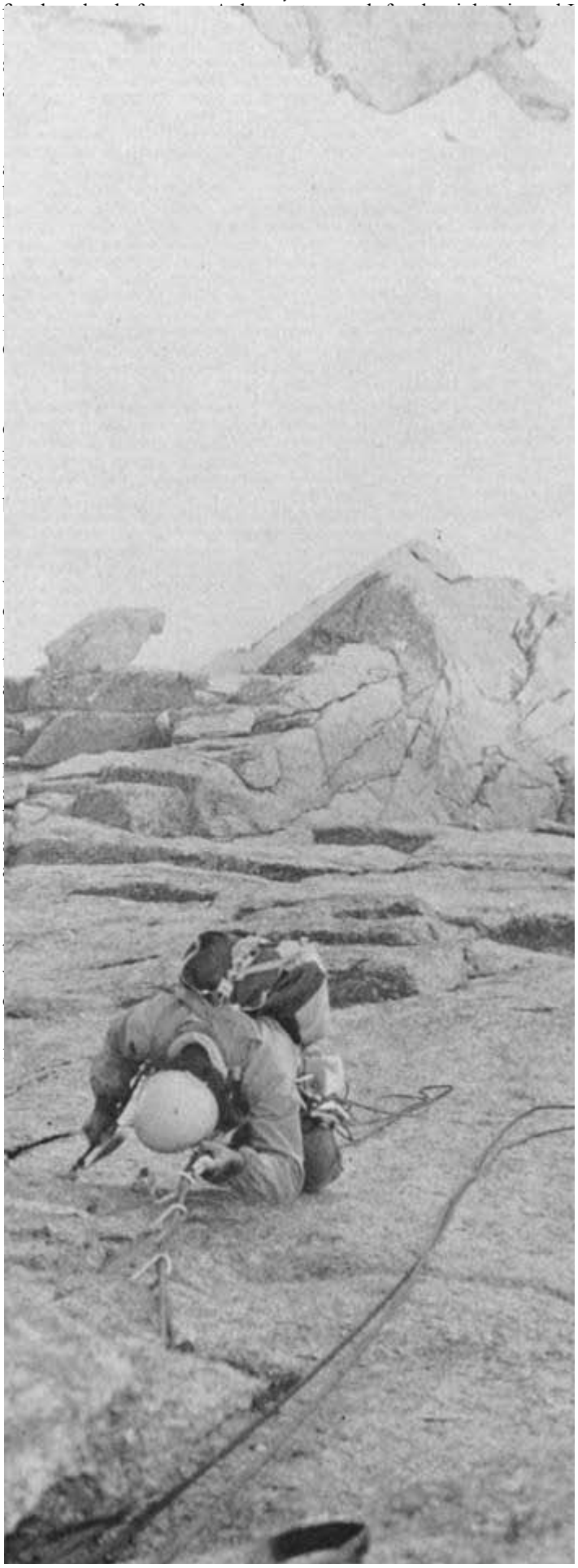
Georges was basking in the sun on a beautiful ledge while I was struggling to get my feet off the ground, my hands in a viciously biting jam crack. Truly magnificent climbing followed. Very steep, very rough and solid rock. Virtually no pins in place. And lots of free climbing, much more than we had anticipated on such steep rock, but hard.

On my belays I mused about the grading of these climbs. The Gervasutti Pillar, which is all free climbing except maybe for ten pitons, has the same top class as the Chandelle. The crux of the Gervasutti Pillar, given in the guide as VI, was a poorly protected 5.7. However, we had climbed passages which were harder. Judging from the piton marks these moves may be done with aid by some climbers. The free climbing on the Chandelle was almost consistently strenuous and more difficult. On the other hand, the Gervasutti Pillar is probably four times as long as the climb we were on and terminates nearly 600 metres higher. I came to the conclusion that the NCCS was a pretty good system indeed.

Traverse 30 metres very exposed, were Georges' instructions, and that should lead to the 20 metre crux pitch. Very exposed. I traversed, but after a little more than 3 metres, with no holds in sight, I opted for a crack going straight up after discovering a few pitons. It would have to do for the crux pitch—it did. The start was easy enough. Then the pins ran out. The crack became wider and wider and turned into a terrible hollow sounding flake. I used nuts only. Then a fixed wood wedge as the crack became slightly overhanging. I did not dare to hit it with my hammer. I gave flash-warnings to Georges and started testing. One foot in the etrier. . . gentle weight shift. . . second foot dragged up ... zap! as the wedge let me down and I took off—to the glacier below. Marvelous these modern belaying techniques, perlon ropes and seat harnesses. And of course, that extra runner in the right place.

Now the fun really started. With nuts and hero loops over little spikes the odd free move got me higher. The edge of the flake was very friable rock. A couple of layback moves, a foothold, an undercling and I reached a healthy looking crack. I ignored the

The crux on La Chandelle *Helmut Microys*



And what a rappel it was! Four pitons tied together for an anchor, George for the first time in his life on a carabiner brake. It seemed to take him hours to get down. When it was my turn, I did understand. After only a few metres the abseil was free for nearly 40 metres. The small narrow col below is off to one side and the rope dangled freely down the sheer north face. Level with the col, Georges had to start a pendulum in order to get onto it. He saved me this experience by hanging on to the end of the rope and pulling me in. Four long rappels over very steep rock to the couloir. Carefully, over some snow and ice to our axes. A quick search uncovered one intact lens and one piton. Then the walk back to the Col du Midi. Snow, clouds, silence. The wind increased as we approached the Col du Gros Rognon; we walked faster. We were quite pleased with ourselves when the noise of our shoes on the hut balcony broke our long silence. It was getting dark.

(Mont Blanc Range: La Chandelle, 3561 metres, possibly 4th ascent; with J. G. Teutsch; 21 July 1971; NCCS IV, F8/F9, A3.)

Helmut Microys

Baldr

Baldr was a son of Odin and Frigg and there was nothing but good to be told of him. He was the wisest of the gods and the most beautiful. He lived in the palace called Breidablik nothing impure could be there for

There where Baldr
has built his dwellings
in that land
where I know
there are fewest evil things.

Two tiny red tents huddled together, kneeling at the foot of Baldr. The north east face soared sheer above, giving it the appearance of a huge mediaeval fortress, a succession of rock buttresses and ice fields that rose tier upon tier to the pure white peak above. At this end a marvellous tower stood smooth and gleaming in the sun, the summit tapering to a sharp point. This was called Breidablik, the palace of Baldr.

Determined to learn something from our epic sorties on Sif (30 hours on the mountain) we planned to approach Baldr with more caution and meticulous planning. Thus we spent the whole morning in bed, if that word could be used for our fakir-like performance on the sharp stones of the tundra. Perhaps this seems overcautious to the casual reader, but he has not allowed for the combined cunning of mountaineers from two hemispheres. The plot unfolded over greasy tea the previous night and hinged on the use of the two man tent. This would be carried up onto the Weeping Glacier and pitched somewhere on the lower slopes of Baldr. It would facilitate an early start, and hopefully the steep snow slopes of Baldr would be frozen and "adluking" would be minimised. Adluking is the process of walking on your crutch, particularly applicable when walking on a snow crust which is prone to failure every few steps. The word was derived from the Eskimo word "adluk" meaning seal hole.

The team was to consist of Barry as snow, ice and lore expert, fresh from the icy wastes of New Zealand Alps; Gaston as rock technician, hero and general mastermind, who had dangled by his finger nails from the granite towers of Chamonix since puberty; and Dave as peg cleaner and chocolate bar carrier. By now the flaw in the plot will have been realized. The use of the two man tent precluded having three people in the party, but this problem was overcome by the use of a little imagination which involved completely revolutionizing the concept of tent and thinking of it as a three man sardine tin.

After toiling up an endless scree slope and crossing the weeping Glacier we came upon a rounded ridge covered with black boulders that projected from the base of the north glacier of Baldr. We spent a creative hour collecting huge chunks of moss and filling and grading a tent shaped area of stones. We were not satisfied until there was a good six inches of comfort, and the tent was erected over our handiwork.

Predictably, Gaston was the first to crawl out of the sardine tin, to experience the bracing Arctic morning from an elevation of 3000' above sea level. Unhappily the camp site appeared to be directly in line with a ferocious wind funnel and a tearing gale was still screaming down the valley from the north. Gaston was eager to get started and he huddled himself round a spluttering stove hoping to entice bacon to fry. It was unbelievably cold. Even wearing every piece of clothing we had hauled up the mountain the biting wind still seemed to penetrate to the bone. In desperation Gaston transported his stove and bacon into the tent whereupon he discovered a leak as the kerosene poured over the groundsheet. There was nothing else for it. The bacon had to be eaten in whatever state Gaston had managed to coax it. This was one of our happiest moments. Standing around in the grey Arctic dawn, the wind whistling through our fingers, we bravely swallowed pieces of raw bacon dipped in cold fat.

Eventually we felt it was time to move, and throwing stoves, sleeping bags and bacon rinds into the tent we trudged sleepily off toward Baldr, moving awkwardly like medieval knights due to the half ton or so of clothing we were wearing. The sun was frantically trying to heave itself over the shoulder of Ringhorn, across the Weeping Glacier, but was only managing at the moment to light up white fluffy clouds mooching around above Summit Lake. At precisely 4:50 a.m. we were sitting on a huge flat boulder gazing knowingly at the soaring white snow slopes above. Gaston leant forward and gingerly prodded the snow with his index finger. "It's 'ard!" he triumphantly announced. Frabjous joy! Lovingly the well-oiled, newly sharpened crampons were untangled from the packs and a few minutes of grunting, creaking and groaning followed as the spikes were strapped to the soles of receptive boots. Gaston masterminded the rope order. Barry as ice expert would be in the middle so that both Gaston and Dave could belay him simultaneously if a pitch worthy of his skill was encountered. Otherwise Gaston as hero would lead and Dave would be last for obvious reasons.

The whole of this face of Baldr is a huge creaking glacier, which came sliding round the corner from the col between Breidablik and the summit ridge, forming a wide ice gully adjacent to the rock buttress. At this point we had reached the gully was less defined, but there were tiers of ice walls guarding the upper reaches of the

glacier. We elected to thread a way through the ice walls, and then hopefully reaching easier ground we would be able to traverse back left above the gully.

The sun was now shining brightly from a deep blue sky as Gaston chipped his way upwards in an ascending traverse. A couple of pitches later only a steep hard band of ice barred us from escape to the more gentle slopes of the upper glacier. Now we began to appreciate the magnitude of the surroundings. It was not unlike being three pimples on the rear of a white elephant. Above, a wall of ice completely fooled by the cunning of our route frowned down at us, and below the ice dropped away, sheer, falling to our minute tracks trodden earlier that morning. The pace did not slacken as we crunched up and to the left aiming for the Breidablik col, which defined the end of the glacier. A few patches of ice finally led to the col, where we were rewarded with tremendous views.

The snow was crisp and hard, so that only the crampon spikes made an indentation as we gently made our way over the two clean white peaks of Nanna, the wife of Baldr. We had discovered that the true summit of Baldr was over a mile away, at the far end of the winding knife-edged summit ridge. Suddenly we were confronted with "the notch". This square cut col was a hundred feet deep and two hundred feet wide composed of delicately balanced loose boulders. Gingerly we made our way down into it using pressure holds to keep the mountain in place. The last few feet of the col overhung and involved a traverse to the left, a lowering on big jug handles that resembled those of cracked beer mugs, and then a big stride right underneath the roof and suspended over nothing. The floor of the Notch was one foot in width and dropped two thousand feet sheer on either side. Carefully tip-toeing so as not to disturb the huge poised rocks over either abyss, we arrived at the foot of the rock face. This was the finest rock pitch we had found so far on Baffin. The rock was steep, clean and firm, with knobbly quartz holds exactly where needed.

We had now attained the summit ridge proper. It was a splendid arête. The apex of the ridge consisted of superb hard snow and we crunched along relaxed at a fast pace. All around us were strange unclimbed peaks of indescribable magic and beauty; blocks, teeth, horns and towers. The ridge took a sharp right-angled bend and then led straight to the summit. The final tower consisted of a short rock pitch, and then the ascent of a gentle snow slope put us on the summit of Baldr, 6 hours after leaving the high camp. We were over 5000' above sea level and ten miles north of the Arctic circle, but the air was so still and the sun so warm that various bodies disported themselves around the rocks sunbathing and demolishing the remnants of 'scroggan' a mixture of dried fruits and nuts and/or broken chocolate. Its uses include not only providing the mainstay for gastronomic survival but also the principal excuse for having a rest while thrashing away on some endless scree slope. On this occasion it was exceptionally palatable and so with fine Arctic weather, good food and the splendid company of the surrounding peaks we whiled away a pleasant two hours with the wise, merciful and beautiful Baldr.

The Cumberland Peninsula of Baffin Island in Arctic Canada is a large glaciated mountain region containing peaks as high as 7000', very few of them climbed. In 1970 a party of five from Queens University flew by Nordair to Pangnirtung, then travelled by canoe and on foot into the mountains and attempted some of the peaks around the Summit Lake area. During a three week period, with mild weather common to this region in Summer, five new ascents were made, and the unclimbed peak of Asgard 'looked at'. Since the ascent of Asgard in 1953 most of the names chosen for the mountains in the Pangnirtung Pass area have been taken from Norse mythology. This tradition was continued by the choice of the names Mjollnir, Sif, Ringhorn, Nanna and Baldr for the peaks climbed.

Dave Sellars

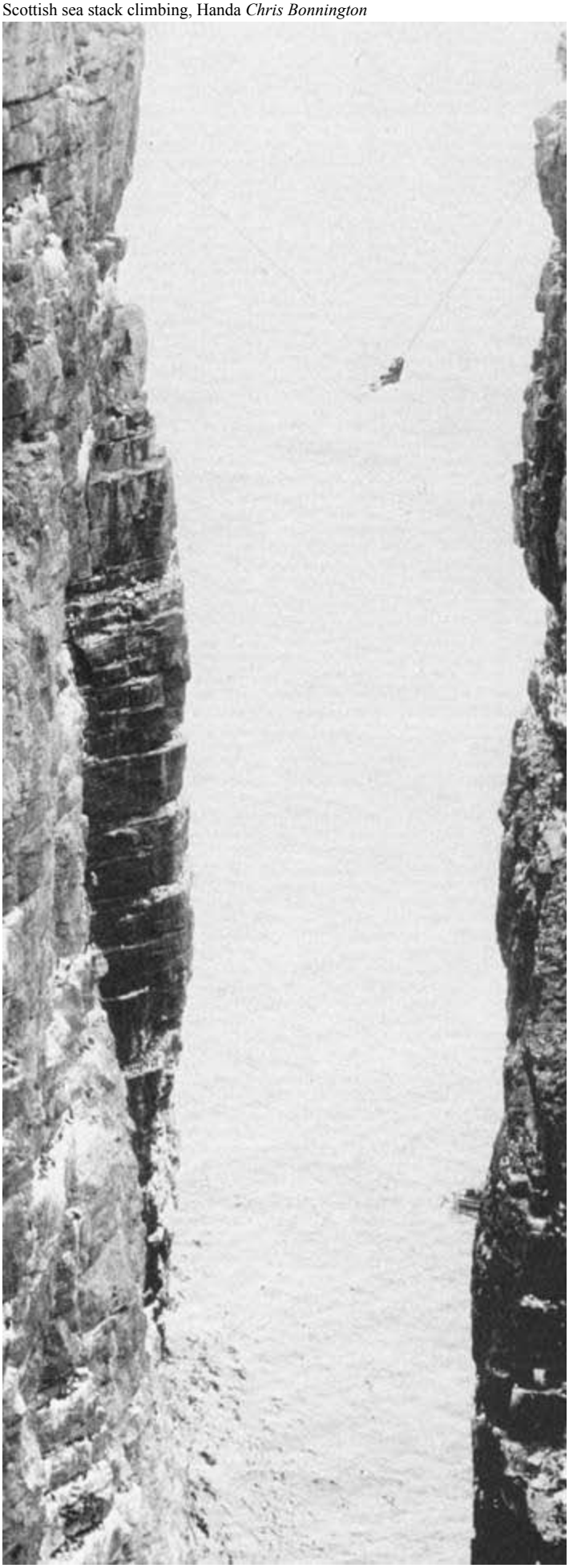
The British Climbing Scene

Although the standard of climbing in England and Wales has now reached an unprecedented high, there is one essential ingredient missing—rock! The popularity of climbing is greater than ever, maybe partly due to the extensive television coverage that climbing enjoys in England at the present time. With the development of new techniques, new equipment and a comprehensive selection of guidebooks, the standards are being pushed higher and higher. In the classical climbing areas of the Lake District, Wales and the gritstone outcrops of the Peak District, most routes have been done many times and the possibilities of new lines are few and far between. To a certain extent the action has drifted away from these areas. However, as psychological barriers to making difficult ascents are crumbling, new concepts of difficulty are being evolved. Whereas a few years ago an ascent of one of the hard routes on Clogwyn Du'r Arddu would constitute a good day's climbing, this is no longer so, with climbers now doing two or three extremely difficult routes in a single day. In Wales, where the high competitive nature of climbing is particularly evident, solo climbing has become increasingly popular. If it is not possible to do a numbered ascent of a hard route the climber can gain satisfaction from the solo ascent of a hard climb, and many very fierce climbs on Clogwyn Du'r Arddu and Tremadoc rocks have now had solo ascents. As the standards get higher it becomes possible to climb artificial routes free, and on essentially free routes the number of points of allowed aid are becoming reduced drastically. A good example of this is Think Pink, a route at the Avon Gorge, which a few years ago was artificial but is now climbed almost entirely free.

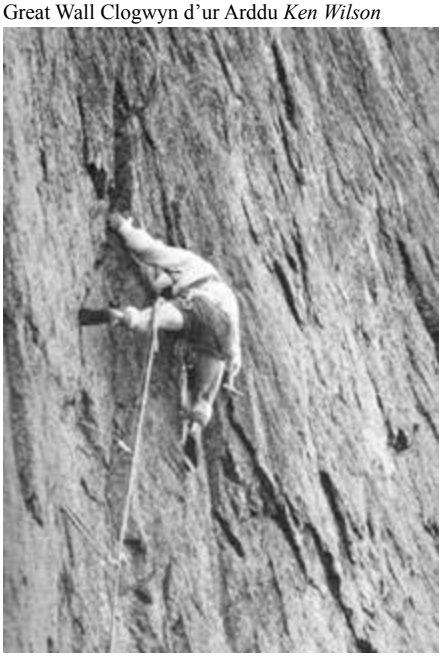
In some respects, the shortage of new rock in the traditional climbing areas is not altogether a bad thing. In search of new rock, climbers are looking further afield and are finding crags hidden away in secluded dales of Yorkshire, Derbyshire and the South of England. They are also turning their attention to previously neglected crags and sea cliffs of England and Wales. The competitive nature of the climbers has resulted in extremely rapid development of some of these areas, the sea cliffs of Anglesey being a prime example. These cliffs were probably developed faster than any other climbing area in Britain, even though the cliffs are very steep, most of the routes difficult and the rock in places alarmingly loose. There are now many fine routes here including the Mousetrap and Phaedra.

Outside England and Wales, the greater challenges of the Alps are beckoning the British climber more strongly than ever before. As he becomes more Alpine oriented, the crags in Britain are perhaps being considered more of a training for the challenges for bigger mountains. In the Alps it is still possible to climb first British ascents, and in recent years many climbers from this country have made their mark by climbing some of the hardest routes there. For example, last summer five British parties ascended the North Wall of the Eiger, the Eckpfeiler Buttress on Mt. Blanc saw its 1st British ascent and the 2nd ascent, with a new direct start of the Pilastro Rosso on the Brouillard Face of Mt. Blanc was achieved. Solo climbing spread to the Alps with a hard nucleus of British

Scottish sea stack climbing, Handa *Chris Bonnington*



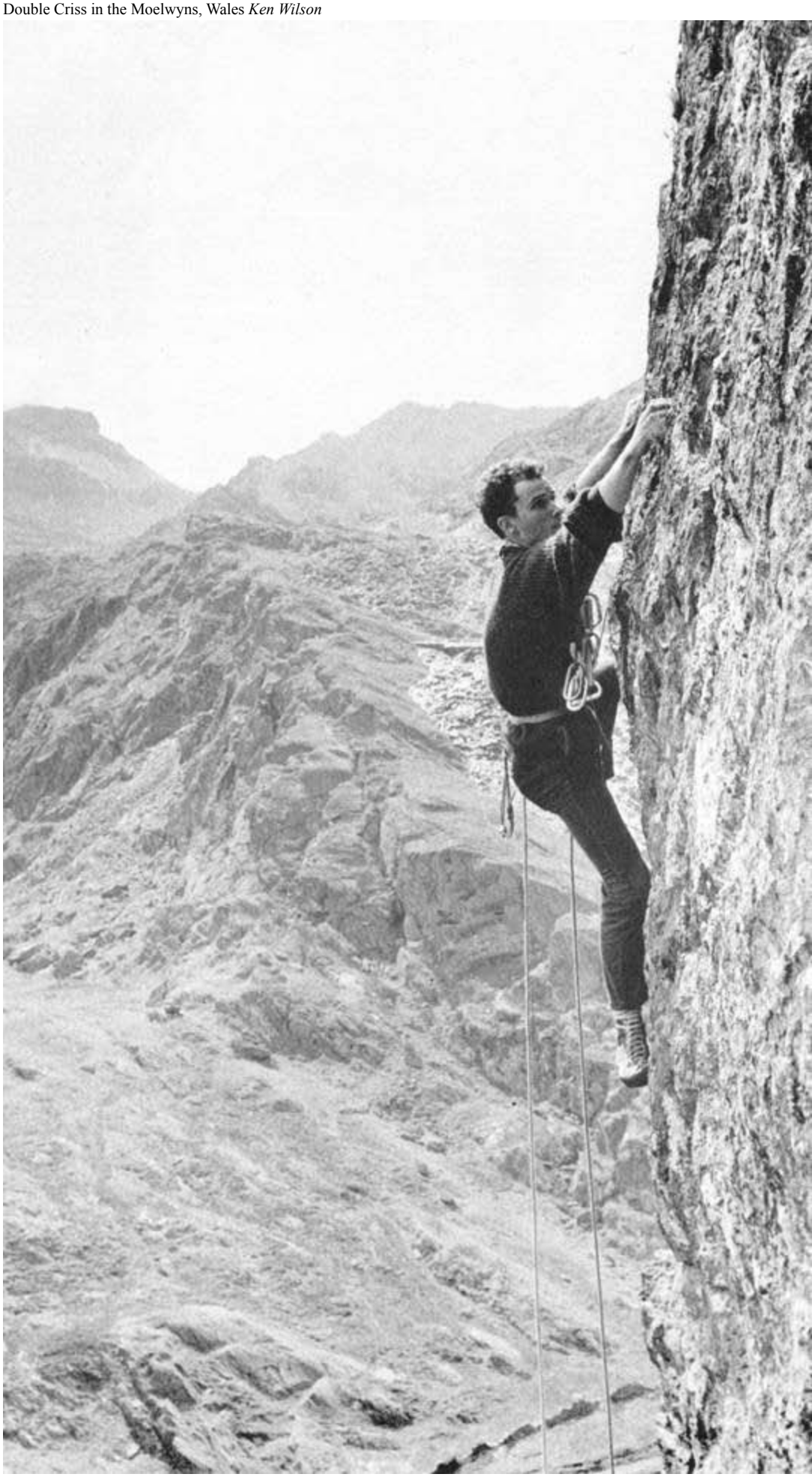
Great Wall Clogwyn d'ur Arddu *Ken Wilson*



First ascent of Aries on Clogwyn d'ur Arddu

Joe Brown and Pete Crew on - the first ascent of Mousetrap on the sea cliffs of Anglesey

Double Criss in the Moelwyns, Wales *Ken Wilson*



climbers ascending such routes as the Walker Spur on the Grandes Jorasses, the Bonatti Pillar on the Dru and the N.E. Face of the Piz Badile, and even a solo 1st ascent—that of the Central Pillar of Brouillard on Mt. Blanc!

The search for new challenges has spread further than Europe, with an increasing number of British climbers participating in expeditions, from the Himalayas (with climbs such as the S. Face of Annapurna) to the rock peaks of Arctic Norway in the north and those of Patagonia in the south.

But what of the future? The Alpine and expeditionary challenges will still be there for years to come, but nearer home there will probably be a migration of climbers to north of the border. In Scotland there still remain a wealth of relatively new climbing areas, from mountain crags with summer rock climbing and winter snow and ice to the sea cliffs and sea stacks which abound these northern shores.

John Moss

Lone Wanderer at Pangnirtung

From my youth upwards
My spirit walk'd not with the souls of men,
Nor look'd upon the earth with human eyes;
The thirst of their ambition was not mine,
The aim of their existence was not mine;
My joys, my griefs, my passions, and my powers,
Made me a stranger; . . . but instead,
My joy was in the Wilderness, to breathe
The difficult air of the iced mountain's top,
Where the birds dare not build, nor insect's wing
Flit o'er the herbless granite; or to plunge
Into the torrent, and to roll along
On the swift whirl of the new breaking wave
Of river-stream, or ocean, in their flow.
In these my early strength exulted; or
To follow through the night the moving moon,
The stars and their development; or catch
The dazzling lightnings till my eyes grew dim;
Or to look list'ning, on the scatter'd leaves,
While Autumn winds were at their evening song.
These were my pastimes, and to be alone .. .
Byron

As Nordair's Skyvan bumped down on the short dirt strip at Pangnirtung it was the beginning of a dream come true. It had been nearly two years since I first heard of Pangnirtung in Brian Bird's description.

" . . . two troughs, Pangnirtung and Kingnait passes, cut right across the mountain backbone of the (Cumberland) peninsula. Both have nearly vertical, spurless sides that rise precipitously more than 1,000 meters from the valley floor. Pyramidical peaks with cirques carved out of their bases rise above the troughs; hanging valleys are common . . . Many of the troughs are partly submerged, forming fiords. From Cumberland Peninsula to Pond Inlet, the very deeply dissected margin of the Baffin highland . . . has been modified by glacial erosion to produce one of the most spectacular highland coasts in the world, the more so as it is still partly glacierized."1

Having recently moved east, leaving overpopulated Yosemite Valley to the Californians, Pangnirtung became irresistible. To most, Canada's eastern arctic is still a total unknown. At best they have the image of solid ice and a few Eskimos. It was next to impossible for me to obtain the information necessary to plan a trip. My only source of information was P. D. Baird's account of the Arctic Institute's 1953 expedition.2 This raised more questions than it answered. It was obvious I would have to be prepared to improvise to meet whatever conditions I found. Miraculously, I used everything I took and wished for nothing I didn't have. Transportation was another problem—travel agents who offer to fly anyone to his personal paradise, gave me blank stares when I said I wanted to go to Pangnirtung. After much frustration, I discovered Nordair and got my own reservations. To complicate matters further, my friends and relatives were sure I was insane. "No one" they would say "can be so crazy as to go off into the Arctic alone." I would just smile my crazy smile and continue my preparations.

Two pleasant surprises awaited me on my arrival at Pangnirtung. First, the sky was clear and the sun bright and warm. I had come prepared for a month of fog, drizzle and 40 degree temperatures. Second, far from the outpost I had imagined, Pangnirtung turned out to be quite a substantial community. In fact it even boasted a small hotel (The Peyton-Cressman Lodge). So instead of setting off up along the fiord the moment I got off the plane, I gladly accepted Ross Peyton's warm invitation to a good hearty dinner. However, I turned down the offer of a boat ride to the head of the fiord because I wanted to be sure I could walk out of any place I got into and because I felt the walk along the fiord was necessary in order to fully appreciate the wilderness beyond. I left after dinner and walked until midnight.

In a few days I reached the head of the fiord, 25 miles from the settlement. By this time the fog and drizzle had returned. Since I now felt entitled to some sort of rest, I spent one especially drizzly day in the tent, eating, day-dreaming and sleeping. My two biggest apprehensions had been that I wouldn't be able to carry the 90 pounds of supplies I felt were necessary, and that I would eventually crack under the strain of loneliness. I had now proven to myself that I could carry the pack, though I certainly set no records with it. The most difficult obstacles were the rivers, a couple of which I spent several hours ferrying my supplies across. The question of loneliness was answered in time. There were to be some strange occurrences in this respect.

The next day the fog lifted to expose the magnificent cliffs and peaks on either side of the valley. I was ready for a climb without my pack, and was in a good position to go for a view of the north face of Turnweather Peak, a cliff of classic proportions rising precipitously to 6000' from a glacier at 2500'. Being improperly equipped for crevasse rescue I chose a route along a jumble of moraines, but it was difficult not to yield to the seemingly easier route up the glacier. In the afternoon I left the moraines, and

climbed up a slope north of Turnweather in the hopes of reaching the 5500' peak between Tête des Cirques and Turnweather. However, a dense puff of fog was impaled on the summit and at about 4000' I chose not to push on.

I don't pretend to be a mountain climber in the modern sense, only a wanderer who occasionally finds himself on top of a mountain. One advantage of climbing alone is that it is possible to be both chicken and lazy without anyone ever knowing. This is precisely what I was most of the time. The excuse I provided for myself was that this was my margin of safety.

The next day I set off up the valley. After a few days of hiking in mixed weather, and several more river crossings, I reached the south end of Summit Lake in Pangnirtung Pass. The following day was one of those rare cloudless days. Rather than pushing farther into the pass, I chose to go for a climb. The map suggested that the 4500' summit of Mt. Battle would offer a superb vantage point and I decided to make a try for it. Progress along Summit Lake was hampered by the worst jumble of glacial moraines imaginable. The last I came to I ascended too high, and ended up having to cross the tongue of a small glacier, a task I approached very gingerly. After climbing Battle's steep south slope, I found myself in wet snow, knee deep. Since the views improved with every step, I kept on plodding from one false summit to the next. Late in the afternoon I came to the edge of a cliff which disappeared into the pass. From here I could see the real summit ahead only a short distance. Yet the route around to it was so long I had to give up all hope of reaching it at this late hour.

The views compensated for the disappointment in failure. To the west and north Turner and Highway Glaciers reached back into 2000 square miles of glistening ice. Behind me, Bundle Glacier disappeared into nameless mountains and valleys and Pangnirtung Valley disappeared among the peaks and cliffs I had passed on my journey to Summit Lake. On all sides was mountain and ice scenery such as I never dreamed existed in eastern North America. It was a cold race with time back through the snow, down across the glacier and moraines to camp, before it got too dark to see.

The next day was a rest, wash and eat day. My campsite was poorly chosen, being exposed to every breath of air across Summit Lake. Since I planned to move back down the valley the next morning, I decided to bear with it for one more night.

In the evening it grew quite raw and overcast. The next morning it was raining too hard to think about breaking camp. By noon gale force winds were battering my camp and rapidly burying it under fresh snow. The 15 minutes I spent outside digging out the north side of the tent, and anchoring the lines with the largest boulders I could lift, was long enough. I hastily crawled back into my sleeping bag, where I began to wonder how much of this I and my tent could take. It was fairly obvious that if the tent went it would be all over. A hot supper that night was out of the question, as was anything resembling sleep. I spent that night and most of the next day listening to the wind howl and the tent flap, creak and groan as each gust of wind nearly flattened it. I was sure the pandemonium outside was driving me mad for I began hearing in it sounds of things I knew were not there. How long could a storm like this keep up?—a day?—a week? Or would I never get out of here? I didn't know, and this didn't help my mental state either.

Late in the afternoon of the second day, the wind subsided as quickly as it had come up. As I watched the clouds gradually lift to expose peaks and cliffs, every crack delicately inlaid with fresh snow, I suddenly felt a sense of victory I had always thought to be reserved only for the successful conclusion of the most difficult climbs. I thought of Shelleys' lines:

To suffer woes which Hope thinks infinite;
To forgive wrongs darker than death or night;
To defy Power, which seems omnipotent;

Neither to change, nor falter, nor repent;
This, ... is to be
Good, great and joyous, beautiful and free;
This is alone Life, Joy, Empire, and Victory.

The next morning was sunny, clear and cold. It took longer than usual to pack my gear, and progress was slow as I maneuvered my heavy load over the snow covered moraines. That evening I found a superb campsite nestled in a gully at the foot of Thor Peak.

The following day was nearly as good as the last. Having passed under Thor twice and seen it from several angles and in many moods, I was now anxious to climb it. Thor rests with his foot a few '100' above sea level, and rises vertically to over 5000'. The west face dominates Pangnirtung Valley as Half Dome dominates Yosemite Valley. For me the only possible route was up the east slope. I climbed out of the valley on a steep moraine crowded between a cliff and a crevassed glacier. This led to a large, flat, ice-free area behind. About 1000' up the back slope of Thor Peak a short cliff persisted on all sides. I worked my way up to what looked like its weakest point, but on closer examination I found it covered with ice and snow from the recent storm. Readily yielding to Thor Peak as I already had to lesser ones, I sat down to enjoy the view into the pass and off across Fork Beard Glacier. Then I retraced my route back to the valley, making a detour to force a Class 3 route to the top of an insignificant knob adjacent to Thor Peak. Even this provided unforgettable views into the valley.

There followed a day of bad weather which I spent in the sleeping bag eating, resting, dreaming, and listening. I found, as I had during the storm at Summit Lake, that if I listened carefully I could hear voices and music in the stream near my tent. The words even became so intelligible at times that I had to look out of my tent to see who was there. Later, after I grew tired of continually checking to find no one outside, I assured myself I was very much alone and secretly hoped no one would come and surprise me. Down at the foot of my gully the rush of the wind and the Weasel River combined to sound like the London Underground, a sound as realistic as it was unreasonable. Experiences such as these tested my mental stamina as much as the mountainous arctic environment tested my physical stamina. I hear much of the value of companionship in the wilderness and I would never deny this. However, I have now discovered the value of solitude in the wilderness. Over an extended period solitude can become as valuable as companionship for anyone who is mentally equal to it, though in surprisingly different ways.

Pangnirtung Fiord from Overlord *David MacAdam*

In the evening, as the storm cleared, I suddenly noticed Tirokwa Peak looming up before me. Though I had already walked around it, I had always been too close to its base to really notice its summit. It is situated very strategically at the bottom of the valley and the head of the fiord. It is the only mountain the adjacent glacier passed around rather than cut through. As the storm clouds cleared, its 6000' foot summit looked inhospitable and inviting all at the same time. Could I climb it? Certainly not from the north. From the south perhaps? I couldn't tell without moving back out to the fiord.

A few days later I left the valley in good weather on a route which took me high up the heavily vegetated south slope of Tirokwa, well above a glacier flowing down from the east. As the morning wore on, clouds built up rapidly over the peaks and ice fields. By noon a steady south wind blew raw, damp sea air and fog from the fiord up the slope, where it crystallized as fine snow. I continued climbing even though I had no hope of reaching the summit. Finally when the clouds and fog grew so thick that visibility was only a few yards, I had no choice but to return.

Two days later the weather looked more promising, so I set off out of the valley to try to climb Overlord Peak, which dominates the east side of the fiord at its head. After passing under its towering west face, I headed up a steep moraine and gully. This route proved more unpleasant than difficult, especially since the weather was deteriorating rapidly. When the moraine came to an end, it was a short but steep climb around and up onto the ancient south slope, which curved gracefully up to the summit. By this time the sky was completely overcast and light snow was blowing about. When I reached the 5000' summit late in the afternoon, however, visibility was still quite good and the neighboring peaks were all clear. Suddenly all my past climbing failures became insignificant. At most they made standing here alone on top of Overlord a more exhilarating experience.

I had a good view of the lower valley and the south slope of Tirokwa. I could see that there was only one route to that summit for me, and even that was doubtful. In the opposite direction the fiord, grey under the overcast sky, extended as far as the settlement

Asgard and the Turner Glacier from Battle *David MacAdam*

Turnweather Peak, north face *David MacAdam*

before disappearing behind black cliffs. Across the fiord nameless peaks rose from nameless cliffs. Beyond, the mountains gave way to rolling hills which disappeared into Cumberland Sound in a thin band of golden sunlight. To the east was all ice, snow and rugged peaks, barely visible in the grey light and snow squalls.

It was late when I began my descent. It was a long way back to my camp, and the moraine route was steep and treacherous. Every step loosened half a ton of debris and I had to be careful not to join it. It was nearly dark when I reached the fiord, but fortunately the sky began to clear far in the north west, and the long dusk provided the light necessary to make my way back to camp. After a cold bath in a nearby stream and a hot supper in the dark, I crawled into my sleeping bag for the night. The next day was cold, windy and clear. It was the good weather I had been hoping for several days. I was too tired for another big climb so I spent the entire day around camp enjoying the sunshine, the solitude and the local berries.

Early the next morning it appeared that another fine day was in store for me. With great effort I stirred myself earlier than usual and set out back up the valley for a second try at Tirokwa Peak. It took most of the morning to work my way up the steep south slope to the point where I had to turn back on my first attempt. Somewhat to my surprise I discovered that the large snow field, up which my proposed route was to go, was in fact an old glacier. During lunch I made the decision to give it a try since it looked free of crevasses. Nonetheless I did a lot of probing with my ice axe so that progress was much slower than might be expected over such an easy route.

Everywhere, except at its far end, the glacier came to an abrupt stop at the base of a 1000' cliff. The only possible route to the top of the cliff and on to the summit was up a steep and narrow snow filled gully at the far end of the glacier. Could I get up that? I wasn't sure. But I couldn't tell without a closer look and a try. As I moved higher a couple of hawks began to soar above me, not letting me forget for a moment that I was a foreign intruder in their domain. All about me on the snow were the tracks of wolves and arctic hare. Before I knew it I was part way up the gully. It was steeper than I had thought, yet did not seem impossible. Like the glacier below, it had a hard surface. By taking the time to kick good steps, I was able to work my way up it to the more gentle snow covered slope at its top. This led to the summit, which was split by a small crevasse. Fortunately the weather remained perfect, though on the summit the temperature was 18 degrees and the wind 20 to 30 mph.

The views far surpassed anything I had yet seen. In front of me lay the upper portion of Pangnirtung Valley, disappearing in the pass beyond Summit and Glacier Lakes, with Thor Peak on the right and 7000' Mount Odin on the left. Beyond was Freya Peak, Tyr Peak, Mount Asgard and the rest of Baffin Island's highest peaks. In the opposite direction, the lower valley gradually transformed into the fiord, guarded on the left by Overlord Peak and on the right by equally high but nameless cliffs. The mountains of the Hall Peninsula were clearly visible 100 miles away, beyond Cumberland Sound. To the west the mountains leveled off to rolling hills, completely buried under a huge ice field. To the east was the most rugged country imaginable; a sea of glacier ice penetrated by hundreds of high, steep, ice-covered mountain-islands. Should I try to find names for these nameless mountains? No, I thought, names are so often inappropriate for peaks, and seem somehow to rob them of their wildness. Part of the exhilaration I felt on Tirokwa's summit was due to the knowledge that not one of the peaks to the east had a name.

Several weeks had now passed since I left the last of civilization and humanity behind at Pangnirtung. The events of those weeks blurred my image of that world as much as they sharpened my image of myself and the world in which I was now living. Time, place and the usual concerns of shorter mountain excursions had long been forgotten. Instead were the concerns of day to day wilderness living and exploration, both of myself and of this virgin and unforgiving world of mountains and valleys, rivers and glaciers, wind and snow, fog and drizzle, and even occasional sunshine. Suddenly while standing there alone on Tirokwa's summit I saw myself in true perspective: one tiny, lone, foreign speck swallowed up in the vastness of a strange, silent and beautiful world. I became a part of the mountain I stood upon, my breath

became a part of the wind which rushed by me, and I became so completely one with this world I forgot I was human. To this day this vision haunts me, and colours my view of the world I have returned to.

Suddenly my day dreaming came to an abrupt end when I realized how low the sun was getting and how far I was from my camp. I retraced my footsteps down to the gully, assuming that if there was a crevasse to be fallen into I would have fallen in it on the way up. I resisted the temptation of a glorious glissade down the gully, and retraced my footsteps down that too. In no time I was down off the glacier. By now the sun had moved far into the north west and cast a soft light on the spectacularly sculptured cliffs and peaks south east of Tirokwa.

It was nearly dark when I got back into the valley. Fortunately, the late summer cold cut the flow of the rivers I had to cross, making them no problem even in the dark. It was completely dark when I arrived in camp. I ate supper by the light of the northern lights at midnight. The next morning the stream was frozen and the autumn foliage in the ground cover was etched with frost. I knew summer was drawing to a close and, much as I hated to leave, I knew it was time to return to Pangnirtung. Except for a wind storm which nearly launched my entire camp from the side of the fiord, my return was uneventful. Ross Peyton welcomed me back to his lodge with such luxuries of the civilized world as a steak dinner, a hot shower and a real bed. Following a day in the hills behind Pangnirtung, I flew south on 1 September, determined to return next summer.

David P. MacAdam

1 J.Brian Bird,The Physiography of Arctic Canada. The Johns Hopkins Press,
Baltimore, Maryland (1967). pp. 103-4.

2 P. D. Baird, Baffin Island Expedition, 1953: A Preliminery Field Report. Arctic
Vol. 6, No. 4, Dec. 1953. pp. 227-251.

Mt. Colonel Foster

Mount Colonel Foster is a series of six steps, narrow rock peaks cirqued above a tiny glacier, at the head of a pocket valley off the upper Elk River in Strathcona Provincial Park. It has long been the subject of conversation among mountaineers on Vancouver Island and has, in the last few years, become the object of attack by the more ambitious.

The 1st ascent of any of the peaks came during the Provincial Government Surveys of 1935-36, when two surveyors bent on mountaineering let their wanderlust lead them up the rotten east gully to the summit of the south east peak on an unofficial sortie. The surveyors took no instruments with them, and, in fact, the highest station occupied by the survey party on Colonel Foster was over 900' below the summits. The same route was repeated in 1954 by a small party of the Victoria section of the Alpine Club of Canada.

The 3rd ascent of the mountain was in 1957, when Ferris and

East face of Mt. Colonel Foster
1 South East 2 South West 3 Main 4 North East 5 North West 6 North *Mike Walsh*

Hugh Neave and Karl Ricker fought their way up a very rotten western gully to the south west peak, to be rewarded with an internal view of a heavy overcast. Their article (CAJ. 1958, p. 35) led readers to believe the party had climbed the highest summit of the mountain, but my observations from the south west peak in 1971, and the peak immediately north of it in 1968 and 1971, showed the latter peak to be the highest summit of the mountain. This is borne out by sheets 92F12W and 92F13W of the Provincial Government Topographical Series.

The next ascent was accomplished in 1966 by Ralph Hutchinson, Ron Facer and Mike Hanry. They traversed the south east peak from the east and climbed the south west peak (CAJ 1967, p.55). On the summit they found the 1957 Neave-Ricker cairn and summit note, which thus robbed them of the 1st ascent they had expected. To the north stood the highest (central) summit and no cairn could be seen on it's top. An unsuccessful attempt was made to reach the higher peak before rejoining the remainder of the Island Mountain Rambler party on the south east summit. A reconnaissance and further attempts were mounted on the main summit during the following week, but without success.

July 1968 saw the next success on the mountain. I had bushwhacked up Butterwort Creek from the Elk River Valley to carry out a solo reconnaissance of the mountain from the north. The trip proved so successful that it took me to the summits of the four virgin peaks. (1968 Timberline Tales - the newspaper of the Vancouver Island Mountain Ramblers.) I attempted at that time to continue to the south west peak, but time and weather combined with Class 5 rock to turn me back and down a gully to the west. In 1969 Blair Paterson, Steve Weber and I made the 2nd ascent of the north west peak in a north south traverse.

Now I had heard of Bill Perry and he had heard of me, but we had met only once, rather fleetingly, and we had never climbed together. We both had the idea of a complete traverse of Colonel Foster's six peaks brewing in our separate minds, and with a long weekend fast approaching, we were both trying to find a partner for the climb. On 27 June there was a club day trip to Mount Arrowsmith the last chance for me to find a partner for Colonel Foster. Bill had had the same idea. We met, and on the summit of Arrowsmith made plans for the July 1st weekend. We both managed to get a four-day weekend, a necessity for the proposed traverse, and found ourselves bedding down beside the car at the start of the Elk Valley shortly past midnight on Wednesday.

Thursday dawned through a light drizzle, and forsaking an early start, we waited for drier weather over a lengthy breakfast. Two hours up the elk trails in the valley took us to the junction of the Elk River and Butterwort Creek. After a short lunch stop we commenced our fight up the Butterwort.

And what a battle it was! Very dense and steep traversing through salal and slide alder, and over and under an infinite variety of windfall and snag, put us on a very greasy traverse of steep slab, with the first bounce destined for the creek bed a few 100' below.

Three more hours of bushwacking and slogging took us in an ascending traverse to open snow slopes below the north shoulder of the mountain. Another rest and then the final push to the top of the shoulder to a tent pitched in the setting sun. A late meal and a mind full of anticipation put us to sleep at a late hour. Friday morning came very quickly, and sunrise saw us front-pointing up a snow gully on the north peak. We changed out of crampons and into an iced-up chimney—wasted time; out onto a verglassed wall—more wasted time. A hasty decision and a short retreat had us front-pointing a traverse into the gully between the north and north west peaks.

Up the gully we climbed; from front points, to kicked steps, to mid-thigh slop at the top of the col. We had by-passed the north peak in a time-saving move prompted by frozen fingers in an early morning north west chimney. One peak down but none climbed—not a very auspicious start.

A tense moment and some swearing took us across a rotten moat lip onto unstable snow on the north west peak. Another lead and we were on rock moving quickly enough to warm our bodies

and our spirits. Minor route finding problems and some scrambling sank the north peak below us putting us on the knife-edged summit ridge, along which we performed a high wire act to the summit for a yodel and a fresh rock on the cairn.

A 500' plunge put up in the next col, and at the base of the thrust of the north east peak. A small bulge, then some Class 4 and another bulge, put up on easier ground and led us up the 700' to the summit. During lunch on the north east peak we spotted two climbers (Ron Facer and John Goldrup) on the east face of the north peak and several tents (of what turned out to be a BCMC trip) 4000' below us, by the lake at the base of the east wall.

A scramble down into the next col and some easy Class 3-4 put us on the main summit in the late afternoon. We relaxed there for a while under cloudless skies and watched the climbers on the north peak. Having added to the cairn, we moved on down the ridge to find a bivouac site. About 300' below the summit we found a flat-topped rock thrust out of the west side of the ridge. It was just large enough to accommodate my 1 1/2-man tent, with rocks tied to the guys and dangling in the void, acting as pegs. Saturday morning's sun found us scurrying to get packed and on our way. The ridge led down for 100' yards, then dropped in a tricky bit of Class 5 traversing around the base of a gendarme, then some Class 4 into the col. A slab with a good bong crack led up onto a knife-edge where the going became easier. A rotten little gully took us down to a rock island in the snow field to the north of the south west peak.

After a hasty lunch on the island, we slopped knee-deep across the snowfield toward the moat as clouds rolled in from the west. A nasty pitch, protected by two tied-off pitons, took us across the moat and onto a rotten rib. A 135' lead on a 130' rope topped the rib and put us on some relaxing Class 4, which lasted the remaining two leads to the summit ridge. A short scramble then had us on the cloud-enshrouded south west summit at 7 p.m.

After a hurried rest we climbed down into the last col and balanced across its fantastic blocks to the south east peak's little problems. Some grovelling and cursing helped us top the layback and chimney, and put us on the summit of the last peak at 9 p.m. We threw a rock at the cairn on our way to the gully. A scramble over loose blocks and down a rotten face led us to fresh footprints in the snow and a 1000' glissade down the east gully to the east shoulder. Two thousand feet of glissade — scramble — glissade took us to the glacier and a dash across it to the lake. The traverse around the lake's edge took an eternity in the race to beat the end of the twilight to the end of the lake. Darkness won out, but only by a few minutes and several stumbles over logs.

A hot tea was forced on us by the occupants of the tents we had seen the previous day from the peaks. They had climbed the south east peak, but their attempt on the north peak had failed just short of the top. An 11 a.m. start on Sunday took us down the Elk Valley in a leisurely 4 hours to a cold bath in the river.

Some fantastic new routes remain to be done on Colonel Foster. The entire mile-long 3500' high east face is virgin. There has been only one visitor to the summit of the north peak and two on the north east and main summits of this, the fourth highest and the most difficult mountain on Vancouver Island. Of course, there is still the full traverse of the six peaks waiting to be done—maybe next time we'll get them all.

Mike Walsh

Foster Flashes

1 July. Sundown. Camped on the shoulder beneath the north peak. Snow flurries and numb fingers. One moment sombre views of Elkhorn and Rambler—the next, we're shrouded in white mist. Determination and apprehension: Gotta make this baby go. Been raining all month—we're geared for bad weather, so let's give 'er all we got. Still, I'm sure hoping the mountain won't all be like that horrendous traverse above Butterwort Creek.

2 July. 3 a.m. Awake to still clear night. Bright, starstrewn sky forecasting at least one day of good weather. Back to sleep. Crisp clear dawn. Cramponning the gully, then at last onto the north west summit ridge—the jagged backbone of the mountain we'd follow for 2 whole days. "What'll we call the traverse now?" "How about the full traverse of the five major peaks of Col. Foster?" Trouble the north peak (lowest by 200') looks highest from the usual campsite to the east.

All day unroped but 2 pitches on the north east peak. Keep mainly to the right of the ridge when it's too steep to follow. If the going gets too thin, try the left. Descents and bypasses usually by loose-looking gullies which drop steeply a few 100' and disappear into sheer nothing—these the only parts I found unpleasant. Otherwise good climbing, sound rock and perfect weather. Ropes would have created more problems than they'd have solved, as the gullies were devoid of cracks and natural anchors. But then I might not have had falling fantasies while going to sleep that night. My most airily aesthetic high camp ever. Atop the ridge and ringed by the white peaks. Whole ranges visible to the west even in starlight. Then, to my surprise, a sleep full of pleasant dreams and peace and quiet breathing.

3 July. Roped up for the direct descent to the gendarme and around it on an unlikely-looking traverse to the right (west). Then topped the ridge and down the other (east) side of it to a snowfield. It took all morning. Could be we (I) overprotected in places, but it was early morning on steep pitches never climbed before. And, man, the exposure! Now the push to the south west peak. We'd expected the greatest difficulties here. Getting started was a bit of a puzzle, but then pleasant climbing—some delicate moves, but nowhere near the sustained high-angle stuff we'd anticipated. Snow, 3 rock leads, a mixed snow-rock pitch and the scramble to the top. As usual, we alternated leads. We'd psyched ourselves up for this in a really positive way. I felt a kind of electricity flow along the rope as we shared the pure animal joy of climbing. The next bit to the south east peak was anticlimactic. We got off route once and missed the full appreciation of the final knife-edge traverse. In the fog we could only imagine the 3000' drop on either side. A tight chimney forced us to haul our 40 pound packs up a short pitch to the final summit—the only time this was necessary during the entire traverse. Then we "traced the little footsteps in the snow" all the way to Foster Lake and the BCMC

camp. To (yes!) handshakes, tea, and questions from wide-eyed girls. Flat ground, people, a warm and welcome fire. A perfect end to a climb and more reminiscent of the Alps than wild Strathcona.

Bill Perry

Editorial

If there's one thing Canadian climbing suffers from it is lack of imagination. Certainly no lack of ability—a glance at the pages of this and previous journals will show plenty of that. But it will also show how many of our finest routes, peaks and climbing areas have been pioneered by foreigners, this year being no exception. Is it a lack of initiative, of interest, or some sort of ultimate put-down—a lack of faith in our own ability? I think not—rather it is a somewhat myopic vision of what we might do; what I have loosely termed a lack of imagination. Conditioned no doubt by the circumstances of our existence, this limited vision of our role has led to the situation that from the Chief to Pangnirtung Pass, with rare exceptions, others have led the way.

It's obviously a pretty pervasive feeling—the Club's own Expedition's Committee's choice for this year was Huantsan; not a bad peak, but long since climbed, and hardly an inspiring objective for a first class Canadian expedition; more like the kind of thing a reasonably strong small party could manage. It fell to a privately organized westcoast expedition to suggest something more appropriate—Batura Mustagh 1 in the Karakoram, at 25,540' probably one of the highest unclimbed peaks in the world, and mentioned by the Canadian Himalayan Expedition in 1964. (Oh how we seem to have slipped since then!) Part of the committee's reticence can be attributed to caution because of the lack of Canadian high altitude experience, though one wonders why they discounted previous successes on such peaks as Logan, St. Elias, Ancohuma, Huagoruncho, Huascaran and Noshaq. But if they were worried about this, why could they not have chosen another more appropriate objective?

Surely the exploits of such as Culbert, Greenwood, Vockeroth, MacDonald and Leif Patterson, with their proven records, merit at least a lower altitude problem of world class? And surely the likes of Smaill, Sutton, the Burton brothers, Auger, Davidson, Microys and Jean Sylvain, to name just a few, could cut a swath through Patagonia, or the peaks of the Logan Mountains or Baffin if one wanted a worthy Canadian objective.

This editorial should not be interpreted as stemming from some kind of petty chauvinism, or worse, an anti American sentiment—it is rather prompted by a wish to see Canadian mountaineering realize its full potential, something that in my view has not yet taken place. Whatever it is that leads to this situation, I trust we are beginning to see signs of its imminent departure. The steps taken by the ACC to reclaim the responsibility for our guidebooks, and the grants supporting innovative projects are an excellent start. It has been a good year for Canadian climbing, and hopefully the imaginative repatriation of the lead in our mountains is just beginning.

Andrew Gruft

Address all editorial material to Moira Irvine, Secretary, Canadian Alpine Journal, 1565 Haywood Avenue, West Vancouver, B.C., all business enquiries to the Club Manager, Mr. Pat Boswell, Box 1026, Banff, Alberta.

The deadline for submission is 15 January, but it is most helpful to receive material for the next issue as soon as the ascents are made so as to have the 1973 issue out by spring.

Submissions should be typed in normal letter fashion (upper and lower case) double space with 2 inch margin on the left hand side: two copies are required. Photographs should be sharp and clear, minimum 6 by 8 inches, glossy finish; black and white prints should be made from colour slides. The results of converting from slides to black and white are uncertain to say the least, but best results are obtained when a large (4 x 5, 2 x 3) negative is used in making the transfer. When photographs with routes marked on them are sent, a separate unmarked print should be included.

In naming peaks or other geographical features it would help if the following principles were followed (extracted from Principles and Procedures), Canadian Permanent Committee on Geographical Names). First consideration should be given to names with well-established public use. Local usage should be the prime consideration in settled areas, whereas historical significance should be emphasized in unpopulated areas. Duplication of names to the extent that it may cause confusion should be avoided. Personal names should not be used unless it is in the public interest to honour a person, and during the lifetime of the person concerned only in exceptional circumstances. The adoption of both an English and a French form of a name for the same feature should be avoided. Indian or Eskimo names for which there are no accepted forms will be recorded according to a recognized, local orthography. Avoid unnatural or incongruous combinations of words, use of both Christian and surname, inclusion of the apostrophe in the English possessive form, and cumbersome names.

Book Reviews

Expedition Yukon

Edited by Mamie Fisher. Thomas Nelson & Sons (Canada) Ltd. 200 pages. $14.95.

Perhaps this book was owed. Having spent $131,645.53 on a centennial spectacular, this glossy text might be considered a fitting record.

Without asking why then, let's try asking for whom this book was written. The introduction places "those who are interested in the mountains" as the main target. If that means the book was written with climbers in mind, and the constant use of mountain jargon suggests this, then it fails from the outset because of lack of impact. The range dominantly featured had remained virgin through being overlooked by climbers, largely because its is overlooked by summits half again as high. The major climbs were eventful, and sizable chances were taken by several of the parties (in part because some of the members were out of their environment, if not clean over their heads). Bad rock, foul snow and inexperience are a poor basis for a 200 page climbing book, however, and there are so many peaks that no summit or climber develops enough character to become meaningful.

Also there is the matter of 30 pages devoted to preparation, presented largely in a historical context rather than as data for solving similar problems in the future. It might well be argued that this feat of organization was the biggest challenge involved, but even though the section is well written it is just too much ploughing for a climbing book.

Perhaps then it was written for the public, a sort of Sierra Club type book, as the size and glossy colour shots would suggest Unfortunately, although many of the photos are excellent, many have also been pushed too far in enlargement, or have been converted from slides with the often accompanying poor results. Most of the book is text anyhow, and that is definitely not for joe public despite a glossary of terms at the back. With the exception of the flyleaf and Sir John Hunt's foreward, the mire of heroic posturing and superlatives has been tastefully avoided. Furthermore, some of the sections are well written, but mainly it comes off like a string of CAJ articles from the mid-sixties—certainly not public fodder.

Obviously then, Expedition Yukon is designed as a spectacular memento for the 250 odd climbers involved in a most massive and unusual undertaking. To these people I don't have to recommend the book, and to others I cannot—however, if you should get hold of a copy be sure to Xerox Walter Wood's excellent history of the St. Elias Range (Appendix A), and if you enjoyed Rum Doodle you will get a lift out of Richard Thompson's description of an ACC camp.

Dick Culbert

The Papers Of The Palliser Expedition, 1857-1860

Edited with an introduction and notes by Irene Spry. Toronto, The Champlain Society, 1968, cxxxviii, 694, xix p. Frontispiece, maps.

In 1857 the British North American Expedition, under Captain John Palliser, was commissioned to examine the route between the Great Lakes and the Red River settlement, to examine the southern prairies and to find and examine practicable passes through the Rockies south of Athabasca pass.

A popular book about this Expedition was written by Irene Spry, in which she combined material from the various official reports into an interesting narrative. (Review, CAJ 1966). Her further researches have resulted in editing the Papers for the Champlain Society. Although these are a research tool, with distribution limited to members of the Champlain Society, members of the Canadian mountaineering fraternity should be aware of their existence and value.

The book consists of several quite distinctive parts. The first 138 pages comprise a preface and introduction by Mrs. Spry. She has not only studied written material in libraries and archives, but also retraced parts of the route taken by the expedition to try to disentangle conflicting accounts, on one occasion making a helicopter trip to study the two Kananaskis passes. As a result of such thoroughness, her detailed introduction is now the logical starting point for serious students of specialized aspects of the Palliser Expedition.

The 493 page Report follows, and the remainder of the volume consists of eight appendices, including Blakiston's Reports on the exploration of the Kootenaie and Boundary passes, Sullivan's

records and Bourgeau's summary. The volume is fully indexed, with biographical notes on many people mentioned in the report. A note on sources provides an indispensable guide for further study.

A large folding map of the expedition route, originally published in 1863, is contained in a back pocket. The frontispiece shows sketches by Hector including one of Simpson's pass in 1858.

Elizabeth Walker

Mountain Trail Guide For The South West Mainland Area Of British Columbia.

Mountain Access Committee, Federation of Mountain Clubs of British Columbia, P.O. Box 3768, Station D, Vancouver. 64 pages. $1.95.

An excellent guide. Not only are the trails well described but each has directions for both vehicle approach and finding the start of the trail. Most trail descriptions are also accompanied by maps.

Moira Irvine

Hiking Near Vancouver

Dougald MacDonald. Mitchell Press. 20 hikes, 103 pages, about $4.00.

"I'm suspicious of mountaineers." So begins the forward to an unassuming new guide book for "non-mountaineers" which bloomed unexpectedly in bookstores about Vancouver last year.

By volume, the book is almost one-half photographs, most of which are well composed, although the colour plates have suffered in reproduction. Each trip is accompanied by a good map (credited to William Salter), and instructions for vehicle approach. It is difficult to fault the accuracy of information as very little hard data is given in this guide—the writing instead being a personalized account of a trip on each of the trails involved. Very chummy—events, party members, wayside scenery, and a few imbedded travelling instructions. This places heavy responsibility on Dougald's writing ability, which happily is reasonable although some descriptions (like some hikes) come out lacking zest. His trips are very heavily concentrated along the Squamish Highway in fact Hiking near Squamish might have been a fairer title. Within this area he has managed to get most of the more popular aesthetic hikes, and a few less recommendable ones as well.

The basic question surrounding this book is one which might be asked of most 'pleasant reading' guidebooks—namely whether enough information has been included to function as a guide in the field. Perhaps it will suffice—mainly on the strength of its maps dominantly—but I suggest a Mountain Access Trail Guide tucked somewhere in the rucksack in case of route complications. MacDonald's book is recommended as a present for someone you think might enjoy hiking, as a little low-pressure motivation to get started.

Dick Culbert

A Climber's Guide To The Interior Ranges Of British Columbia

William Lowell Putnam. The American Alpine Club, 1971. Fifth edition.

The new edition, replacing that of 1963, is now available.

Andrew Gruft

The Canadian Rockies Trail Guide—A Hiker's Manual

Brian Patton and Bart Robinson. A Summerthought Publication, Box 1420, Banff, Alberta. 207 pages, $3.95. This very useful and timely trail guide was compiled by two American expatriates who are now residents of Banff. As the authors take pains to explain, this is really a guide to the primary and secondary trails of the seven mountain National Parks, namely, Banff, Jasper, Waterton, Yoho, Kootenay, Glacier and Mt. Revelstoke. Mt. Robson Provincial Park has been included in the Jasper Park descriptions.

All, or nearly all, of the primary and secondary parks trails, including the much publicized Great Divide Trail, are covered. The authors have actually trundled a bicycle wheel over some 400 plus miles of primary trail, providing the most accurate trail mileages in existence for the manual owners (apologies to the Parks Branch). Descriptions of the primary trails are well organized and include useful information in the form of mileages to points of interest, total elevation gains, and estimated average hiking times. For those who don't know the difference between a Hudsonian life zone and a Fairholme dolomite reef, this type of information is also freely given. Adequate directions to points of departure are given for each trail, along with references to appropriate 1:50,000 maps.

The introduction contains useful information regarding the history and nature of the parks, Park regulations, necessary hiking equipment, map references, etc. A quite reasonable bibliography and an alphabetical index of trails are included. Numerous references and entreaties in regard to garbage disposal are scattered throughout the text.

There are several fairly obvious inadequacies—the excellent photographs and the regional trail maps are not indexed; Mt. Revelstoke and Glacier trail descriptions are mixed together (and in light of the title, probably as an afterthought), and the authors apparently decided that individual sketch maps were not needed for most of the trails. Some comments on the suitability of appropriate trails for ski touring would have been useful. Knowledgeable and discerning users will probably find inaccuracies and/or omissions in the trail descriptions. These people will, I hope, pass their observations on to the publishers.

For oromaniacs and all park users this should prove to be a very useful and enjoyable book.

Bob Jordan

Boulders And Cliffs.

Climbers' Guide to Lowland Rock in Skagit & Whatcom Counties.

Dallas M. Kloke. 1971. Signpost Publications, 16812 36th Avenue West, Lynnwood, Washington 98036, U.S.A. $2.50.

This compact pocket guide printed on "waterproof" paper will be of interest to Vancouver area rock climbers, as it deals with climbing areas in Washington state immediately south of the Canada-U.S. border.

Andrew Gruft

Climber's Guide To Yosemite Valley

Steve Roper, Sierra Club, San Francisco, 1971. 305 pages. $6.95. The new guide is peg bound to permit addition of further pages, and has good photographs with clear route markings.

Andrew Gruft

World Atlas Of Mountaineering

Edited by Wilfred Noyce and Ian McMorrin, Macmillan. 222 pp. $14.95.

Disappointing and overpriced. There has been a need for a mountaineering atlas for some time but this attempt falls far short of what is required. In spite of some fine photographs, insufficient and inadequate maps (the basis of any real atlas—this one has only 32, covering the whole world?!) the odd errors and totally uneven coverage of different regions (perhaps stemming from a European bias, something that could have been avoided by using authors from the areas described) makes this book little more than a coffee table decoration, and pretty useless for reference or planning.

Andrew Gruft

Basic Rockcraft

Royal Robbins. La Siesta Press, Box 406, Glendale, California. 71 pages.

The greatest experts are seldom the most natural teachers, especially for the instruction of beginners, whose problems they have left well behind. It is therefore somewhat surprising that Robbins' booklet on basic rock climbing is clear, concise, and perfectly digestible by the novice. He does not confuse the reader with long discussions and comparisons of conflicting techniques, nor does he attempt to portray a climbing mystique or otherwise sell the sport. This is an instructional book for the beginner, and in that context is excellently written. The same, unfortunately, cannot be said for his photos, most of which are confusing or have suffered shoddy reproduction—an unwarranted situation when you consider the volume of good photo work which the old guard Yosemite clique have produced across the years. This deficiency is largely made up by the diagrams of Sheridan Anderson, which are simple, instructive, and enjoyable.

For those who are not novices, Royal's philosophy and treatment of ethics will be the main points of interest. To begin with (as admitted in the introduction), the taste is very Yosemitean. It is a world where people climb in short pants and the objective dangers are minimal—no hard hats are in evidence. The slime and crumble and verglas and stratified rocks are very distant, and technique may be practiced in its purest form. I suppose this approach is defensible, for Yosemite technique has become the fundamental chord in American rock-craft, and once learned may be bastardized as required for use on real-life cliffs.

Ethics are value judgments and hence not ultimately amenable to logic or to universally satisfactory solutions. For example, Royal's assertion that "to assault a very great wall in a direct and committing way... with a limited amount of food, water, and equipment, is to climb in good style", is not calculated to win points in mountain rescue circles. Still on the philosophy track, it is gratifying to see the concept of a calculated dynamic belay laid to rest, and the introduction of hardware and its uses at the beginning level. This last point is admittedly more practical in a book than in mass training programs.

This being a Yosemite book, one of the main problems of ethics involves preservation of delicate cracks and difficult pitches against destruction through over use. Royal puts forth and defends the "first ascent principle" of ethics—namely that a climb should not be carried out in worse style or changed from the form of those who conceived it. In practice, that boils down to Royal's position in the bolt controversy, that bolts should neither be placed nor chopped on an existing route. For those unfamiliar with this controversy, other tenable positions are that bolts are poor form, and if they can be by-passed should be removed as a route 'improvement' or 'upgrading'; and that the position that any published route should be adequately protectable for safety, by addition of bolts if necessary. As always there is no wholly satisfactory answer, and although the Wall of Early Morning Light now casts a long shadow on Royal's "don't drill—don't chop" rule, it was doubtless the best one to introduce at the basic level. It is heartening to find an extreme climber who has not taken an extreme position on this question.

And that is perhaps a reflection of Robbins' most valuable asset as an instructor—an ability to view and communicate on all levels.

Dick Culbert

The Challenge Of Rainier

Dee Molenaar, The Mountaineers, Seattle.

Rainer has been much written of for many years, but never as thoroughly as this. The book is a combination history, guide, sketch pad and accident record, written by a man who loves the peak enough to have climbed it 50 times.

Occasionally one feels that a few sketches could have been omitted, and replaced by more detailed maps. But after being delighted, frightened and occasionally bored you realize there are really no questions left unanswered. You can't ask more than that of this kind of book.

Paddy Sherman

The Alpine Lakes

Photos by Ed Cooper and Bob Gunning, text by Brock Evans, with a Forward by David Brower; Mountaineers, Seattle, 1971. $25.00. Another $25.00 (slightly higher in Canada) photo book? The price itself suggests the format: oversized, slightly clumsy in the hands, a bit too heavy to fit in an overnight pack, gracious in its use of white space, pungent but sparing text, earnest in plea, rich in colour; all in all a patrician tome, redolent with a slight tinge of decadence.

The Alpine Lakes has a heroine, the landscape herself, and a villain, man in the guise of miner, forester, ski area developer or tourist—neither you nor me, which is reassuring—about to besmirch the reputation of the unsullied maiden with a seduction called progress. Quite a dramatic story, though it is not fleshed out in the reader's mind until he has both seen the pictures and pursued the text. (More of this later.)

The Alpine Lakes area is situated east of Puget Sound, between Stevens Pass on the north and Snoqualmie Pass on the south, and

extending as far east as Wenatchee, with the peaks on the western edge clearly visible from Seattle as one two page spread makes obvious. Less than an hour away from most of Pugetopolis, the Alpine Lake area is distinctly what Brock Evans calls it, a major wilderness close to a major urban metropolis. The Mountaineers of Seattle, concerned people that they are, have produced the book in order to bring a lavished attention to this delicate alpine area of the Cascades and its stronger adjoining valleys. They argue for a core National Wilderness Area circled by a larger National Recreation area. (Full points to the Americans for their distinguished scale of wilderness protection. In Canada our over reliance on National Parks to provide our recreation, our scenery, our tourism, and our wilderness has led to too many conflicts of interest. Would that our national priorities would include a National Wilderness Act, a Wild Rivers Act, and the authority to establish National Recreation Areas.)

There's no argument against books of this sort. Our North American demands for wilderness are great and growing greater. David Brower in the Foreword to The A/pine Lakes argues for each of us when he states that "a great many of the wild places of Earth I have not visited, and never shall be able to, but I have known some of them intimately, with delight, and thus claim citizenship of all the wild places of all the states and nations of all the continents and seas. From the citizenship comes the responsibility to care."

But If I may explore one reservation, The Alpine Lakes argues the threats persuasively in its text. Point after point is made against the mining concerns who would despoil the land, the loggers who would clear-cut its valleys, the U.S. Forestry Service which would sell its soul for an extra cord of lumber, the railroads which under the masks of forester, developer, miner, would lay waste to the alpine domain. Yet the photographs, excellent, clear, occasionally rising to magnificence, would argue no threat exists. We would have a sign, those of us too easily persuaded by the photos, that the threat is real, that similar valleys have been desecrated, that the roads even now are beginning their irresistible trek to the highlands, that the last hopes are visibly being foreclosed upon.

It's an exceedingly difficult thing to do, to have the guts to present in a book of elegant photographs, set out to please the eye again and anew, the shots of the encroachment, the pillage.

In my initial sketch I suggested that the book is dramatic. Perhaps the term should be "melodramatic." And there's the flaw and weakness. The 83 single page colour photos and the seven two-page spreads and the three maps present a plea on behalf of the delicate heroine, the text defines the maledictions of the aggressor-rapists. Were the photos once or twice to support the argument of the text, the book would be more credible.

The necessity for wilderness is not sentimental. Too many of the consciously beautiful images, of tarns and larger lakes magnificent mountains, clear cool canyons, of ferny forest and shallow streams, soften the mind a smidgen, and don't argue as forcefully as a sullied meadow, desecrated till the glaciers again erase the little marks of man and give the world a blank sheet to start over with.

The cause is right, the concern is genuine. The book is elegant, and not overpriced at $25.00 It stands well with The Wild Cascades from the Sierra Club and The Cascades from Portland Graphic Arts.

Jon White

The Black Cliff

Soper, Crew and Wilson. Kaye & Ward Ltd., London. £2.50. Recently on CBC radio an anthropologist talked about some of the myths and rich folklore of Wales. He spoke of the townspeople in one village who referred to a grassy knoll in the district as the "Hill of the White Knight", and had done so as far as anyone could recall, since antiquity. As you may also have heard, progress is on its way to North Wales in the form of Rio Tinto Mines— they have plans for Snowdonia. The same kind of progress caught up with the grassy knoll recently, as part of a new sub-division. A bulldozer neatly erased it, to reveal in its depths the 1500 year old bones of a horse and man!

As a boy of 14 I recall listening to tales of the past, crouched captive in a tent at the base of wet mist shrouded crags in the Lake District of Scotland, or standing mile after tedious mile, in a United Transport bus heading for some obscure and romantic cliff. Tales which varied in the telling, varied with each teller— tales of climbers and climbs of the equally misty past. Most of them we assumed (but never out loud) to be equally as vague and misty regarding historical fact. There were no climbing magazines you see. It's true there were books—at least one anyway, Whymper's "Scrambles amongst the Alps", and for the longest time I thought it was the only one ever written—but all climbing news travelled the same route as our "Hill of the White Knight" had, by word of mouth.

So the new history of climbing on Clogwyn du'r Arddu, is as revealing for me anyway, as the bulldozer blade had been for the residents of that Welsh Village. For out of its pages, centred on a 600' cliff on the northern slopes of Snowdonia, march the myths of the past, complete with names, places, times and photographs; myths no more .. .

It's true after all—there really was a climber who offered to throw his partner up a crack to try to reach the crucial hold, after he'd failed to do so balanced on tip-toe on the top of his head. In fact it was the 19th of June 1932 on the east buttress of Clogwyn, with Alf Bridges, the steeplejack, offering to do the throwing, and the desperate Hargreaves declining, with the two greats of the prewar British climbing fraternity, Maurice Linnell and Colin Kirkus, looking on. How many of our mountaineering legends of the past are based as surely on fact, and how many are as revealing?

The Black Cliff is more than a simple listing of climbs done, when, how hard and by whom. It is the carefully researched and told story of the development of climbing in Britain, as reflected in the steep walls of one of the great shrines of climbing in the British Isles, known affectionately, albeit with some mixture of awe, to those who have made the pilgrimage, simply as Cloggy.

However the book does more than just bring back the ghosts of their youth to expatriate British types, who may catch glimpses of their real or imagined or inflated dreams of yore in its pages. Its three authors sketch the history of Cloggy and its climbers in a way which bring together their joy, pathos, and determination, in a style

capable of holding the reader from start to finish. They have the respective actors tumble out onto the stage at the appropriate time, starting with the Rev. Williams from Lanberis in 1798, through the Keswick brothers, Longland, Smythe, Edwards, Brown, Whillans to the present day tigers.

Throughout the book, arguments principle and ideals emerge, the continued debate over what is good practice and what is trite. An endless debate washing to and fro, it shows the breadth and depth of the culture which is British Climbing—and incidentally a debate which is only now beginning to appear amongst our own rapidly maturing climbing fraternity in Canada.

Follow for a moment John Streetly up the 1st ascent of "Bloody Slab" in 1952, after the 200' free lead "he reached a good grass ledge after the thinnest slab climbing yet done on Cloggy, in a situation over which he so nearly lost control. Nobody would follow, and he had reached the end of the rope. He untied and soloed up the gully above." Or Joe Brown, after hours of climbing deciding that the last 50' of the Great Wall was possible but only with more pitons, and as his personal rule at that time was only two pegs per pitch "he decided to retreat leaving the abseil peg marking his highest point. Over the year this peg on the wall became a constant reminder of Brown's superiority over the rest of the field"!

The book reflects the tough competitiveness of British climbing, harkens to this luckless soul getting the critical once over: "Barry Webb was a young climber of the Sheffield group and was one of the more talented climbers in Wales at this time, but for his chronic laziness he would have done much more..." Again Brown, on another 1st ascent, with life long friend and partner Don Whillans: "He was in extremis at the top of the shallow chimney, wiggled his fingers under a grass tuft to find the crucial finishing hold, and then carefully replaced the tuft to make sure the next ascent would not be too easy"— what kind of a friend is that for a partner?

The cliff still holds the imagination of the British cragsman, and sometimes the old saying that one only practiced on the home cliffs in order to sharp up for the great day when one would be called to the Alps seems to have reversed itself. On one particular occasion two lovers of North Wales—Soper and Dave Gregory—were sitting in the rain in the shepherds hut at Montenvers above the Chamonix saying "Cloggy will be dry man." Three days later they were roping up at the foot of their beloved Cloggy.

The more than 100 photographs you will like—none of those posed studied, lined-up shots with azure skies and slanting Marlboro Country sunlight. Page after grained page of dripping wet slabs, fog curling around the buttresses, just as one remembers it, and doubtless as it is at this very moment.

One thing I'd almost forgotten. Perhaps for those still seeking the Ultimo at Squamish, the great attraction of girdle traverses in Britain would be of interest. Every piece of rock had one no matter how modest, and Cloggy is no exception. Can you see a couple around the Chief? On a crag in Northumberland we had three. The lower girdle the most difficult, was 1/4 mile long, and varied in height from one to six feet. A good party with double ropes, bivouac equipment and lots of imagination could do it in a 3 day weekend. Mark you if any member of the team stepped on the heather, or leaned down to retrieve dropped objects, they were immediately disqualified, and the attempt was back to square one! A girdle traverse of the Chief wouldn't offer such easy exits. Read the book, it's written with a passion and a love for an odd shaped cliff in North Wales and the men and women attracted to it. I think you'll understand, and I hope appreciate a little better, some of the seemingly odd foibles of the British climbing scene in the process.

The postscript tells an oft lived tale, for me anyway, of the struggle of a nameless climber at the end of the day.

Muscles quivering, palms sweating, fear all about him, the second is giving advice—from below. "Ten feet and it's cracked." "Yes", he thought, "just ten feet and I'll pack up this bloody game." In a frenzy of finger jams and sliding feet, he fought his way to the friendly upper reaches of White Slab. "Quite hard, that groove, in the damp". To his second, now struggling on a tight rope, he bawled, "It's a piece of duff—get thrutching!"

Les MacDonald

Annapurna,South Face

Chris Bonington. Cassell. 65/-

As Maurice Herzog forecast 20 long years ago, there would be other Annapurnas in the lives of men. But he could hardly have imagined one like the South Face of Annapurna itself. It wasn't just impossible then; it was unthinkable. As the extraordinary photographs in this book show, compared with Bonington's mountain Herzog's, which fascinated the world, was but a walk.

The walk at times evoked a poetry of emotion; he revered his mountain "with a monk's veneration of the divine." Unfortunately Bonington's infinitely greater feat inspired the feeling he himself writes, of "Let's get up the bastard and go home." As a result, at times Mr. Bonington's book reads rather like a railway time-time, with A and B shunting into camp C as X and Y go to camp Z. There are some fascinating people there, including a devout nonsmoking Mormon sharing a tent with a man carrying 7000 Gauloises, but you never feel you know them. The most vivid chapter is Dougal Haston's on the summit.

Despite that, it is an important book. It opens the age of super-Eigerwands in the Himalayas, which will flourish until some mathematically-predictable catastrophe gives us pause and starts us re-thinking. And it does hint at why Haston and Don Whillans, one of the strongest teams in history, should do so well on Everest, yet be part of a group that shattered in anger.

Paddy Sherman

The Alps And Alpinism

Edited by Karl Lukan. Thames & Hudson, London, 1968. 200 pages, 283 illus., about $18.00.

This is an imaginative, broad and highly illustrated history of human activity in the European Alps. Lukan sets the scene by describing some evidence of early human habitation of the area, and the evolution of attitudes to this mountain region. As the book was inspired by an earlier work, Steinitzer's "Der Alpinismus in Bildern" (A Picture-Book of Mountaineering) it is not surprising to find a third of the book devoted to mountaineering history.

In the introduction Christian Bonington describes the Alps as "the world's perfect mountain playground" and Alpinism as "a form of physical LSD, of heightened sensation that at its climax reaches euphoria." Accordingly, he illustrates his philosophy with a graphic description of a climb up the Right Hand Pillar of Brouillard, on the south side of Mont Blanc.

Lukan, in tracing the development of climbing in the Alps since the 18th century, considers a wide variety of aspects including changing equipment and techniques, climbing personalities ancl peaks of particular historic interest, like the Matterhorn. The illustrations range from fine contemporary photographs of extreme climbing to historical views, sketches and cartoons.

Bonington notes that "on a fine day over a hundred climbers and their guides jostle up the Matterhorn—300 in the day is the record—while even on the steepest faces, in good weather there are often queues." It is unfortunate that Lukan pays no attention to the increasing problem of overcrowding, but merely concludes that, "the passage of time has changed so much: the climbers relationship to his mountain, climbing techniques, equipment, the lot!"

In a very brief section of skiing Erwin Mehl provides a chronology of the development of the sport, its equipment and techniques. There is only minimal consideration of ski mountaineering and touring and little comment on the present. While it is observed that "it is quite impossible to envisage any limit to the growth of his new phenomenon" again there is no expression of concern about the future ability to cope with skiers demands.

An even briefer, but most welcome, chapter by Hans Kremslehner is devoted to "sport among the rapids." This gives an interesting insight into the relatively recent (post 1900) and little publicised sport of white water boating. While many of the streams such as the Salzach, Var, Gail and Enns have been 'conquered", and hydro-electric installations have spoiled some reaches, it is concluded that "there are still sufficient unspoiled mountain streams for exciting adventures on foaming waters." This section might provide some stimulus for those contemplating such activity on our neglected Rocky Mountain Rivers.

In a disappointing section on building in the Alps, odd comments are offered regarding road construction, railways, the provision of tourist accommodation and climbing huts in the mountains. However, one comment worthy of note relates that between 1948 and 1958 the Austrian Alpine C'ub spent £500.000 on its huts alone, and maintained 25,000 miles of trails. One may wonder if, and when, the Alpine Club of Canada will be in such a position.

Fritz Schmitt has written an interesting chapter on artists ard the Alps. In a rather catalogue fashion the main mountain painters, their styles and works, from the 15th century to the present are presented. The selection of illustrations at this point is especially helpful in understanding the range and development of art works with an alpine theme.

A final section by Karl Kolar deals with mountain photography and films. The difficulties of early photography, beginning with the Daguerrotype in 1837, are emphasised by reference to a few of the early expeditions one of which, in 1863, required 12 porters to carry the equipment into G'ockner group. The survey is brought up to date with a selection of the Austrian Alpine Club's award-winning photographs for the years 1964-6.

With a book this broad in its coverage one might have hoped for sections on the literature of the Alps, and more detail concerning the occupied landscape and economy of the alpine periphery. It is also unfortunate that, given the time perspective of the book, little attempt was made to make any future projections, or to discuss foreseeable problems in the recreational development of the area.

The book is attractively produced with the text on quality grey paper, and the colour illustrations removable for mounting, but some of the illustrations are not mentioned in the text and the numbering system is confusing at times.

Despite these limitations and the somewhat greater cost of the book in Canada compared with Europe, I feel justified in concluding with the dust jacket comment: "the alpine enthusiast will find his memories confirmed in these pages, and for a stranger to the Alps there could be no better introduction." One can only hope that someday there will be a similar tribute to the Canadian mountains and the mountaineering they have fostered.

John Marsh

Tuareg Tassili Sahara.

Mario Fantin, Bologna, Italy: Tamari Editori, 1971. 193 pp. 166 pictures in color, 118 sketches and maps. Lire 6,000.

The Tassili, or Tassili n'Ajjer, as it is locally called, is the mountain world of the Saharan Touareg tribe, which lives in southern Algeria. This mountain region is formed of brown and red rock spires rising above the bleak Saharan plateau, its highest point being almost 7000'. The closest equivalent to this strange region in North America would be found in the mountainous areas of the southern U.S.A.

The purpose of the books is to describe, for both the layman and the rock climber, the mountain world of the Tassili, by means of word, picture and map. The book is written in Italian but has a French translation of the photo captions. It contains three descriptive chapters on the Sahara desert, its mountains and natural life; one long chapter on the Arabic tribe of the Touaregs, with sections on rock paintings by their ancient predecessors and a glossary of local terms, for tourists and climbers. The areas is served by Algerian airlines which fly to Tamanrasset periodically. The book has 166 very fine plates in colour and more than a hundred sketches, maps and drawings, which are particularly useful in helping to identify these Saharan peaks.

Mario Fantin has published some fifteen books on mountains and mountaineering to date, all of which are of high quality. In his latest books he has begun to include at least English captions for the pictures. It would be most desirable if all his books were to continue this practice and if possible become wholly bilingual.

Evelio Echevarría

Environments of Change

Environments are dynamic, a phenomenon that partly results from the organisms that inhabit them. Present societal concern for "the environment" derives from a recognition that man has done much to stimulate this dynamism or change. Man-induced change is most obvious in the urban milieu where environmental stresses in the form of noise, thick air, rotten water and too many close "friends" are constantly impinging on the inhabitants. To avoid such stresses, man has turned to wild or natural areas such as can be found in Provincial or Regional parks, and various other recreation areas. Here he has found alternative physical environments, and presumably more satisfying behavioural environments as a result. However, even these alternatives are changing. Increasing numbers of people are finding these alternatives, and the type of activities they present, attractive. This in turn has led to attempts to manage both the areas and the people that use them.

Before proceeding, it is important to recognize that we are speaking of two aspects of environment. On the one hand there is the physical environment which embraces all tangible, animate and inanimate phenomena in a given space at a given time. Then there is the behavioural environment which is a function of both the physical phenomena and the behavioural characteristics—the preferences, values, beliefs, attitudes and idiosyncrasies—of the organism or protagonist, in this case man.

This essay focuses on a place specific environment, the Canadian Rocky Mountains, and a special type of protagonist, the mountaineer. In this context both the physical and behavioural environments have changed markedly since 1906 when the Alpine Club of Canada came into being. Because individuals persist in body for 70-plus years, and because many of the personal features that make up their behavioural environments are relatively static as compared with those of a society or group, an organization like the Alpine Club of Canada has difficulty "keeping up with the times".

Mountaineers of various sorts are a group with a long standing interest in the Canadian Rockies. Although the mountains have been the most important element of the physical environment for this group, many other elements such as rivers, lakes, glaciers, forests, flowers and wildlife were added attractions.

Many aspects of this physical environment have undergone change. Some changes have been natural, others have been perpetuated intentionally or unintentionally by man. Intentional change, it should be pointed out, often masquerades under the alias of "management". Perhaps the present attempt to devise an acceptable master plan for Banff National Park is an example of this. Examples of unintentional change would be forest fires ignited through carelessness. It is important to recognize that well-meaning management may also result in unintentional change of a negative sort. Fortunately examples of the latter are few in the Canadian Rockies, but elsewhere the river channel management projects carried out by the U.S. Army Corps of Engineers provides pointed examples.

The actors have changed as well, so we must also consider change in the behavioural environment of mountaineers. Part of the behavioural change logically results from a changing physical environment. For example, the introduction of new and useable roads has given a new configuration to mountaineering possibilities and probabilities. At the same time, the preferences and attitudes, and thus the behavioural environment, of mountaineers in the Canadian Rockies have been altered by external influences from such cradles of technical and psychic innovation as the European Alps and Yosemite.

Amidst all this change is the Alpine Club of Canada. A "... National Mountaineering Club", this organization has had a strong identification with the Canadian Rockies. Indeed, the Club has done much to increase our understanding of this environment, and today some members have a sincere concern for preservation.[1] Within the Club framework the practice of mountaineering and identification with so-called alpine and sub-alpine ecosystems have been closely associated. During an era of rapid change in the behavioural environment of mountaineers, this association has proven to be embarrassing at times—somehow serious mountaineering and an empathy with flowers have been incompatible! Within the Club, we have, in microcosm, one of the major paradoxes in values and attitudes that mark the times. Conservatism with respect to the physical environment, as characterterized by the Canadian Rockies, is regarded as good, whereas conservatism in one's own attitudes and values, in this case with respect to the practice of mountaineering, may be frowned upon.

It is useful to contemplate a few of the physical changes that have occurred in the Canadian Rockies. However, it is important to recognize that some of these changes have resulted from changes in technology as well as changes in people's preferences. The physical features in the Canadian Rockies that have undergone the most obvious change independent of man's activities have been the glaciers. At one time, the observation of changing glaciers was very much part of the activity of recreational mountaineers.[2] Today it is the constituency of professional glacier watchers. Because the glacial change is probably natural and because it has not markedly affected the activity of mountaineers in recent years,[3] it probably is not as important as some other physical changes.

Wildlife populations have change markedly both naturally and in response to man's activities. To yesteryear's mountaineer, and to a few today, the sighting of a goat culminated a day almost to the same extent as a 1st ascent. Fifty years ago both were in the realm of the possible. As 1st ascents have become rare in many areas of the Rockies, so have goats. Today we content ourselves with fleeting glances at herds of subsidized elk along the manicured banks of mountain highways. The sighting of a bear was reason for awe and flight, and later big stories. Today the bear population seems to be undergoing a clustering process in response to the clustered character of man and his garbage.[4] Although bears still inspire big stories, they are more often regarded as a big nuisance.

The forests, home of wildlife and trolls, have changed as well.[5] If one lets them, trees generally grow, and it has been the policy of man in the managed areas to see that they do just that. Fires, bugs and other natural processes that work against growing trees are ruthlessly dealt with. At the expense of alders and good berry patches, a monoculture of lodgepole pine is being nurtured to the

extent that spruce and fir will eventually appear.

The works of man, often the result of changing technology and behavioural environments external to the region under consideration, must be considered as part of the physical environment. The fact that man is becoming more and more mobile is annually imprinted on the Canadian Rockies. What were once trails are now roads.[6] With roads come cars and people, and with people come all the trappings to keep them comfortable. Herein lies what must be the greatest change in the physical environment, and it has had a strong influence on the character of mountaineering in the Canadian Rockies. It also impinges on other elements, for example wildlife of all sorts find garbage and handouts easier fare than the traditional variety; assumptions are made that monoculture forests are more attractive and thus more desirable than burns and bugged-out areas; streams in the vicinities of townsites and major hotels carry unpotable water. Increased mobility in the Canadian Rockies has been a major influence in changing the character of climbing in the area.

This is obvious where a road gives access to a great peak thereby eliminating a long pack trip. Such mobility changes are not only related to matters of vehicular conveyance—the use of modern cross-country ski equipment and techniques[7] has changed four-day snowshoe or ski hikes into one-day dashes to the base of a big peak. Thus "life on the trail" and all that is associated with it have been partly eliminated from the mountaineers experience.

At the same time a general change in mountaineering, and the type of experience sought through it, is important.[8] One is tempted to characterize this change by saying "modern mountaineers are no longer concerned with the physical environment". Such an analysis would be incorrect, however, as it is just a distinctly different physical environment that concerns them—a more restricted and intimate physical environment. Theirs is an environment of warm and cold hard vertical rock, lots of air, and strenuous work. This mountaineer is extremely sensitive to his physical environment—his sensitivity to minute discrepancies in the rock, small fluctuations in the weather, structural changes in snow and ice as well as emotional changes in himself is a large determinant of his success. His personal and emotional commitment may exceed that of former mountaineers. While much of the stimulus for this type of mountaineering comes from a competitive spirit, some of the stimulus comes from a desire for a particular kind of experience. But it is probably dangerous to characterize mountaineers according to their interest or non-interest in the environment, as the Alpine Club of Canada has an active conservation committee which indicates interest in the traditional physical environment also.

In the Canadian Rockies, modern mountaineering has been characterized by increasingly hard new routes, and old routes climbed under difficult conditions. This probably started with the influx of climbers from elsewhere. Gradually local people entered the scene, so that we now see the beginnings of a "club spirit.[9] It should be pointed out that this is occurring at the periphery of the Alpine Club of Canada, through local or regional mountaineering groups. The movement has appeared within the Club framework most obviously through the Canadian Alpine Journal, particularly since the 1970 volume. In the Rockies the move to more difficult new routes was, and still is, nurtured on the good hard rock of Yamnuska. Big face climbing has been successful on Edith Cavell, Temple, Howse, Assiniboine, Babel, Hungabee and Columbia to mention just a few.

Interjection of difficult conditions came about in various ways: great prolonged traverses, winter climbing, solo climbing and their combinations. The prolonged traverse game began one cold Christmas on Rundle and culminated several years ago with the 22 peak traverse in the Lake Louise area. Winter climbs have been successful on Assiniboine, Victoria, Hungabee and Temple amongst the big peaks. Hard rock soloing is becoming more common at Yamnuska. Finally, winter solo efforts on such classics as the east ridge of Mt. Temple surely must transgress what were once considered the canons of prudent mountaineering. Perhaps these changes do not reflect the mainstream of mountaineering in the Canadian Rockies. But they do define a frontier and therefore the direction and extent of change.

In concluding it would be wise to consider how changes in the physical and behavioural environments have come about, and what the implications might be for the Alpine Club of Canada. In the first instance the physical environment of the Canadian Rocky Mountains has proved extremely attractive to people in general and mountaineers in particular. Various aspects of this physical environment such as glaciers were changing naturally, but these changes had little influence on the character of mountaineering. Other elements such as forests and wildlife changed markedly in response to man's presence in the area. Because of these changes in character, but more particularly because of changes in man's mobility and material comforts, both external technological changes affecting all people, certain parts of the physical environment such as those mentioned above have become less a part of the mountaineer's behavioural environment. At the same time external developments have led to a change in mountaineering games, techniques and equipment. These have added to and greatly reinforced other changes in the mountaineers behavioural environment.

Fortunately or unfortunately, depending on your viewpoint, people do not seem to have changed as much as the characteristics of their physical environments. All mountaineers are probably interested in and sensitive to their physical environment, but how different mountaineers perceive this physical environment is not the same. Their behavioural environment is heavily seasoned with legacies of their particular previous and present physical and behavioural milieux.

Interest groups such as the Alpine Club of Canada are founded on the premise of similarities amongst their members. With a long history it becomes increasingly difficult to maintain this premise because of the changing physical and behavioural environments to which its members are exposed. If the Club is to be all things to all mountaineers, it first must recognize that environments have changed faster than the individual. Then the choice must be made between catering to the interest of the past, the interest of time, or embarking on a program of planned diversity.

The latter is clearly the most desirable path to follow. A legacy of the past as embodied in individuals and tradition is a valuable

asset in understanding and coping with the future, so long as it doesn't determine it.

J. Gardner

1 This is illustrated by recent pronouncements of the Conservation Committee of the Alpine Club of Canada in *The Gazette.*
2 See for example the work of Alpine Club members between 1906 and 1940 especially that of A. O. Wheeler.
3 This generalization does not hold in some local instances where glacier shrinkage (or rapid advance in other ranges) has resulted in the development of large and complex crevasse systems and wide or offset bergschrunds.
4 Steve Herrero has written an extremely interesting paper relating to this point. The paper, entitled "Human Injury Inflicted by Grizzly Bears" was publish: in the 6 November 1970 number of *Science,* pp. 593-598.
5 See J. G. Nelson and A. R. Byrne, "Man as an Instrument of Landscape Change—Fires, Floods and National Parks in the Bow Valley, Alberta, *Geographical Review,* 1966, vol. 56, pp. 226-238.
6 What must be a major element of the new master plan for Banff National Park is the proposed public road up the Cascade and Red Deer Rivers to join the existing road network at Lake Louise.
7 This "innovation" evolved amongst a group of young climbers from Calgary who used it successfully in the 1967 Icefield Traverse from Jasper to Lake Louise and on several winter ascents including that of Mt. Assiniboine.
8 See Lito Tejada-Flores, "Games Climbers Play," Ascent, 1967, Vol. 1, No. 1, pp. 23-24. This is reprinted in the Canadian Alpine Journal, 1970, vol. 53. pp. 46-47.
9 On the problem of "club spirit" see: Les MacDonald, "Oh Canada," Canadian Alpine Journal, 1970, vol. 53, pp. 2-3.

Psychopathology in Alpinism

The complex somato-mental reactions of human beings under the specific conditions of stress at high altitude are presented comprehensively and dynamically. Psychiatric, psychological and auxiliary examinations were carried out in a group of 30 Polish alpinists (20 men and 10 women) who have been climbing for many years and who took part in alpine expeditions at altitudes of over 7000 metres above sea level in the group of men, and 4000 metres in the group of women.

Two personality types in alpinists were distinguished: schizoid-psychasthenic (20 persons) and arthenic-neurotic (9 persons). The motivation of alpinism was based on personality and environmental factors, including the need for experiencing strong emotions and testing one's strength and possibilities, increased positive emotional tension, unloading of negative emotional tension, and compensation and hypercompensation of inferiority complex, Integrative fear was specific for the emotional processes in alpinists.

Mental disorders in alpinists under conditions of high altitude stress are characterized by acceleration or retardation of mental processes. In the psychopathologic pattern at various altitudes, emotional excitement or indifference at low altitudes (1500-2500), apathetic-depressive or euphoric-impulsive syndromes at medium altitudes (2500-5500), and psychoorganic syndromes at high altitudes (5500-7500) predominate. A special type of psychoorganic syndrome after prolonged stay at high altitudes, possessing specific etiopathogenesis, has been called altitude cerebro-asthenia. The biological, sociological and psycholooical factors in the mental disorders and the positive and negative aspects of mountain climbing are discussed.

INTRODUCTION

Alpinism is an exceptional sport because of its specific environment and conditions, the personality of alpinists, and motivating factors. The psychopathological part of this study was therefore preceded by a psychological part intended to answer some basic questions: Why do alpinists climb mountains, and is a special type of personality characteristic of persons who dedicate themselves to this sport? The mental disorders to which alpinists are subject at high altitudes are still insufficiently understood and have not been elaborated monographically.

Physiological and pathophysiological studies at high altitudes were preceded by incidental observations on the behaviour of humans and animals in the mountains. The earliest description, dated 1298, was Marco Polo's account of his experiences in the Tibetan mountains12. Jose d'Acosta6 is usually considered the pioneer observer of mountain disease.

The physiology of high altitudes began to flourish toward the end of the 18th century, when the Alpine peaks were climbed for the first time. Of special interest are the studies and works of de Saussure, who was the first European to describe the symptoms of mountain disease, which he ascribed to the effect of low oxygen pressure in the atmospheric air. In the 19th century, a lively rivalry arose in studies on altitude between Alpine and South American investigators. Mountain expeditions were better equipped and carried apparatus, and high altitude laboratories were organized which conducted research on adaptation of the human body to high-altitude conditions2, 52 Polish authors also took part in studies on psysiology of high altitudes. In the years 1925-1939, Kaulbersz carried out studies mainly on the influence of low pressure temperature and other climatic factors at high altitudes on changes in the blood 24, 28. More recently, intensive special studies have been undertaken, the results of which are of interest to alpinists, aviation medicine and space medicine11, 21, 22, 35.

A survey of the various investigations in this field leads to the conclusion that the reactions of the human body to the specific bioclimatic, ecologic, sociological and psychological factors in high mountains depends mainly on their duration. At first the body reacts with physiological changes called accomodation ("accommodation a court term") 13, consisting in activation of compensatory cardiorespiratory mechanisms and changes in blood morphology. The period of accommodation may be complicated by functional disorders, called mountain sickness (morbus altitudinis, le mal aigu de montagnes), which develops if adaptation to conditions of hypoxia is too rapid. Symptoms of mountain sickness may appear at altitudes of 3-4000 metres above sea level in unaccustomed persons. The onset of sickness may

be acute or chronic. Acute mountain sickness is usually of short duration, lasting several hours to several days. Symptoms usually pertain to the internal organs of sense, whereas nervous disorders are rare3, 13, 19, 4, 53. Complications include bleeding from the oral cavity and reproductive organs48, pulmonary oedema, cerebral and pulmonary embolism52, thromhophlebitis, loss of consciousness, and even death 17, 45.

After the period of adaptation, whether complicated by acute mountain sickness or not, other more profound changes take place, especially in the neurovegetative and endocrine systems, leading to the next phase of adaptation, in which homeostasis on a higher level is established. In this phase, pathologic complications may take the form of so-called chronic mountain sickness (le mal chonique des montagnes, Monge's disease). This phase is characterized by inability of further acclimatization at altitudes above 300 metres above sea level as a result of rapid increase in the numbers of red blood cells, pulmonary hypertension and hypertrophy of the right cardiac ventricle with symptoms of cardiorespiratory insufficiency15, 18. Monge distinguished several forms, depending on the predominant symptoms: cerebral, neuroplegic, cardiac, digestive, respiratory and mental (cf. 13). The course of the disease is severe and may even be fatal. In spite of many descriptions, the etiology and pathomechanism of this disease are insufficiently understood 38, 49.

Prolonged or continuous stay at high altitudes leads to acclimatization, manifested by anatomic and functional adaptive changes without insufficiency and with maintained reproductive ability. For instance permanent adaptation may be observed in inhabitants of high mountains and in alpinists who spend much time in the environment of high altitudes32 33.

Most authors believe that cerebral hypoxia is the main etiologic factor of mountain sickness. Studies have been carried out on the nervous system including the cerebrospinal fluid 44, electroencephalographic changes36, and the endocrine system 1.

Compared with the somatic and neurological changes, psychopathologic observations are much less numerous 43 Alpinists themselves were the first to describe mental disorders, sometimes with great accuracy 7, 9, 14, 16, 34, 41, 47. Recent alpine expeditions have provided very interesting psychological data on psycho-physical efficiency under conditions of high altitude stress. For the first time, attention has been called to the possibility of permanent and late intellectual and mental changes after stress at high altitudes10. The need of information about the personality of alpinists for proper selection of participants in the great Himalayan expeditions has been pointed out. Important work has been done by Lester 30, 31 and Jackson20, who described the personality of members of Himalayan expeditions to Mount Everest. Their results and analysis of the literature indicate that alpinists, irrespective of their nationality and background, are a characteristic and separate group of sportsmen with profound mental and biological peculiarities.

MATERIAL AND METHODS

This study was carried out at the Psychiatrical Clinic of the Medical Academy in Cracow in the years 1965-1969 on a group of Polish alpinists (20 men and 10 women), active mountain climbers, members of the Alpine Club, who participated in alpine expeditions at over 4000 metres above sea level in women, and 7000 metres in men.

The basic method of the study consisted in psychiatric and psychological examinations (Cattell's personality questionnaire, Bender, Benton and Graham-Kendall tests), and auxiliary methods such as electroencephalography, radiology, etc. The results were analyzed statistically. In the psychiatric examinations, besides professional, family and social status, special attention was given to childhood diseases and trauma in the past, and illness connected with mountain climbing. For purposes of personality evaluation, information was collected about emotional states during climbing. Mental and psychopathologic experiences at high altitudes were specially analyzed. Direct contact with the alpinists provided valuable information about their present mental states and an opportunity to asses the influence of personality traits and alpinistic environment on intellectual and emotional contacts.

The psychological examinations were carried out at the Psychological Laboratory of the Clinic by an experienced psychologist (Mgr. E. Universal). The electroencephalograms, made by Dr. J. Gatarski, included resting tracings and activation by hyperventilation and the use of stroboscope, employing a 16-canal apparatus, a product of the Alvar Co.

RESULTS

1. General data

The studied group consisted of 30 persons (20 men and 10 women). The age of the men ranged between 26 - 49 years (mean 33 years), and that of the women 28-45 years (mean 35 years). Only one man and one woman came from a rural environment, and the remainder were urban dwellers. Twenty-one persons (70%) were from intellectual environments, 8 were physical workers (27%), and one person was of peasant origin (3.3%). Eight persons had no siblings. Three men were unmarried (15%), 13 were married (65%), and 4 were divorced (20%). Only 3 of the married men had no children. Four women were married, and 6 were single.

Twenty-six persons (95% of the men and 70% of the women) had an academic education, and the remainder technical education. Seventeen persons had technical studies, and 8 university studies. Ten persons were employed as scientific workers of academic schools. One person was an assistant professor of medicine, one was a lecturer in physics, and 7 had doctoral degrees. The remaining persons had responsible jobs.

2. Past diseases

A large variety and frequency of childhood infectious diseases, often with severe course, were noted (in 6 persons with cerebral complications in the form of delusional-confusional syndromes). Other diseases in childhood included infectious jaundice (3 persons), sinusitis, otitis, Heine-Medin disease (with paralyses and pareses), rickets with bone lesions, and others.

Trauma and disease connected with mountain climbing can be divided into the following groups: mechanical trauma, thermal trauma, sunstroke and somatic diseases of unclear etiology. Fractures, luxations, torsions, wounds and contusions were frequent. All but two persons had suffered various mechanical injuries

during climbing, including simple contusions, wounds, compound bone fractures and craniocerebral injuries with cerebal shock. Ten persons suffered fractures of the lower extremities, and 4 of the upper extremities. Rare complications of climbing injuries included spontaneous pneumothorax with subpleural effusion after rib fracture, and in two cases intestinal rupture as a result of injury by climbing rope tied around the chest during a snow avalanche. Six persons had frost injuries, which in two cases necessitated amputation of toes. Three persons had sunstroke.

3. Personality of alpinists

The abundant information about the personality of the alpinist was classified arbitrarily into clinical personality types based on dominant traits. The schizoid-psychasthenic type was observed in 16 persons (11 men, i.e. 53%, and 5 women, 50%). In 4 persons (3 men and 1 woman), schizoidal personality type was noted. In all, 20 persons (68%) exhibited predominance of schizoidal personality. Five persons (4 men and 1 woman) presented the asthenic personality type i.e. 17% of the whole group. The neurotic personality type was noted in 4 persons (13%). One person could not be classified into any grounp.

In the analysis of the Cattell personality questionnaires, the mean personality profile of the whole group was compared with the mean profiles for men and women. The mean personality profile of the whole group was characterized by schizothymic features and tendency to avoid contact with other persons. Comparison of the mean profiles of the group of men and women showed statistically significant differences in factors C, M, O, Q3 and Q4, leading to the following differences between the groups. In women, the level of general adaption was low, numerous neurotic symptoms were present, control of emotional reactions was poor, sensitivity enhanced, tolerance of frustration was diminished, and a rich fantasy predisposed to neurotic fear of imagined danger. Emotional contact was difficult, with a reserved attitude toward other persons, bashfulness, weak social contact tendency to fear and hypercompensation. Women tended to be depressive and outwardly aggressive. Men exhibited good adaptation, on the whole, in spite of avoiding contacts with other persons, a strong need of dominating and egoism, marked tolerance for frustration, and well developed self-reliance and independence. The whole group was characterized by weak sexual adjustment, weak social adaptation, uncooperativeness, and weak professional preoccupation.

In summary, two main personality types were distinguished: schizoidal-psychasthenic and asthenic-neurotic. The first, more frequent, type was characterized by such traits as secretiveness, reserve, emotional sensitivity, and avoiding contacts with people; in spite of lack of self-reliance and feeling of inferiority, and high aspirations. As a rule, these persons were hyperactive, independent, unconventional and eccentric. They were emotionally labile, oversensitive, obstinate, excitable and aggressive and submitted to social and collective discipline with difficulty. The men, especially, showed a need for dominating and expressing their ego, as well as the need for social approval. These persons were inclined to daydreaming, preferred abstract intellectual work, and had humanistic interests. They were physically fit and tolerated frustration well. In some cases, the schizoidal traits were more pronounced, for instance outward emotional coolness, isolation and a tendency to avoid company. Self-reliant, independent and self-controlled, they tolerated hardships well. Especially pronounced was their need for risk and strong emotions. They were also often distrustful and suspicious of others, and antisocial.

The asthenic and neurotic types, described separately, may be combined into a single asthenic-neurotic personality type. This type was characterized by shyness, tearfulness and inferiority feelings, and presented many neurotic symptoms. Having high aspirations, they felt a strong need to dominate over others, manifested already in childhood. Traumatic factors and childhood diseases led to a feeling of inferior worth and physical efficiency, and to avoidance of playmates, resulting in the need for compensation in other spheres. Moreover, this group was characterized by the need for continual testing of their own worth in difficult and dangerous situations. They displayed distinctly neurotic traits such as excessive sensitivity and emotional imbalance. Neurasthenic, psychosomatic and phobic-depressive symptoms were prominent in this group, and frustration was tolerated poorly. As a result of rich imagination, neurotic fear of imagined danger was felt. The whole group, especially the women, shows poor sexual adjustment and high intelligence.

The motivation for alpinism was based on two main mechanisms: the need for strong emotions and for testing one's own possibilities (11 men, i.e. 55%), and fascination with the alpine personality and the desire to be admitted to closed circles (6 women, 60%). A majority of the probands emphasized that the greatest attraction of alpinism is that it provides opportunities for a special kind of emotional experience. Environmental factors included the impression left by the first contact with mountains, alpine family traditions, and an influence of alpine literature. The emotions accompanying mountain climbing were of two kinds: 20 persons experienced pleasant emotional tension (positive sign), and in 10 climbing diminished unpleasant emotional states (negative sign) felt in everyday life. Seventeen men (85%) and three women (30%) experienced pleasant emotional tension during climbing, and three men (15%) and 7 women (70%) felt relief from unpleasant tension.

Fear emotions during climbing were of two kinds: biological fear (connected with the situation and hypoxia), and social fear. Emotional processes in alpinists during climbing were characterized by fear leading to personality integration in threatening situations, exerting a favorable effect on personality development, which may be called integrative fear.

4. Mental disorders under conditions of altitude stress.

The psychopathological pattern

The mental disorders experienced by the studied group of alpinists during mountain climbing were divided arbitrarily according to the criterion of altitude at which they occurred. The psychopathologic symptoms at low altitudes (1500-2500 metres above sea level), medium (2500-5500 metres) and high altitudes (5500-7500 metres) will be discussed separately.

a. Neurasthenic pattern

At low altitudes (e.g. in the Tatra mountains), two types of psycho-pathologic reactions were observed: emotional stimulation or depression. During the first day at these altitudes, 20 persons (14 men, i.e. 70%, and 6 women—60%) felt emotionally stimu-

lated; and 6 persons (3 men and 3 women) emotionally depressed. Both types of reaction had neurotic character in all cases. The first type consisted in mental stimulation, slight euphoria, increased motor drive, periods of accelerated thinking, scattered attention, impatience, unjustified haste and irritability. In the second type, fatigue predominated, with deterioration of physical fitness, fatiguability, drowsiness, emotional indifference, and sometimes episodic dysphoria. These symptoms lasted from several hours to several days.

b. The cyclophrenic pattern

At moderate altitudes, 22 persons (75%) experienced mental perturbations in the form of apathetic-depressive syndrome, and 6 persons (20%) euphoric-impulsive syndrome. Two persons had alternating apathetic-depressive and euphoric-impulsive symptoms. The intensity of these symptoms was at the neurotic level, respectively moderately psycho-organic, but never attained a psychotic level.

The apathetic-depressive syndrome was characterized by mental and physical fatigue, indifference, narrowing of interests, aversion to physical exertion, muddled thinking, physical lassitude, depressed mood, sorrowfulness, drowsiness and diminished sexual interests. Somatic complaints were also usually present. Several persons exhibited dysphoria.

The euphoric-impulsive syndrome was characterized by elevated, slightly euphoric moods, unmotivated feeling of happiness, bewilderment, increased motor drive and physical activity, motor unrest, unnecessary actions, emotional tension, irritability, explosiveness and a tendency to fall into conflict with other persons. Aggressive and asocial behavior was also observed.

c. The psychoorganic pattern

Only men in the studied group climbed at high altitudes. Mental disorders of the psychoorganic type occurred in 10 men (50%). Three persons (15%) experienced psychotic complications in the form of confusional (2 persons) and schizophrenia-like states (1 person).

The most important psychoorganic symptoms consisted in diminished physical activity, clumsiness, disorientation in time and space, diminished criticism, labile moods, disorders of memory (gaps), pathological somnolence, optic-motor discoordination, disorders of equilibrium and perception. In the intellectual sphere, slow and imprecise thinking, dullness, impaired abstract thinking, and tendency to false conclusions were noted.

In persons with psychotic disorders, visual and acoustic illusions, delusions of persecution, symptoms of derealization and depersonification, and pronounced confusional disorders of consciousness occurred. These disorders were observed in persons with symptoms of so-called altitude deterioration, with somatic breakdown, and physical emaciation, which in one person resulted in a loss of 25 kg in body weight. These symptoms occurred usually after long stay under conditions of hypoxia, low ambient temperature and insufficient food. At altitudes of up to 7500 metres above sea level these persons did not use oxygen apparatus. For several weeks after the expedition they continued to feel poorly, showing signs of apathy and abulia, and impaired memory.

5. Clinical observations

On the basis of the psychiatric and auxiliary examinations, the following clinical diagnoses were established in the studied group of alpinists: personality disorders in 7 persons (5 men—25%, and 2 women—20%), neurosis in 4 and psychoorganic syndromes in 10 persons (8 men—40%, and 2 women—20%). In the remaining 9 persons, abnormalities justifying a diagnosis of psycho-pathologic syndrome were not observed.

Neurological symptoms of focal central nervous system damage were noted in 4 persons.

Electroencephalography, which was performed in the whole group, gave normal tracings in 19 persons (63%), including so-called flat tracings in 7 persons (23%). This classification was dictated by caution in the interpretation of the electroencephalograms. Pathologic electroencephalograms were found in 11 persons (6 men—30%, and 5 women—50%). The mean number of pathologic electroencephalograms in the whole group was 37%. The Bender, Benton and Graham-Kendall tests gave the following results: normal in 13 persons, on the boundary between normal and pathologic in 12 persons, and indicating organic pathology in 5 persons. In the whole group, 40% of the results were on the boundary of normal and pathologic, and 17% indicated organic pathology.

DISCUSSION OF THE RESULTS

The specific personality of alpinists must be considered with reference to the cultural and sociological factors peculiar to our nation. Brzezicki5 has described the "Polish character" as skirtothymic, characterized by heroism, altruistic dedication, ability of mobilization in difficult situations, bravado, a tendency to the fantastic, a specific sense of humor, etc. In alpinism, more than in any other sport, heroism is a salient feature, accompanied by the struggle to overcome solitude and the hardships of alpine nature, to master one's own shortcomings and feeling of inferiority4, 51. Alpinists are a group of individuals with high intellect, ambition and creative powers.

Comparison of the results of this study with the descriptions of personality of western alpinists shows many similarities, especially with respect to schizoidal personality, social maladjustment and inferiority complex, besides high aspirations20, 31, 37, 39.

In the analysis of fear in alpinism, the classification proposed by Kepinski29 proved very useful. Kepinski distinguishes four types of fear reaction: connected with direct danger to life, with social endangerment, with the inability to select appropriate action, and disorganization of the existing structure of interaction with the surrounding world. This classification comprises four types of fear: biological, social, moral and disintegrative. Biological fear may occur during dangerous mountain climbing, similar to the fear described under conditions of hypoxia at high altitudes. Fear of a negative judgment by other alpinists, and the fear of orphaning one's family, are of the social type. Fear leading to personality integration in dangerous situations during difficult climbs is peculiar to alpinism. Conscious confrontation with the danger involved in climbing and increased emotional tension mobilize fear

and integrate the psychophysical efficiency necessary to overcome difficulties and avoid danger. In contrast to disintegrative fear in the classification of Kepinski, this type of fear is integrative42.

Only an attempt can be made to discover the etiologic factors on mental disorders at high altitudes. The complex altitude stress is connected with biological as well as psychological factors. Depending on their role in the etiology of mental disorders in alpinists at high altitudes, these factors may be arranged in the following order: atmospheric factors, somatic conditions, mechanical injury, psychological and sociological factors.

Hypoxia of the central nervous system as a result of oxygen deficiency in the atmospheric air was unquestionably the main etiologic factor of the mental disorders at high altitudes. This is indicated by the characteristic psychopathological pattern of these disorders, among which disorders of memory, mood, orientation and consciousness predominate, suggested disturbed function of the cerebral cortex. A convincing clinical argument is the observation that mental disorders disappear when an oxygen apparatus is used, or if the alpinist descends to a lower altitude. Other important climatic factors include low ambient temperature, high humidity, wind, solar and cosmic radiation. The influence of the latter factors on the human body is insufficiently known.

Among the somatic factors, diseases or abnormalities which diminish the efficiency of the cardiorespiratory system (cardiac valvular defects, myocardial disease, pulmonary emphysema, bronchopulmonary diseases, excessive smoking and alcohol consumption) are important.

Sociological factors which deserve mention include social isolation during mountaineering expeditions, stay in foreign or exotic countries, altered way of life, confinement to the company of a small group of persons, the language barrier, separation from family, etc. Realization of personal ambitions, and not the success of the whole group, is also an important factor.

The complex etiology of mental disorders in alpinists under conditions of altitude stress does not permit differentiation between the various factors. Undoubtedly, the simultaneous effect of many factors, together with individual predisposition (somatic and emotional state), contribute to the resulting disorders.

As yet, there is little information available about the therapy of) mental disorders occurring at high altitudes. Better known are trials of treating other somatic and mental diseases in high mountain climate40, 46. Empirical observations show that the disorders are favorably affected by proper acclimatization, administration of oxygen and descent to lower altitudes, confirmed also by the author's own experience during an expedition to the Caucasus in 1966.

On the basis of the fragmentary data, the following concept of therapy of these disorders may be proposed: in emergency situations, immediate administration of oxygen (if possible), or descent to a lower altitude, and complete repose in recumbent position. Theoretically, administration of neuroleptic drugs is indicated in disorders of the euphoric-impulsive type and psychoorganic syndromes with psychotic symptoms. Small or moderate doses of these drugs should not only alleviate the symptoms, but by diminishing cerebral metabolism should decrease the effect of oxygen deficiency. The action of psychoanaleptic drugs in apathetic-depressive syndrome (e.g. oxazolidine or centophenoxine derivatives) deserves trial under altitude conditions.

Prophylaxis consists of careful selection of members of high mountaineering expeditions with respect to cardiorespiratory function, planned acclimatization to altitude, restriction of activity to the necessary minimum under conditions with a possible detrimental effect on health, and early administration of oxygen.

Positive and negative effects of alpinism

The positive, or beneficial, effects of alpinism consist mainly in satisfying the psychological needs of the individual connected with his personality structure. In addition, physical fitness and motor efficiency are improved, resistance to climatic factors increases, and rehabilitation of the effects of injuries may be attained.

The negative effects of mountain climbing include the possibility of injuries, including fatal accidents, and the possibility of remote and permanent psychiatric sequels of long exposure to altitude stress. In the studied group, changes of this type were found in 4 men who stayed at altitudes between 6500-7500 metres above sea level for periods of several to nine days. The psychopatho-logic symptoms in these persons were of the asthenic-apathetic type, and auxiliary examinations indicated pathologic lesions of the cerebral cortex. Assumption of a causative relation of these symptoms to altitude stress and the effect of hypoxia, low temperatures and somatic disorders (deterioration) seems justified. In view of the specific etiopathogenesis of this type of psycho-organic syndrome, it may be called altitude cerebrasthenia.

The mental disorders occurring under high altitude conditions and later changes in the central nervous system do not require psychiatric therapy. Appropriate prophylaxis should suffice to prevent these minor psychiatric complications.

CONCLUSIONS

1. Popular alpinistic literature is a valuable source of information about psychopathology in alpinism.
2. Two personality types may be distinguished in Polish alpinists: schizoidal-psychasthenic and asthenic-neurotic.
3. Environmental and personality factors play an important role in the motivation of alpinism. In men, the need of strong emotions and of testing ones strength and possibilities is the main motive; and in women fascination with alpinistic personality and the desire to be admitted to alpinistic circles predominate. Mountain climbing causes increased positive emotional tension (in men), or unloading of negative emotional tension (in women). Moreover, it develops the mechanisms of compensation and hypercompensation of feelings of inferiority.
4. Emotional processes in alpinists are characterized by a specific integrative type of fear, leading to personality integration in dangerous situations and exerting a beneficial influence on personality development.
5. Mental disorders in alpinists under conditions of altitude stress are characterized either by acceleration or retardation of mental processes. The psychopathologic pattern at different altitudes was characterized by emotional stimulation or depression at low

altitudes (1500-2500 metres above sea level), apathetic-depressive or euphoric-impulsive syndromes at medium altitudes (2500-5500 metres), and psychoorganic syndromes with or without psychotic symptoms at high altitudes (5500-7500 metres).

6. The main etiologic factors of mental disorders at high altitudes include atmospheric conditions, somatic state, mechanical trauma, psychological and sociological factors.

7. There is a lack of experience in the therapy of mental disorders at high altitudes. Prophylaxis should consist in careful selection of participants in alpinistic expeditions, planned acclimatization, restriction of activity at high altitudes, to the necessary minimum, and the administration of oxygen.

8. The positive effects of alpinism consist mainly in satisfying psychological needs connected with specific personality structure. For most alpinists, mountain climbing was a source of positive emotional experiences liberating mechanisms compensating and hypercompensating feelings of inferiority. Alpinism facilitates development of deep emotional bonds not only during climbing, but also in the specific atmosphere of the Alpine Club. The experience gained in overcoming hardships during climbing permits alpinists to adapt themselves better to everyday life.

9. The negative aspects of alpinism include the possibility of fatal accidents, injuries during climbing, and late psychiatric sequels of prolonged stay at high altitudes.

10. Prolonged stay at high altitudes (hypoxia, low temperatures, deterioration), in view of its specific etiopathogenesis, may cause a psychoorganic syndrome called altitude cerebrasthenia, characterized by asthenic-apathetic symptoms and pathologic lesions of the cerebral cortex.

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A History of Backcountry Facilities in Glacier National Park

For the purposes of this account backcountry facilities are considered to be the cabins, shelter and lodges provided for persons prepared to travel some distance from the main rail and road routes. A history of such facilities in Glacier Park is interesting because it aids in explaining the present inadequate distribution of such facilities and provides insight into the past recreational use and management of the park, for comparison with the present.

EARLY FACILITIES

Immediately after the opening of the transcontinental railway via Rogers Pass in 1885, and the establishment of Glacier Park in 1886 as a 30 square mile unit, the Canadian Pacific Railway Company began to develop facilities to encourage tourism in the area. The first stage of the Glacier House hotel was completed by the company in 1887. This railside facility was located some two miles south of Rogers Pass, in the Illecillewaet Valley, near the present Illecillewaet Campground.1 From the windows of this six bedroom chalet the immense icefall of the Great Illecillewaet Glacier and Mt. Sir Donald could be seen.

The CPR's perceptive promotion of the area's scenic attributes and facilities soon made Glacier an alpine centre of international repute. While many visitors admired the scenery from the security of the hotel or train, others ventured forth to explore the surrounding area. To encourage such excursions the CPR built trails to the Great Glacier, Asulkan Valley, Marion Lake and Avalanche Crest. About 1900 a rustic summer house was built near the top of the "Cascade" on the Avalanche Crest trail, overlooking the waterfall and Glacier House. The foundations are still visible today, as are those of a "shelter" at the Observation Point near Marion Lake. This "shelter" is first mentioned in a CPR brochure for 1905, which also refers to another close to the lake These "shelters" are not mentioned in other accounts and no photographs are available, so their precise character is not known. A third "shelter" seems to have been located up the Asulkan Trail, it being noted in 1901 that: Emerging from the gorge, the path leads over an old moraine, across the stream flowing in from the east, and thence up a very steep, grassy slope to the shelter erected for the accommodation of tourists. This point is about 2,000 feet above Glacier House, and about five miles distant from.3

This would appear to have been just beyond the end of the present trail up the valley, but no foundations have been found and no further details are available.

The arrival of the Swiss Guides at Glacier in 1899 caused a burst of mountaineering activity and led to improvements in the facilities available for the sport. About 1902 the CPR built a cabin at the end of the new Hermit Trail, on the slope of Mt. Rogers, near Rogers Pass. It was made out of logs, a corrugated iron roof being provided some time later. In 1912, it was described as:

Rogers Hut... a mere shack primitive in the extreme, out of repair and very uncomfortable; the roof leaks and mountain rats (pack at, bush-tailed rat) are very much in evidence. On fine nights, the climber is more comfortable outside.4

Clearly the CPR's concern for the welfare of its clients was variable around Glacier.

THE NAKIMU CAVES

In 1904 Charles Deutschman discovered the Nakimu Caves in Cougar Valley, some 7 miles by trail from Glacier House. As the caves lay in the park, which had been greatly expanded in 1903, the government made its first major contribution to recreational facilities in the park by commissioning Deutschman, who was hired as caretaker, "to take all necessary steps to open them to the public."5 Accordingly, a headquarters cabin was built near the main entrance and steps and safety devices were installed in the caves. By the railway, at the bottom of Cougar Valley, a cabin was built for the convenience of tourists alighting from the train, and a similar visitors cabin was built near the caves. That there was some aesthetic concern in this work is shown by the comment that:

These cabins are of rustic design, being of split cedar on heavy log frames. I have endeavoured as far as possible to carry out the rustic design, which is by far the most suitable as well as the prettiest for all buildings in the park.6

This is the first recorded evidence of concern about the character of buildings in the park, a concern that is still not always evident. The cabins were furnished with camp stoves, cooking utensils and bunks, but Deutschman claimed that the one he occupied was "far too small for the crowds of guests that sometimes assembled there."7

By 1915 a tote road from Glacier House to the caves had been built and a tallyho service was in operation. This encouraged an

average of 600 persons per season to visit the caves, some of whom stayed overnight at the cabin. In 1924 the CPR, having displayed minimal interest in the caves, opened a teahouse at this point. Its use was short-lived, however, for with the closure of Glacier House in 1925 the park was without accommodation, and being inaccessible by road attracted little day use. The teahouse apparently never reopened after the 1925 season, although the government cabins were used a little longer. As there was no caretaker at the caves after 1931, and few visitors, all the buildings at the site began to fall into ruin. When CPR abandoned its lease on the teahouse site in 1944 it was suggested the building be used as a "Trail Shelter Camp" or for a ski camp like that at Sunshine. Nothing was done, however, and in 1948 all the buildings on the site were demolished. The foundations, including the old fireplace, can still be seen today, beside the overgrown trails and rotting stairways.

GLACIER CIRCLE AND WHEELER HUT

In 1920 or 1922, the CPR built another cabin in the park, known as Glacier Circle Hut.8 Located between Mts. Macoun and Fox, at the southern end of the Illecillewaet névé, it was intended mainly for the use of mountaineers requiring shelter while ascending peaks in the south section of the park. The cabin was constructed by Fred Pepper of Field, who went in with materials, his wife and baby daughter, by dog team over the Illecillewaet névé. Their experience, which it has been said "would in itself make an epic story," illustrates the difficulty of providing backcountry facilities at high altitude at this time. In 1943 the CPR relinquished ownership of the hut and although the National Parks Branch were now responsible for it, maintenance thereafter was minimal. The Hermit Hut was also allowed to fall into disrepair, and accordingly was replaced in 1947 by a hut built by the Alpine Club of Canada.

In 1947, the Alpine Club also opened its chief facility in Glacier Park, the Wheeler Hut, located near the site of the old Glacier House Hotel. The Club had originally proposed building such a hut in 1941, near Rogers Pass, but the war delayed construction. The present location was selected in 1945, when the land and an old railway house, owned by Harrison of Banff, were acquired. The railway or "Red House" was used as overflow accommodation for the Wheeler Hut for some time.

BACKCOUNTRY FACILITIES TODAY

The demolition of the Red House in 1967 and the erection of a prefabricated shelter at Sapphire Col means that there are now four recreation huts in Glacier Park, although that at Glacier Circle is hardly useable.9 The locations of the older huts were determined at times when access and climbing interests were somewhat different from today. The availability of backcountry facilities has changed but little since the sudden invasion of the park after opening of the Trans-Canada Highway in 1962. Accordingly, several improvements in the quantity, type and location of huts could, and should, be made. Failure to update such facilities will curtail some of the most appropriate recreational usage of the park.

(A third "shelter was located up the Asulkan Trail. It was mentioned in 190110 and in 1905 Wheeler noted:

"At the end of the trail, the railway company has built a so-called shelter. It had no roof and was much cramped; moreover, it was built on the slope of a hill and the floor had not been levelled. With regard to the shelter, there would seem to be little need for it where it has been built.11"

This would appear to have been just beyond the end of the present trail up the valley, but no foundations have been found and no further details are available.)

Regarding existing huts it is suggested that the Wheeler Hut is now redundant, and is liable, as a result of its exclusive use, to cause more management problems than it is worth. The Alpine Club would do well to concentrate on securing adequate provision of high altitude shelters for climbers, and relinquish facilities primarily of use to hikers. A shelter on the flanks of Mt. Sir Donald might be particularly useful. As the Hermit Hut is old, and very close to the highway, it too might be abandoned in favour of a shelter nearer the peaks.

To facilitate longer backcountry hikes in Glacier Park, the Parks Branch should consider building at least four new cabins. As the Bald Ridge area is one of the most interesting in the park, a cabin somewhat above the present Copperstain warden patrol cabin would be much appreciated. To encourage use of the southern backcountry of the park a cabin near the Beaver-Duncan divide might be built. Since the turn of the century a cabin south of the Asulkan Pass has been advocated. This would enhance climbing in the Dawson Range, and if trails were developed could allow a two-day trip via the Asulkan, Incomappleux and Flat Creek Valleys. A cabin at the end of the Bostock Pass trail would make this route more appealing and would be especially desirable if a round trip route down Mountain Creek was developed.

As such improvements would take time and money, it is suggested that the Parks Branch consider using existing warden patrol cabins in the meantime where feasible. Co-operation with outdoor groups in the future might also help to expedite the improvement of backcountry facilities in this and other parks, save Parks Branch money, and enhance the wilderness recreational appeal of such areas. The Swiss Guides and the CPR at the turn of the century, and the Alpine Club subsequently, provided a good lead that should not have been allowed to lapse.

John Marsh

1 For information on the history of Glacier House and a site plan see: J. Marsh, M. Miller and M. Lindsay, Glacier National Park, a guide for mountain pilgrims, Peterborough, Canadian Recreation Services, 1971.

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4 A. 0. Wheeler and E. Parker, The Selkirk Mountains—A Guide for Mountain Climbers and Pilgrims, Winnipeg, Stovel Co., 1912, p. 86.

5 C. H. Deutschman, Old Grizzly, unpub. ms.; pp. 77-78, National Parks Branch Library, Ottawa.

6 Canada, Department of Interior, Annual Report for 1906-07, p. 9.

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8 Various dates for the opening of this hut have been suggested. For an interesting accounts of its use see: G. J. Hill II, A Climbing

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9 The Glacier Circle hut is due to be repaired by the ACC in the summer of 1972, the Parks Branch paying the costs.

10 CPR. Banff the Beautiful, Montreal, 1901. p. 25.

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Preservation vs. Use in the National Parks

"Those who have had the rare pleasure of being a first visitor to any of these beautiful lakes in the Canadian Rockies, and seen nature in her primitive glory, may thoroughly appreciate the destructive effect of the ordinary camp. Trees are ruthlessly cut down or destroyed by camp fire, branches are hacked off for firewood or bedding, the bark is blazed from trees and replaced with a multitude of names of those seeking a misguided notoriety, while the green carpet of grass and beautiful alpine flowers is changed to a waste of empty cans and broken glass."

Thus wrote Walter Wilcox in his Guide to the Lake Louise Region in 1939. Yet later on in the same book the strongest advice that Wilcox dared to give was "Burn up papers and refuse and hide all empty cans in a deep part of the forest."

The inherent conflict in national parks between present use and enjoyment and preservation for future generations was apparent from the beginning to the perceptive observer but only within the last decade or two has it been widely acknowledged. Until recently it seemed that top priority should go to encouraging people to visit the parks and enjoy the beautiful mountain scenery. In a 1944 submission on post-war development of national parks the Alpine Club gave almost total emphasis to improved accessibility "to tourists in general", stating that "The recreational value of our parks cannot be too greatly stressed .. . But unless they are made readily accessible and the public is encouraged to make use of them, their value is lost."

I must hasten to add that the specific suggestions were almost all for improved trails and shelters; the only road proposed was "an extension of the highway up the Astoria River to Chrome Lake." It is rather embarrassing to recall this latter suggestion now, but it was made in the spirit of the times. In fact such a spirit has persisted until quite recently, and within the Parks Branch rather longer than with the public at large. Witness the deliberate encouragement in the late 60's of snowmobiles to promote greater winter use, and the proposals for several new roads that were included in the recent provisional master plans.

It is a measure of public concern for the natural environment that so many of us now accept the responsibility to carry out all garbage from the wilderness, and that it is Club policy to carry out garbage from huts rather than bury it there. Similar policies are promoted by many groups now, which would hardly have been tolerated 5 or 10 years ago.

Public opinion is changing, and Club policy is likewise shifting to give greater emphasis to preserving the parks unimpaired for future generations while encouraging present use in ways that we think are most appropriate to the alpine wilderness, and are relatively undemanding on the environment. This has been emphasized in a number of Club briefs supporting the creation of new parks in the arctic areas of Canada. The detailed response in the spring of 1971 to the Provisional Master Plans for Banff, Jasper, Yoho, and Kootenay Parks, a brief to the Parks Branch objecting to the recreational use of snowmobiles in the parks, and the policy of packing out all garbage, are all manifestations of the stronger conservationist stance.

The Club submission on the provisional master plans was coordinated by the Conservation Committee so perhaps a conservationist point of view was to be expected. But there was a surprisingly broad and intense participation extending from the Board through the various committees, local sections, to individual members. The emphasis was on encouraging greater foot travel throughout the park by development of carefully sited trails, shelters, and huts. At the same time, while admitting that members enjoyed the use of roads, the submission opposed most of the suggested new roads as "any small gains in convenience of access that might result from additional roads would be outweighed by the loss of wilderness values."

Although the brief did not go into as much detail as did the 1944 document in suggesting specific trails, it presented a general philosophy that would permit high use in some areas with high protection in others. Protection for portions of the interior of each of the major blocks of roadless wilderness would be achieved by keeping the trails few and rudimentary. The major trail systems should be located in regions that can stand a heavier visitor load. Provision was asked for particularly solid and relatively easy circuit trails from various visitor and interpretation centres along the highway. These would provide a pleasant and easy introduction to walking in the parks.

The use-preservation problem arose again in dealing with shelters and huts. Their existence in the back country clearly is a strong attraction to encourage more visitors. But if many people are already using an area, having them stay in a hut is less damaging than intensive camping. In the end we proposed a system of huts carefully sited along major trails, with attendants at the busier ones—in effect an extension of the Club network of near and below treeline huts, although these would be public rather than Club huts. Huts rather than shelters were preferred to encourage a greater degree of winter use by snowshoers and ski travellers.

Many of the briefs presented agreed with ours that the parks are best enjoyed when visited on foot. The Club also drew attention to the importance of climbing as a desired and desirable form of park use—a subject almost totally neglected in the provisional master plans. We pointed out the significance of high altitude huts and shelters for bivouac and emergency use. These shelters are generally situated in places of little interest to most hikers and should, if carefully located, be acceptable even in the most highly protected (Class I) zone. In view of the expected flood of hikers and climbers in coming years it was proposed that the sign-out system for wilderness and climbing trips be made optional so that, for those people who wanted it, an effective checkup service could

be offered.

Is the conservation effort worth while? Representations to officialdom do seem to produce some results. For example, according to a recent statement from the Parks Branch, the almost unanimous objections to new roads and visitor service centers in the four mountain parks have been heeded. The three new national parks promised in the (February 1972) Throne Speech are in areas that we have recommended: the Kluane Park will include at least part of the St. Elias Mountains, the Nahanni Park will include part of the Ragged Range, and the Baffin Island Park is in the general area of the Cumberland Peninsula that the Ottawa members of the committee proposed. We may not see the lower ranges included in the Kluane Park though, nor the most spectacular part of the Ragged Range in the Nahanni Park, and these relatively fragile areas may be more seriously damaged by the extra people attracted by the new parks.

Of course, establishing a park does not resolve the conflict between use and preservation. This conflict will be with us as long as there is any wilderness left. Perhaps it is hopeless, perhaps, in the words of Aldo Leopold,

"all conservation of wildness is self defeating, for to cherish we must see and fondle, and when enough have seen and fondled there is no wilderness left to cherish."

But Leopold never gave up, and I'm sure we won't either.

Harry Habgood

Technical Notes

A multi-purpose climbing tool

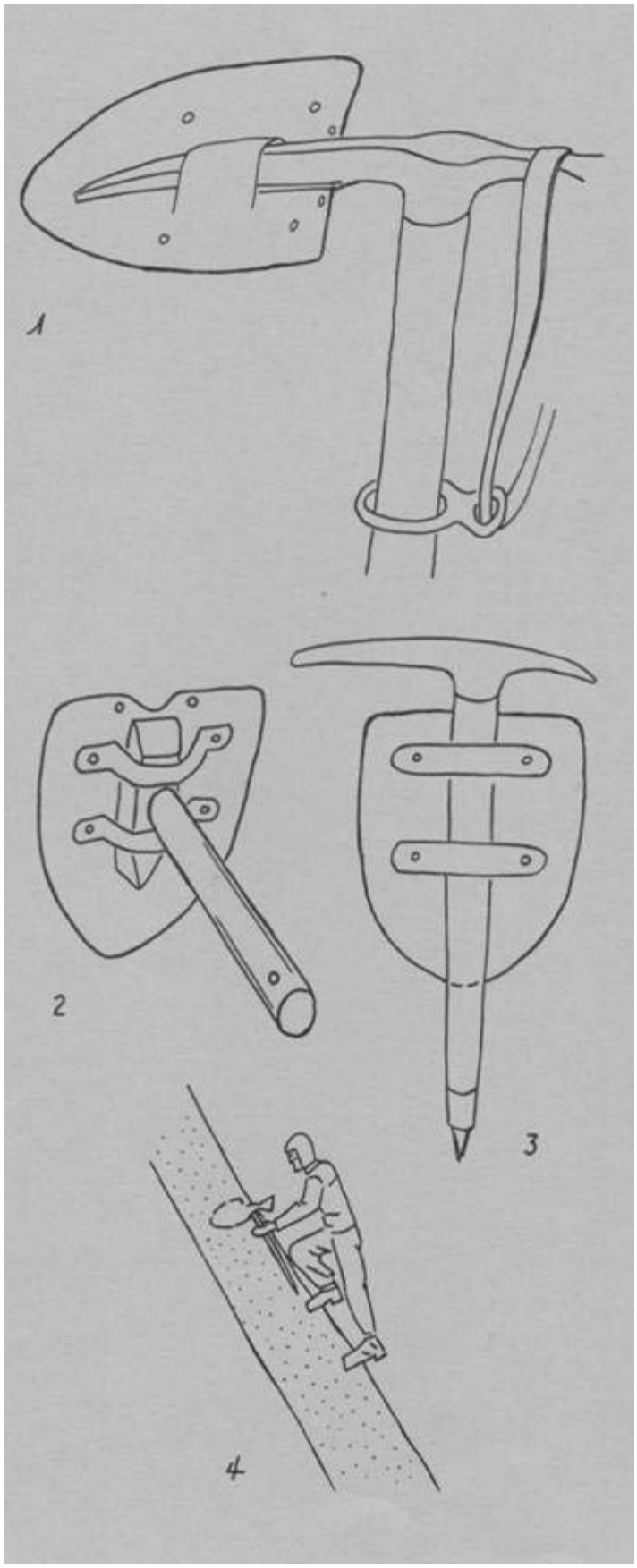
For those climbers who have experienced the many inadequacies of the conventional ice axe in a variety of climbing, belaying and digging situations, the following multi-purpose attachment designed by Toni Meissner of Germany may provide a solution. Basically, the tool is a shovel-like blade, constructed of a tough aluminum alloy, which can be fastened to the head or shaft of an ice axe or hammer. It is some 7 inches long by 5 inches wide and weighs only about 1/4 pound. Attachment of the blade to the axe is by utilizing two brackets, secured by screws and wing nuts, as illustrated in the accompanying diagrams and photographs. A short cord can also be attached from the blade to the axe head as a safety precaution.

The situations in which this attachment can be used are as varied as the sport of climbing itself, but the following will constitute some examples.

For climbing and descending in relatively soft snow (figures 1 and 4). The pick is pressed into the snow with the shaft flat on the slope, similar to the self-arrest axe position. Indeed it can be used as a self-arrest brake in soft snow.

Digging snow caves or avalanche rescue—digging out a victim.

Using the principle of the 'dead man'—favoured in Britain in recent years—the blade attachment fastened to the axe shaft will provide increased security when belaying in soft snow. The increased surface area of the blade, acting against the direction of pull, helps to resist the tendency of the axe shaft to break or pull out (figure 3).



By attaching the blade to a climbing hammer (figure 2) the combination can be used for crossing short snow pitches on a rock climb.

The value of this attachment lies in its utility and lightness; without measurably increasing the load, it can often prove to be a 'life-saver' in a variety of circumstances.

Fran Losie

Pyroclastic Peak *Dick Culbert*

Climbing Reports: Vancouver Island

1971 was an average year for climbing on Vancouver Island, according to those who've been here long enough to make such comparisons. By approximately doubling the number of hikes and climbs on the Island Mountain Ramblers' schedule, the quality of these organized trips was also improved by reducing the number of people per trip.

The Island's three highest peaks were climbed—possibly the first time all three were done in the same year. The Golden Hind was climbed by the "normal" route and the one pioneered by John Gibson in 1970 during the trip to Burman Lake, 7-14 August, led by Syd Watts. Mt. Burman was also climbed during this period and an attempt on Mt. DeVoe foiled by storm. Elkhorn was climbed by a BCMC party from a campsite near "Foster Lake" on 1 July while climbs on Colonel Foster were in progress. Victoria Peak was climbed over Thanksgiving, a three-day weekend, without the use of aircraft. Thanks to a new logging road the mountain is now accessible from the north. Brian Lee, Franz Reuter and I crossed the White River, followed the creek between Queen's Peak and the Victoria-Warden massif and arrived at the campsite on the south east shoulder by evening of the first day. From here we gained the summit via an established route on the East Spur.

I believe this approach was explored previously by Richard Miller. An exhilerating traverse of Mt. Colonel Foster, including a previously untrodden section of the summit ridge is covered in a separate article by Mike Walsh.

Three "new" approaches to Mt. Arrowsmith are worth noting.

East Gully: Leave M&B's Cameron Division's Pass Road at a bridge about 1 1/2 mile before reaching the Rosseau Chalet. Follow a spur road to the right (north), cross creek, and ascend gully east to the Cokely-Arrowsmith col and thence by normal route. Done 27 June by Ralph Hutchinson and Ramblers party. 4 1/2 hours car to summit.

South Direct: Leave Pass Road at any convenient point below the south face of Arrowsmith. Ascend by the most direct route to main summit in 21/2 hours. Source of information: Ron Facer.

Blacky's Route: Follow M&B North West Bay Division Main road along Englishman's River as far west as possible. Finally Road 143A40 crosses the river (now just a creek) and climbs steeply north east. Leave car at creek and follow creek and its main gully above to a small lake just below and south west of the Cokely-Arrowsmith col. Proceed to col or climb one of the gullies on the east face of the summit ridge. Car to summit: 5 hours. Approaches 1 and 3 are bushy; most pleasant in deep spring snow.

On 8 and 9 August Mike Walsh and Bob Tustin established a new route on the north ridge of King's Peak in Strathcona Park. Grade 2 to 3 and worth repeating. There were several other climbs in Strathcona worth mentioning: On 23 May, the south west peak

of Augerpoint was climbed by two parties. Ron Facer and Ralph Hutchinson established a new route on the north west face while Mike Walsh and Tom Volkers duplicated the north east ridge route of the 1st ascent party (Carl Lund and Brian Foan, October 1970) Both routes were Class 3 to 4 and descent was via a south gully.

In August, 1971, Carl Lund and Brian Foan ascended Mt. Mitchell from the south. This was a ridge and face effort, mostly Class 4, and the first time the peak has been approached from this direction. A party of 11, led by Syd Watts, explored the seldom-visited Ash River Valley, the southern entrance of Strathcona Park, on the weekend of 12 and 13 June. An enjoyable day of rambling by foot and canoe was followed by a hike up the ridge east of Oshinaw Lake, with views of Mt. Septimus, the Red Pillar and Fowler Ridge.

Two up-lsland ventures were conducted by the ACC Vancouver Island section. On 2 to 4 September, a reconnaissance of Pinder Peak (5060') was driven back by rain at the 3200' level. Pinder is located between Tahsis Inlet and the Nimpkish Valley. Party members John Gibson, Roger Neave and Alan Robinson feel that this fine-looking twin-peaked mountain is well worth revisiting. On 9 to 11 October, Syd Watts, Jack Clark and John Gibson returned north; this time to the Schoen Lake area. They reached the west summit of Mt. Cain (5920') as well as climbing an unnamed peak connected to Cain by a long ridge. This peak, they called "Mt. Abel". The impressive and apparently unclimbed east summit of Mt. Cain, they feel, would certainly justify another trip to this infrequently climbed area.

Rock schools were held for the first time this year by the IMR. The two sessions at Pipers' Lagoon and one on Mt. DeCosmos, in April and May, attracted about 20 people per trip. Meanwhile, the Victoria Outdoor Club held rock climbing instruction and a snow and ice school on Mt. Baker.

Rock climbing practice cliffs were discovered near the top of Mt. Moriarty, on Parksville's Little Mountain, and on the north side of Cameron Lake. These are all in central Vancouver Island and easily accessible. Ten short routes, Class 4 and up, have been established, and a few have pitons left in place.

Bill Perry

Schoen Lake Area

Sid Watts, Jack Clark and John Gibson arrived at the Schoen Lake turn in the Nimpkish Valley about 2:30 p.m. on 9 October. We started towards Schoen Lake, but seeing a logging road named Mt. Cain, which appeared to lead close to timberline on the south ridge of Mt. Cain, we turned off. The logging road came up to expectations and soon we were at 3700', in the sub-alpine zone. From the end of the road, we walked up a pleasant ridge and emerged above timber in less than an hour, onto the summit ridge of Mt. Cain (5920'). An easy scramble soon had us on the west summit, presumably the one marked 5920', and from there we could see that the east summit, an impressive looking tower beyond an impressive looking gap, might well be the higher of the two, and would certainly be the more interesting one to climb. We assumed that it had not been climbed, for there was no sign of a cairn on it. It was now after 5:30 p.m., and if we were to get back to the car by dark, there was no time for dalliance with unclimbed towers, so temptation was resisted and we retraced steps, camping at that delectable spot at the top of the road.

So far the weather had been fine, though smoky from slash fires, and we planned to spend the next day traversing the ridge from Mt. Cain to an unnamed peak at the other end of a cirque, which obviously ought to be Abel. But in the morning we were enveloped in mist, and the weather showed all signs of breaking. We walked around the corrie between and drove down our logging road to a fork with another, which took us up to 3900' on "Mt. Abel". The weather was now improving, the mist was relatively dry, and it periodically cleared giving us fine glimpses of ridges and little lakes towards Mt. Schoen to the south east, and occasional views of the Rugged Range across the Nimpkish valley. Again, a pleasant walk soon had us above timber and on to the summit of "Mt. Abel", which would have been the last point on our ridge traverse, had we followed the cirque round from Mt. Cain.

We sat on the summit waiting for the mist to clear between us and Mt. Cain, so we could have a good look at the interesting east summit from another angle. But the mist would not oblige and our curiosity was not satisfied.

We carried on down to the car and down the valley, and camped beside Schoen Lake. From here Mt. Schoen (6109') illuminated by the setting sun and almost free of cloud, persists in memory and invites return.

John Gibson

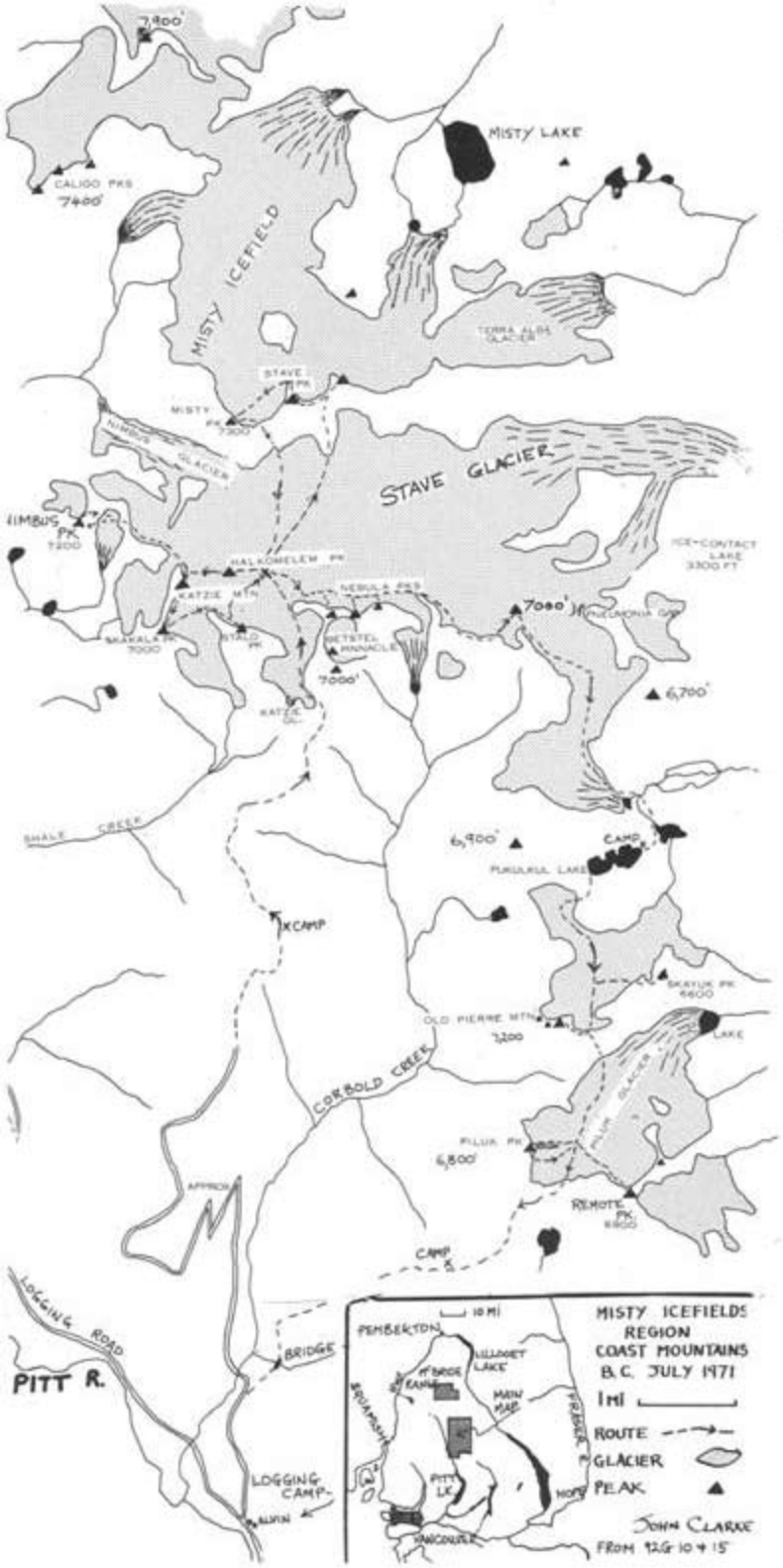
Pinder Peak Reconnaissance

A small party consisting of Roger Neave, Alan Robinson and myself set out on Thursday 3 September for Pinder Peak, situated on the watershed between Tahsis Inlet and the Nimpkish valley. We hoped to reconnoitre the approaches to the mountain on the Friday, and climb it during the weekend. Though only 5060' high, Pinder is a fine looking twin peaked mountain, and a conspicuous landmark from the west coast between Kyuquot Sound and Cape Cook. It is also visible from Johnstone Strait, and ought to be a particularly good viewpoint.

We had a magnificent view of our mountain by the light of the full moon, as we approached Atluck Lake at about 1 a.m. on the Friday morning—and that was the last we saw of it. We camped at the north end of Atluck Lake, and in the morning the clouds were down to 1000' or so. We drove along the logging road beside Atluck Lake until opposite two islands about half way down the lake, then put our boat in the water and rowed across the lake to the base of a prominent rock slide on the slopes of Pinder.

We started up the slide, which is old and moss covered, and offers quite good going. Higher up it got bushier, and the rain intensified, and the bush got wetter. We reached a bump on the ridge at 3200', from which we could see the next part of the ridge and the natural route, changing from forest to alpine in nature, and leading up into swirling mist. (We had come through the lower layer of cloud, and were now between layers, where it merely poured with rain!) Honour was satisfied, and we retreated, saturated.

Misty Icefields *John Clarke*

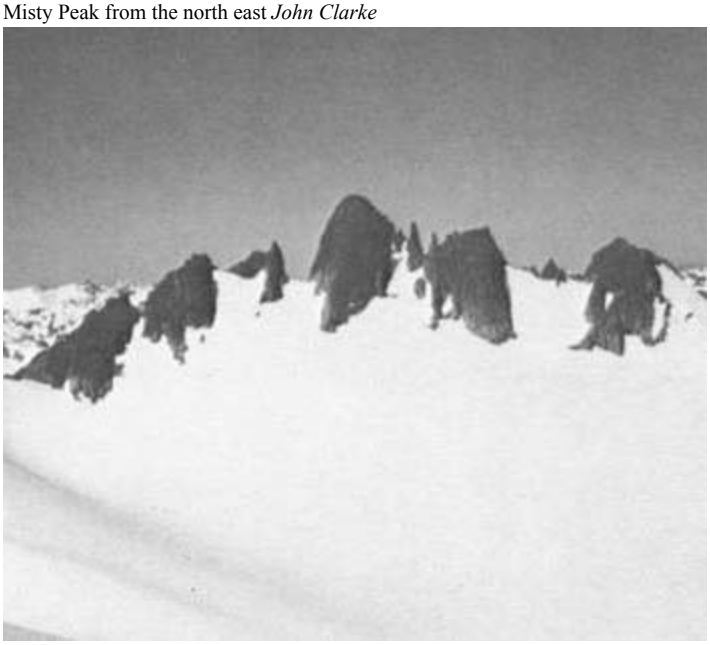


Our camp was saturated too: I think it rained 1 1/2 inches that night. Alan slept in his car, Roger and I in my tent, which leaked. Roger gallantly arranged a plastic over the top while I snored within. In the morning the barometer was lower than ever and still falling. We cooked our breakfast in a derelict washroom which was conveniently available, then broke camp and went home to get dry.

Although frustrated by the weather this time, we certainly want to go back. Canadian Forest Products, in whose logging area this mountain stands, were particularly helpful and co-operative, providing an excellent map of their logging roads, obtaining a camp-fire permit and delivering it to our tent, and offering to ferry us across the lake. From a camp in this area, one should also be able to get at the north end of the Rugged Mountain range, from the road which goes through to Zeballos.

John Gibson

Misty Peak from the north east *John Clarke*



Unclimbed Vulcan's Thumb from the south *Dick Culbert*

Climbing Reports: Coast Range

A good season out this way. BCMC kicked things off with a ski expedition to explore the Whitemantle area south of the Waddington Range, a very successful trip which accounted for seven 1st ascents and ski-tracks in some totally new country (which is now getting scarce). Also on boards, four VOC'ers (Roland Burton, Barry Narod, Sarah Gelling, John Frizzel) made a traverse from Garibaldi Lake around the head of the Pitt River watershed, south across the Misty Icefields, and down to Pitt Lake. They were out 19 days on this episode, of which 17 were in storm. Masochistic, but classic somehow. Due to weather there was no time for climbing, but John Clarke made a solo expedition to the Misty area in the summer and chalked up most of the unclimbed summits there (12 new peaks).

A BCMC spring ski trip to Cayley saw the 1st ascent of nearby Pyroclastic Peak by Fred Douglas, Ross Wyborn and Roger Chicoine. A steepish snow couloir in the north face was used. They were almost joined by Wyborn's dog Buck, who tore out his snow anchor and made a very fine attempt at a diretissima luckily succumbing to common sense. Pyroclastic should not be confused with Cayley's more spectacular neighbour Vulcan's Thumb, which is still very much unclimbed.

All in the name of science, Glenn Woodsworth and Arnold Shives made nine new ascents and five new routes in the Mt. Raleigh area, their best addition being an impressive new ice and rock route on Raleigh itself via the east face and south east ridge, which was Class 4 to 5. Most work was Class 4. Glenn returned later with Tony Ellis to the same region and got in more ascents, but they were forced out of the area when a storm demolished camp.

The BCMC held their main (family) camp in the Kwoiek area this summer, a very imaginative place for family camp as only one expedition had been there before. Their main innovation was the 1st ascent of Tiara Tower by Phil Kubic, Bill Butler, Geoff Mumford an impressive looking piece of rock.

Farther north, in panhandle country, a team of four Americans, Greg Donaldson, Brad Fowler, Craig McKibben and Rich Mathies repeated our last year's route on Devil's Thumb (the one we figured wouldn't be repeated this century). About 40 hours climbing again. They also ascended a summit to the south, now known as "Rosemary's Baby".

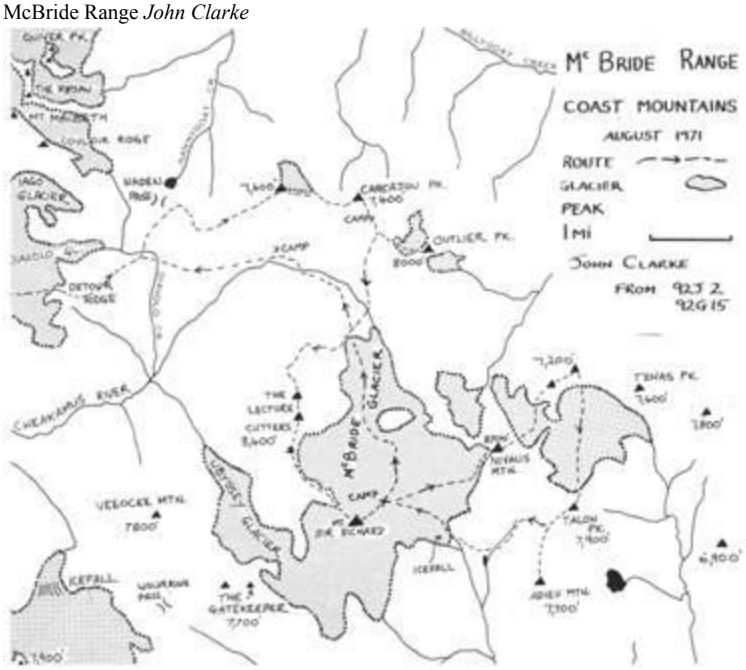
There are getting to be so many climbers that the grapevine is breaking down, so please write when you climb something.

In the same theme, what the Vancouver scene may lack in vitality it is rapidly making up in bureaucracy. A new, all powerful (?) "Federation of Mountaineering Clubs of B.C." has been defined and there are moves to standardize climbing instruction by homogenizing instructors.

For the first time, there have also been serious attempts to

Talon Peak from the ice on Nivalis Mtn. *John Clarke*

McBride Range *John Clarke*



commercialize climbing on the Coast, and it may be of interest that certain people (who have shown no interest in climbing as a sport) are demanding and getting $100 per day and more as "guides" by ripping off mining companies etc. At the same time, 1971 saw the first strong movement here against the concept of pushing climbing as a public sport, especially with regard to building shelters. As a result of this and other factors, only one shelter was put up this year—the Pardoe Hut which was constructed on Dance Platform ledge about two thirds of the way up the main wall of the Chief.

Dick Culbert

Coast Guide Rehash

It is once more time for all lost and benighted souls to send in their personal lists of blunders discovered in the Coast Ranges Guidebook. (Boobs in the Mountain Access trail guide would also be appreciated as I intend to plagiarize shamelessly for trail descriptions.) The new edition will be in two parts. The first, encompassing the southern Coastal Ranges, will treat the regions south of Lillooet Icecap and Bute Inlet, plus Vancouver Island. This ought to be complete by the fall, so this is the last summer to do something new and brilliant and still get reported on. Should you already have innovated and been too slack to write it up in the media, then it's time to confess. Drop a note to Dick Culbert, c/o 1709 Haywood Avenue, West Vancouver, B.C.

Dick Culbert

First Ascents in Garibaldi Park

By 1971, one way to describe any remaining unclimbed peaks in Garibaldi Park was to say they were pretty difficult to reach, not terribly high and technically very easy to climb. However, this description also includes miles of the park's interior suitable for high level overland travelling, either on skis or on foot. The following is a brief description of trips to two such areas in the park in the summer of 1971. The first, to the Misty Icefields, was approached from the north end of Pitt Lake and the second, to the McBride Range, was approached via a route over the Fitzsimmons Range east of Whistler Mountain.

As the Pitt River and surrounding snowfields are notorious for persistent bad weather, all previous attempts at visiting "The Mistys" offered me no more than a few muddy snapshots of the outer ridges and valleys. So it was in sunny weather on 16 July, that the "Pitt Lake Express" took several tons of explosives and one climber to the logging camp at the head of Pitt Lake. This inland tidal lake was the ancient home of the Katzie people of the Halkomelem group of Coast Salish Indians, and some new names applied to features in the icefields are derived from their language.

It was a hot Friday afternoon, and the rest of the day was spent plodding along the miles of logging roads above Corbold Creek, but by nightfall camp was made at 4900' on the approach ridge. Next morning the ridge crest was followed north onto the névé of the "Katzie Glacier", and camp was made in the rocks at 7100' just east of "Halkomelem Peak". There was a flat platform to sleep on and running water nearby, but it was still early in the day and five easy peaks beckoned to the west. Halkomelen Peak was easily ascended and a needle on its east ridge tempted me, but I could only get my hands on top.

"Nimbus Peak" gave a fabulous view of the whole corridor of the upper Pitt Valley and the western face of Mt. Mamquam. It lies at the beginning of a chain of connecting icefields curving around to Remote Peak, with no major drops. This place is made for ski-touring! Deep green valleys accompany the route on both sides. Only 2 1/2 miles long, the "Nimbus Glacier" flows down to below 4000' at my feet. Although most of its névé lies below 7000', the Stave Glacier flowing east is almost 6 miles long and terminates in a lake at 3300'! "Katzie Mountain" (7600'), the highest south of the main glacier, was climbed on snow on the north side after returning from Nimbus. Two other smaller summits, called "Skakala" and "Stalo", were visited before returning to camp at dark.

Sunday morning began with the ascents of peaks to the north of the Stave Glacier, the first being a 7500' peak traversed the month before by a Varsity Outdoor Club group en-route to Pitt Lake. (Sara

Golling, Roland Burton, Barry Narod and John Frizell spent 19 days battling storms all the way from Mt. Garibaldi to the head of Pitt Lake, staying on the ridges and snowfields and climbing over 20,000' in ups and downs!) Next objective was 7700' Stave Peak, (shared with a friendly goat), and the remarkable "Misty Peak", before collecting the camp and moving east.

Stops were made along the way to ascend the "Nebula Peaks", to the south of which an amazing needle, "Betstel Pinnacle", straddled a narrow ridge. Farther east, another VOC cairn was visited on a broad unnamed 7000' summit before dropping 2500' down a nameless glacier which seemed to be just made for skiing. Camp was made on the only dry heather for miles around, just at the outlet of the oddly shaped and still very frozen "Pukulkul Lake" (18 July).

In the morning, the lake was crossed and the route swung into a curious steep-walled canyon that led out of the snout of another glacier, which was followed up to its névé. From here, a short side trip was made to "Skayuk Peak" with a fine view of the Stave Valley, the home of the ancient Skayuk people, none of whom survive today. "Old Pierre Mtn." looked steep from any angle, but the south east slopes yielded via a sinuous route of loose gullies and ridges. After a long glissade down a snowfilled couloir and a march across the "Piluk Glacier" the pack was left again for a visit to Remote Peak, which sported an old surveyor's cairn 4' high and very strongly built. Racing back to the pack, it was still early enough for the side trip to "Piluk Peak", the last of this trip. Toward darkness, I dropped into timber and camped at 4800'. Next day, the logging camp was reached at noon ending a very rushed but rewarding trip.

To save time while visiting peaks in McBride Range at the end of August, a cache had been left the previous week at Whirlwind Peak and picked up en-route. Camp was made the first night under "Carajou Peak" after a long day crossing the Fitzsimmons Range, Detour Ride, Diavolo Flats and the 7600' peak west of Carcajou.

The morning of the second day, 8000' "Outlier Peak" was ascended by the west ridge followed by a 3000' drop to the snout of the McBride Glacier. The Lecture Cutters are three high chizel-shaped summits connecting with the north west shoulder of 8900' Mt. Sir Richard. The first Cutter was a fairly steep 3400' climb from the valley floor with a small glacier at the top end. From the summit, a long and level but narrow traverse followed, the crest dropping steeply to the notch between the first and second Cutter, which is the highest at 8400'. The north ridge of the third Cutter went easy, but the descent to the other side gave some Class 3 rotten downclimbing—the overnight pack being the only impediment.

Once on snow, (there is a moat at the base of Lecture Cutter), the 8600' north west shoulder of Mt. Sir Richard was crossed, and the last 300' of the mountain was a scramble among huge blocks on the north west ridge. The peak is a desolate and lonely place, but has been visited twice before—the Mundays in 1937, and a VOC party in 1969. It was a strange place to be at 8 p.m., but I witnessed a beautiful sunset — Mts. Albert and Tinniswood showed clearly behind the setting sun 60 miles to the north west.

Directly south but below was Mt, Pitt—another mountain very difficult to reach and seldom visited. It was getting dark so camp was made in the rocks just to the north east.

Six hours of electric storms prevented sleep, but the morning was clear and crampons speeded the early morning hike over to 8700' "Nivalis Mountain", the sister peak of Sir Richard. Here the 1968 cairn and records were found intact—no new entries though. The original ascents of "Nivalis", "Talon", "Tenas" and its 7800' neighbour were from a Lillooet River approach. The rest of the day was spent on the two minor peaks north east of Nivalis and climbing over Talon to gain access to the last unclimbed peak—"Adieu Mountain." What's this—another peak with goats on top!

Bad weather was brewing up fast though, and threatened the long walk back to Whistler, so no time was lost regaining the Talon-Adieu Col and dropping into the valley to the west. After cramponning up the right ridge of the steep icefall draining the south east slopes of Sir Richard, the weather was lost for good. Camp was packed up, and the return trip over the next 2 days of heavy rain and snow involved crossing the Cheakamus River on a wild but safe log jam created by an avalanche, and much compass travel over the Fitzsimmons Range. As reported by the VOC trip to the McBride Range, it is ideal for ski-touring, and could be crossed from the Fitzsimmons side to the Lillooet River on an overland trip in about 4 days.

John Clarke

GLOSSARY

Katzie—(Kaytzee) people of

Halkomelem—(Halkomay'lem) Group of the Coast Salish Indians

Stalo—Mainland Halkomelem

Skakala—Infant

Betstel—Needle

Piluk—Sunrise

Skayuk—People of the Stave River Area

Old Pierre—One of the last medicine men of the Katzie people

Pukulkul—Nannygoat

Caligo—Latin word for Fog or Mist

Nivalis—Latin word for Snowy

Tenas—Indian word meaning "small"

Carcajou—(French) Wolverine

Climbing at the Head of Jervis Inlet

A new backpacking programme for high school students has been started at Malibu, at the junction of Princess Louisa Inlet, supported by Young Life of Canada. Much exploration has been now done in this area and most bushwhacking can be avoided by using logging roads and rudimentary trails. Peaks climbed include Mt. Albert (8500'), Mt. Alfred (8100'), "Sun" Peak (7800', at the head of Princess Louisa) and Mt. Pearkes (7000').

The ridges in this area provide easy travel on good granite or on snow. Traverses made include Mt. Pearkes to Mt. Albert and down via Mt. Helena and a logging complex. Another traverse circumnavigated Lausmann Creek from Mt. Alice to Mt. Alfred. An attempt on Mt. George Edwards and Mt. Tinniswood ended at 4000' on the former mountain, blocked by steep bluffy slopes and lack of time. This was preceeded by a two day trek up the very

bushy Haunedrin Creek valley and some rather interesting river crossings.

Of interest to rock climbers is a 5000' granite face rising out of Princess Louisa Inlet and another 5000' face hidden in the deep inaccessibility of the Haunedrin valley.

Paul Starr

Mt. Lindeman, North Face

Mt. Lindeman (as in 'Mt. Lindeman—wherethehells that?') was gnawed out of some mighty nice granite—part of a great granite scar called the Chilliwack Batholith, which runs from the toes of Mt. Slesse eastward beyond Chilliwack Lake. Lovely stuff. The north face drops into an impressive cirque, which is an easy 2 hours pack from Chilliwack Lake (boat required for crossing). Stay in the old stand forests just right of the stream until reaching the brushy cirque floor.

Walls here tend to be big and continuous—our route (likely the longest) being 3500'. Potential lines are mainly up face-crack systems, and although a strong vertical orientation in the cracks will help in the continuity of these lines, lack of ribs or prominent gullies will make them difficult to describe or locate.

Thanksgiving weekend, and Fred Douglas, Alice and I are camped in the cirque for a late season climb. The cirque is double— one should swing far right to avoid the dividing bluff line. We don't and are sorry, losing 2 hours and much energy. Being first on the scene we have an open choice of routes, and take the obvious big buttress leading to the main summit (7900'). As it turns out this is likely the only major route we could have completed within the confines of time and weather, but it is not a recommended line.

The first two-thirds run Class 3 and 4, likely the only such breach in the main wall system. Here our buttress fades into the face, but some shear zones lead on up in easy going. Above this the leads are Class 5, with a few aid moves, and for the first time it looks like we might make the summit by nightfall. Swing to the right around a big bulge of white pegmatite—wierd stuff. We watch a forest fire explode from the forks of Paleface Creek and sweep up 3000' of virgin timber in 15 minutes—that ought to be good for a few nightmares.

Late in the season and late in the day—it's getting cold. A Pacific storm is coming in like a tide, clouds flowing up the valleys, foraging into the draws and finally spilling back into the cirque below—the cirque floor is now 4500' below. 7 p.m. and we've got to be near the top—last lead maybe—but night is closing its jaws and spindles of cloud keep whipping up the wall from the rising sea. We're rushing it—faster than we ought to be—where's that damn summit anyhow? In the lead, I make a mistake and go left instead of taking the chimney which would have come out on the peak 80' above. Perhaps it is just as well, we have a good bivouac cave and it is a cold, stormy night to be without one. Over the summit at first greyness—stiff from the cold and groping in the storm. No cairn on top, we really are in a nowhere region.

We throw stones, count contours, and try to piece together glimpses through the cloud. We decide to try going west and are lucky. There is backtracking, rappelling, uncertainty and wet bush, but no big hangups. Camp by noon.

I recommend this area—it has potential for all grades of rock climbing, and the lake can be crossed in short order with just about any cartop craft.

Dick Culbert

Mount Waddington

The party that met on the 10th of July at Campbell River consisted of 9 climbers, belonging to the ACC, BCMC and the Island Mountain Ramblers—very heterogeneous. Gloomily we looked at the rain, and, as the weather had been consistently bad for eight weeks, we knew of other failed attempts or cancelled expeditions that year. So it was a surprise to find the pilot prepared to take off, and more of a surprise to land an hour and a half later on Ephemeron Lake at the foot of the Tellot Glacier. We were able to make an air drop on the Tiedemann Glacier, somewhat short of our objective due to low cloud.

During the next few days we were treated to improving weather, which brought very unstable snow conditions; our progress up to Rainy Knob was uneventful. The snow was so soft and the avalanching such a hazard on the Bravo Glacier that we climbed at night and came off it by 9 a.m. On one day Werner Himmelsbach, Bob Tustin and Ralph Hutchinson were uncomfortably close to an avalanche that buried their tracks of a few moments before. Finally an advance party of Bob Paul, Mike Walsh, Carl Lund and Ralph Hutchinson got up to Spearman Col and set up high camp. The next day a storm blew through, so very little sleep was had as the tents kept blowing down and we had to hang onto the poles. But after three hours sleep we got up at 3:30 a.m., and to a crystal clear morning set off at 5 a.m. Cramponning up to the base of the Tooth was most enjoyable after the days of wading waist deep through unconsolidated, unstable snow.

We had previously considered the north west ridge, but as we were later in the day than we had planned, and as the mountain was still very white, we decided to stick to the tourist route. So up into the rain of shattering ice feathers we climbed, and found parts of the traverse up to the notch unsuitable, so had to make a detour up onto the face of the Tooth before crossing over to the notch. It was already 1:30 p.m., and there was a good deal of ice and verglas in the chimney.

After lunch under the first chockstone, which gave protection from the falling ice, we struggled on up, Bob Paul leading Ralph Hutchinson on the first rope. The exit at the top of the Chimney was barred by an enormous overhanging icefeather so we had to use a sporting exit to the left. At this point we found the second rope, which Mike Walsh was leading, had been cut by falling ice, so he and Carl Lund completed the climb on an 80' rope. None too soon we were on the final pitch but it was not the scramble we had read of—instead it was 6" of snow on ice. We reached the summit at 6:40 p.m., and after a hurried photograph started the descent. By 9 p.m. it was getting too dark to see the holds on the chimney, so we settled down to a bivouac in our lunch spot. Fortunately it was a beautiful night, and as soon as it was light enough we continued on down.

Our descent was uneventful except for time spent watching the avalanches and waiting for snow to consolidate on the Bravo Glacier. When we finally reached Rainy Knob we found only one occupant, Bob Tustin, who told us that Nick Schwabe, John Fletcher, Frank Foster and Werner Himmelsbach had gone over to the Plummer Hut and had a fine few days climbing Claw Peak and the peaks at the head of the Tellot Glacier. On the 23rd of July we descended the Tellot Glacier and the next day carried on to Ghost Lake where we were picked up according to schedule.

Ralph Hutchinson

Devil's Thumb

Four of us left Seattle by ferry for Wrangell, Alaska and Devil's Thumb on 11 June. Greg Donaldson was fearless leader since it was his idea. Rich Mathies, Craig McKibben, and Brad Fowler rounded out the party. In March we had been a bit disappointed to learn that Dick Culbert and party had made the 2nd ascent of the Thumb the previous summer, but his help was very valuable. During the two-day cruise to Alaska, we entertained the passengers by making wands, greasing boots, and putting macaroni into little bags.

Because of our early June arrival, we had little alternative to Beckey's classical approach, which begins on the Stikine River, follows the Flood Glacier west to its origin in the icefield, and then turns south toward Devil's Thumb. On 14 June Chuck Taylor made our airdrop beneath the Thumb and landed us on the Stikine just below the mouth of the Flood River. Surprisingly, only an hour brush crashing and several more walking along the river bank brought us to the moraine. The remainder of the 19 mile approach took three days, mostly on skis, with a skiing injury slowing progress badly the third day.

Once camped below the peak, we recovered our drop and began trying to climb. The weather refused to co-operate. In the next eight days we made three retreats from the lower flanks, each time in a snowstorm. Our one success was to climb a smaller pyramidal peak just south east of the Thumb while it was plastered with new snow. Ultimately the weather cleared and we set off up the east ridge, Culbert's route. (CAJ, 1971,2) Beckey's route on the south east face was sure to avalanche as the day progressed, and our prospective new line seemed a bit much. The climbing on the "lower knees" was steep and challenging, that above on the narrow crest generally easier but doubly exposed. We were still looking for the summit at the end of every lead when it became too dark to continue. However, there was no ledge at the belay. One more pitch in the dark brought us to a platform on the crest large enough for four. Clear windless skies incredible exposure, and an awe-inspiring panorama made it a fantastic bivouac. Five more rope lengths in the morning put us on the summit.

Rather than descend the ridge, we decided to rappel directly down the south east face to the snow shoulder of Beckey's route, starting near our bivouac site. This was possible because a long spell of good weather in late May had cleared most of the winter snow from the face, and recent accumulation had pretty well cleared during the ascent. Eight 150' rappels brought us to the snow, which we quickly crossed to the rock at the top of the shoulder. In deteriorating weather, we continued down, reaching the tents at 1 a.m.

Mediocre weather alternating with whiteout characterized the last part of the trip, and prevented a good attempt on Burkett. One semi-serious attempt was made on an impressive peak north of the Flood Glacier, but unforeseen difficulties and a lack of time caused Greg and Craig to turn back. On 6 July, two days later, we were picked on the Stikine, and caught the weekly ferry home the following day.

Brad Fowler

Black Dike, looking down from the first roof *Dan Reid*

Climbing Reports: Squamish

Spring came agonizingly late this year to Squamish. Torrential downpours persisted late into March. By the time things were beginning to dry out, it was time to hit Yosemite (and its storms; bad news all around).

The finest ascent this year has to be the 4th ascent of the Black Dike by Squamish regulars John Burton and Paul Piro. During a beautiful stretch of warm weather in early summer they fixed the first three leads, then completed it to Bellygood Ledge in 2 days. The top 400' of the Dike is still unclimbed. The first lead from Bellygood Ledge looks extremely difficult and undoubtedly will receive a concerted attack this coming year.

Not much in the way of 1st ascents succeeded this year on the big walls, although several outstanding defeats were suffered. Tim Auger and Neil Bennett attempted to complete the abandoned Breakfast Run route on Tantalus Wall. They reached the previous high point halfway up the final wall quite easily, dispelling rumours of death defying A4 to the roof. On the next pitch however, Auger

Black Dike, John Marts in the hammock bivouac *Dan Reid*

Eryl Pardoe hut nearly complete *Dick Culbert*

Crossing Belly Good ledge, Dance Platform in the background *Dick Culbert*

encountered severe difficulties just above the roof and ended up ripping out. They came down on their second day.

More and more climbers each year are tackling the established big wall routes. Grand, Tantalus and University walls are the most popular. Among the active enthusiasts, Greg (Bricks) Shannon and his friend Bert climbed Grand and Tantalus in 2 days each. Bricks went on to climb University Wall to the top in 2 days. Richard Doorish from south of the line ascended fixed ropes to the top of Split Pillar on the Grand Wall and then completed it to Dance Platform solo.

Horror stories concerning existing routes are rapidly disappearing as the terror barriers fall to the new school of up and coming climbers. The one route opposing this trend is Gordie Smaill's Grim Reaper on the slabs. Several parties have attempted it, but no one yet has been able to put together the phenomenally thin unprotected moves on the third pitch. There seems to be some question as to how Gordie actually accomplished this section. The crux, however, is supposedly on the fourth pitch!

Another beautiful slab route is being pushed up between Sickle and Diedre and is called White Lightning. As it stands now, half a dozen climbers have had a hand in it, and two long difficult leads remain.

Jim Sinclair was active along the base of the Grand Wall. With several different partners he established several short enjoyable routes.

As the limits are pushed further and further, trends toward difficult free climbs on the Apron and along the base of the Dike and Grand Walls are imminent. Difficult aid climbs are becoming scarce, especially on the big walls where the aesthetic lines are rapidly being climbed out. However, there is still a lot of scope for new extremely difficult slab climbs.

Sadly, in the future, as society's pressure mounts higher and higher, a new breed of intensly competitive rock gymnasts may dominate the scene. Still, the old aesthetic routes will always exist for those who seek the beauty and peace of the high walls.

Hugh Burton

Black Dike, Second Ascent

CRACK !!!... Reflex thrust me against the tree and John Marts flattened his squatting body against the face. A huge section of wedged flake carrying Dave Rogers clutching a two inch angle, catapulted toward our belay spot. During the next fraction of time all questions, anxieties and pessimism about the Black Dike, and for that matter about climbing in general, crossed our minds. A second CRACK and chunks of rock splattered in all directions off hands, skulls and backs . .. then, except for the path below, [here was silence. Yes ... I was there .. . and ... oh yes, that pile of moving rock ... John was there too ... and thank God, Dave was still clutching an angle suspended from the overhanging crack system by an "A-oner".

Thus began our acquaintance with the newest Grade 6 on the Squamish Chief. Ahead lay a fractured, multifaceted, dioritic intrusion whose 8' width snaked up and over three large overhangs conspicuously partitioning Howe Sound's massive guardian. Our usual slow start had us only half way up the second lead with the sun overhead as repercussions and speculations echoed from the spectators below while we began our first transient retreat to Squamish Hospital. Dave's hand had yielded severely to the Chief's sharp crystalline abrasiveness and later required a plastic surgeon's attention. We had struck a tender nerve in His Majesty's spinal cord, and remembrances of this episode contributed little to lessening our apprehension as John and I jumared up our ropes the next morning.

Another factor was painfully evident. We were a bit chagrined at knowing that weekend climbing limitations would force us to use siege techniques, a method strongly frowned upon by the true hard-man. The first duo up this route two months earlier, Al Givler and Meade Hargis, had taken three weekends to reach the now familiar Belly Good Lodge. The outlook for our second tour-de-force didn't look much better.

The first lead started up the wet, slimy, left side of the dike, angling across to a large tree on an adequate ledge 130' from the base. The second proceeded up and to the right, across the dike proper. Several tipped-in horizontals and a rurp using a converted soloing technique alleviated an ever present friction problem, and ended on a one foot down slopping platform 150' from the tree, and immediately below a cavernous roof. Directly overhead on a line exceeding the vertical, the end of the fourth lead was barely out of sight. A quick glance at the terrain below revealed fresh scars, broken branches of trees and pockets in the ground, characteristic of the area beneath an unstable healed joint surface.

John quickly scampered up the first portion of the next lead, and was soon overhead, his back in a body jam under one of the several huge leaves composing the innermost portions of the roof's underside. Finally, after several heroic stretches and contortionistic maneuvers, the first and only aid bolt was placed, enabling us to reach the end of the third lead, still below our first major obstacle, the Great Roof. From our perch just left of the dike we could look straight out and see the tip of next weekend's obstacle.

True to form, Dave was back at it next weekend ignoring an obviously compromised hand, wrapped in gauze and tape. By early morning, we had remounted our ominous perches and were busily pecking away under the loose blocks which tiled the ceiling of the Great Roof. As I neared the roof's apex, gaining hubris with each successive adequate combination of pin placements, resounding ping and crack struck a familiar note. Below, a new crater appeared, made by the impression of the block from which I had just been hanging, and suddenly, at eye level a mere 10' away stood Dave, startled, with belay rope firmly in hand. I hung like the proverbial spider from the ceiling, relying entirely on a trusty 9/16" hex.

That night's rappel and pendulum into station number two below served only as a reminder of what lay ahead.

Short lived cockiness accompanied us on the beginning of the fifth lead, for arduous grunts and groans soon could be heard down Howe Sound. An abrupt reversal of inclination combined with top stirrup nailing accompanied searching hands on the second roof. A long stretch to the left and a triumphant mantle placed us over the lip. Even Tarzan himself would have made a weak second to the primate vulgarities issued by our victory over "Argh" Roof.

The third weekend left us with five leads down and five to go. Foul weather and threats of inundation forced a late start, and it was mid-afternoon by the time we had hauled up all our bivouac gear and equipment to the previous high point. A feeling of uneasiness prevailed as we prepared to dash for the protection of the next, and last, roof, and waited for our ascenders to cool. I think we had come to believe that somehow our no longer fixed ropes were responsible for holding this friable route together.

The sixth and seventh leads were relatively easy with mixed free and artificial climbing. That evening as we struggled into our hammocks, alpine glow highlighted the fjord-like features of the British Columbia coastal inlet below.

After picture taking ceremonies the next morning, amidst outbursts of accusations from John that I held the belay rope with one hand and the camera with the other, the final roof was surmounted and the haulbag became airborne. The ninth, and for the most part, longest, lead followed the upper left leaning sinuous course of the dike. It meandered first to the right, then up the face of a loosely adhered dull sounding flake with precariously tied off short Lost Arrows. This was followed with a tension traverse to the left, and terminated at ropes end a bolt far to the left of the belayer.

John's victorious "Off belay!" on the final lead unveiled our scarcely concealed feelings of accomplishment, and soon we were toasting each other's achievement securely fastened to a big pine tree atop Bellygood Ledge—one of the few stable positions on the fickle Black Dike.

Dan Reed

Sneeze, Shannon Creek Wall

Starts ca. 150' to the right of Weeping Wall, below the Big Chimney. The first lead goes up mossy slabs for 20', then traverses left to a small tree and easier ground. Follow up ivy covered slabs to a good belay tree. The second lead ascends the slab behind the tree, using an obvious crack, to the bottom of a steep corner. Nail the corner to a small tree and ledge. From here the third traverse down to the right. Nail the obvious crack to its end then use bolts and sky hook to gain the upper slab, and angle right and up to finish. First ascent, John Wurflinger, Bob Cuthbert and David Calbeck. Take about 12 angles up to 1 1/2 inches, also a sky hook. 5.6, A2. The difficulties will increase when rock is wet.

John Wurflinger

The Eryl Pardoe Memorial Hut

By the spring of 1971, huts had become a controversial topic among climbers in Vancouver. The Vancouver Section of the Alpine Club had returned a $5000 grant for huts, (due to lack of what it felt were suitable sites), and feeling was running against huts in general. Those of us committed to putting up a memorial for Eryl Pardoe, who died in July 1970 on American Border Peak (CAJ 1971, p. 53) were in a quandary. Most of us agreed with the current anti-hut sentiment but we also felt that a hut would be the best possible memorial for Eryl. Fortunately, Dick Culbert came to the rescue by suggesting an ingenious hut site which did not seem to spell ecological disaster: the Dance Platform of the Squamish Chief!

The suggestion was particularly apt because it was both useful— five major climbs end on this ledge (CAJ 1971, p. 12; see correction CAJ 1972) and many climbers have bivouacked, often in rainstorm, while waiting to complete their climbs—and appropriate— Eyrl had taken particular interest in the Chief and had completed three of its longer routes (Grand Wall, Tantalus Wall, and University Wall).

Once this reasonable suggestion had been put forth, new problems arose. We needed a hut which was very economical, simple to build, large, and easy to transport using pack frames as helicopters were out of the question! The whole problem boiled down to that age-old nemesis—money.

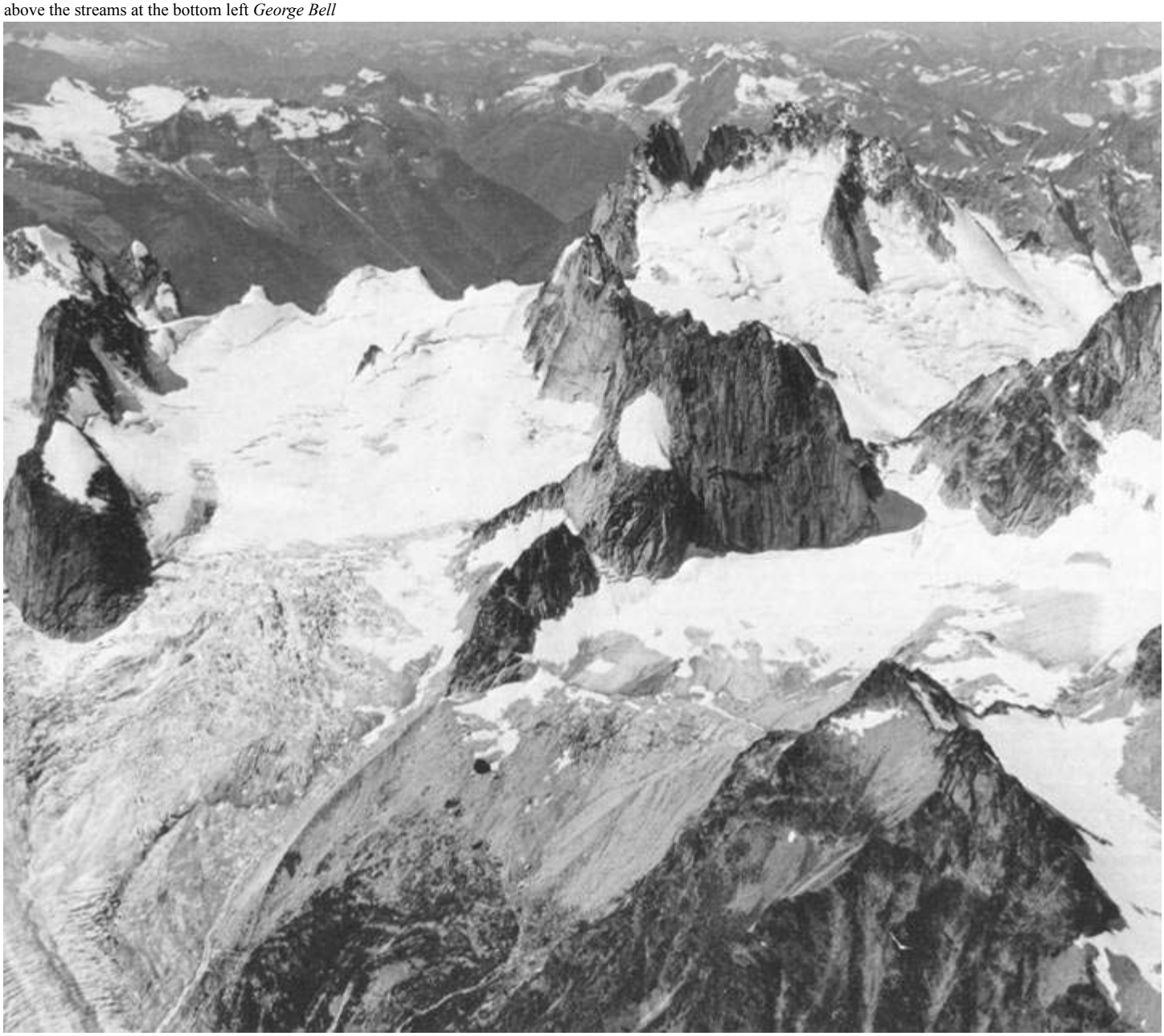
Byron Olson, who is a professional architect as well as a climber, kindly agreed to take up the challenge. His solution took us back to Grade 12 solid geometry—solids whose sides were made of regular polygons. A dodecahedron was rejected because it was too large and perhaps a bit complicated to build. Finally Byron settled on tetrahedrons with a common face. When the structure was completed, it looked like a pyramid to which another pyramid had been attached; the base of the first pyramid was horizontal and the base of the second was at an angle of 60 degrees to the horizontal. Since the ledge had a natural slope of about 30 degrees, a bit of excavation in the surprisingly deep soil allowed us to solidly anchor the hut to angle irons driven into the earth. The hut was built of 27 large equilateral triangles each about 5' high. These were prefabricated one Saturday in Byron's basement. Fortunately, many people showed up, otherwise we wouldn't have completed all the work in one day. The following weekend, volunteers strapped these unwieldy triangular sections to their pack-frames (sometimes as many as three) and carried them to the top of the south peak of the Chief, a gain of about 1500'. There, Dick Culbert organized a system of ropes and carabiner brakes that allowed us to lower all the pieces about 350' to the Dance Platform.

In the meantime, Byron and a group of others had crossed Belly-good ledge and were excavating the hut site. Because of the tremendous responses by volunteers, the hut was almost built in one day. It was finished the following weekend by putting up the aluminum siding and the plexiglass windows. The hut was made possible through the Eryl Pardoe Memorial Fund to which many friends and relatives of Eryl had contributed. It provides shelter for six to eight climbers who can sleep either on the floor or on the sleeping platform. It is only accessible by one of the Grade V climbs to the Dance Platform or by Bellygood ledge which is very exposed Class 4, and has a hard to find beginning. The hut is further protected from vandalism as it is invisible from the highway because of the many trees around it.

All of us involved in its construction hope that it will be used frequently and treated well. We also trust the hut will serve as a fitting memorial for a fine climber and a good friend.

Paul Starr

The Bugaboos: Marmolata and Hound's Tooth on the left, Snowpatch in the centre with Pigeon and the Howser Towers behind, Bugaboo on the right. Boulder camp lies above the streams at the bottom left *George Bell*



Climbing Reports: The Interior Ranges

The 1971 climbing activity in the Interior Ranges was very widespread indicating a growing interest among climbers in several excellent areas. All the major areas received at least one visit, generally from substantial parties.

As usual, the Purcells received much attention from climbers. In the Bugaboos Chris Jones, Galen Rowell and Tony Qamar made a fine new route on the west face of the N. Howser Tower, 34 pitches rated VI F9 A2. Among new routes on Snowpatch: on the east face, to the right of the Beckey route, a route by Peter Carman, Yvon Chouinard and Doug Tompkins, while another was put up by Chris Jones and Jeff Lowe, on the south face. There were other routes and the usual number of climbers.

Furthermore two other areas of the Purcells were visited by the ACC. The Vowells, an excellent granite area of beautiful sheer faces was the scene of the Climbing Camp. Further south, the General Camp was held in the Farnham Creek area. This camp was notable for the diversity of peaks climbed and the number of new routes and ascents. Also in the Farnham area, Fred Beckey and John Rupley made an ascent of the 3000' east face of the Lieutenants, Grade 3, in early August.

Other activities in the area were those of the Larson and Wagner groups, both in the Taurus group. The Larson party made ascents of Mt. Harmon (north west ridge). Mt. Nanette, Mt. Carmarthen (east ridge), Vega Peak and several others. The Wagner party made ascents of Leitrim Peak (south east ridge) Eire Spire, Mt. Donard and Mt. Cuchalainn.

The middle of July saw a contingent of Putnam troops, 13 strong, arrive by helicopter in the Remillard area of the N. Selkirks. In the subsequent 10 days many of the peaks were named and 1st ascents made. Notable among them were three routes on Remillard Peak, and 1st ascents of "White Face Tower", south buttress by D.

Michael and G. I. Bell, rated F6, and the "Waldorf Towers", by W. L. Putnam, D. Michael, G. I. Bell and D. Jones—west tower F4 via east ridge, east tower F5 via north face. Several F6 to 7 routes were done on a 1000' granite cliff directly above camp.

Meanwhile Fairy Meadow came under siege in the last days of July by more than 20 climbers representing the Calgary AC, Youth Hostel and Kootenay MC.

In the Southern Selkirks, climbers were also on the offensive. First a Vockeroth party climbed several virgin granite spires in the vicinity of Thumb spire in the Nemo group of the Battle Range. Later the Toronto AC arrived to do a number of new routes on Mt. Nemo (north east ridge, north face), Mt. Evening (south face), Feather spire (north east snow ridge and face), "Mazinaw", and Mt. Nautilus (east snow arête).

The Rogers pass area was generally neglected, the only completed route being that of the Patterson party via the ice ramp on the north face of Mt. Bonney. Several uncompleted routes on the south face of Mt. Tupper and north face of Mt. MacDonald. Further the Loop creek pillars were climbed free-F8 providing short severe climbs a few minutes walk from the Wheeler hut.

In the Valhallas, another area of granite faces, John Roskelly and Roy Kligfield climbed the obvious crack system on the right hand buttress of the north face of Dag. They called the route "Sweet Judy Blue Eyes Buttress" and required 3 days to do the climb which they graded VI F9, A3. In the same area Chris Kopczynski and Doug Fosdick made the first ascent of the 2000' east face of Gimli II in one day, rated III F3.

Surprisingly even the Monashees had two visits this year. In the north, Tom Dakrowski with 10 others climbed "Panorama Peak", ''Mica Mtn.", "Mt. Sérac", Little Flapjack, "Leo Peak", "Sandman Mtn." and Mt. Revenge, all 1st ascents in the Dominion group. In the south Monashees, around Mt. Thor, several peaks were climbed by a party led by Don Vockeroth.

Climbing appears to be increasing in the Interior Ranges, in particular in those areas which have not previously enjoyed much attention. In future as access improves it is expected that climbers will visit more of the granite areas which offer some of the best rock climbing potential in Canada.

Dave Jones

Kamloops

Defections, deluge and duty combined to stymie the major aspirations of the Kamloops climbers in 1971. However, there was welcome liaison between this centre and Leon Blumer's Kelowna group. The combined operations assaulted Mts. Bonnie and Rogers and also teamed up for a rock school at Vernon.

There has been a notable increase in the number of people seeing the true light and consequently going on the rocks. My main relaxation over the past summer has been introducing some of these to the fundamentals of rock climbing. The local rocks offer considerable scope in this regard.

Mt. Dag from Mulvey meadows, Judy Blue Eyes follows the sunlit buttress near the left skyline *John Wurtlinger*

The Kamloops Outdoor Club forsook their usual foray into the Monashees this year in favour of a leisurely hike along the Skyline Trail from Jasper to Maligne Lake. This is a particularly attractive safari into the mountains, even if you don't find much tiger spoor.

Anyone having news to impart re activities in this part of the interior should contact me so it can be recorded in the Journal report.

Hugh Neave

The Northern Monashees

The guidebook to the Interior Ranges has several interesting things to say about the Northern Monashees, one of the more intriguing being that the area has received little attention from climbers. Looking for lots of solitude, a few virgin peaks and some genuine wilderness, our group decided to fly into the Pancake Peak area during the first week in August. The economics of helicopter transportation dictated that we have a large group. Members of our convention sized party were. Tom and Judy Dabrowski, Les and

East face of Snowpatch Spire
S South Summit, N North Summit 1 Bedayn, Arnold (regular route) 2 Beckey Mather 3 Chouinard, Carman, Tompkins 4 Davies, Derouin, Rowe attempt x point where Buckingham route crosses to east face *Urs Kallen*

West face of Snowpatch Spire
S South Summit, 1 Greenwood, Homer 2 Davies, Derouin 3 Krans, McCarthy, Rupley (best descent route) 4 Beckey, Rowell 5 Beckey, Greenwood, Mather, Pigou *Urs Kallen*

Betty Davenport, Jim and Jan Hartley, Pete and Sally Owzarski, John Rowley, Martin West, and John Young.

Our climbing was centred about two base camps. From the first, located at the head of Moose Creek, we climbed "Panorama Peak"(ca. 8400') on 31 July, via easy rock, snow and heather on the west ridge. The peak lies immediately north of the large lake alongside the Foster Glacier, On 1 August we climbed the highest summit along the ridge running through Pancake Peak. The elevation of this summit was ca. 9900' (incorrectly reported as 9750' in the guidebook), and we named it "Mica Mountain" in honour of the stuff which kept blowing into our eyes, lunch and cameras. The route was up the left half of the east face, via relatively unbroken glacier, then up a short Class 3 rock pitch on the ridge south of the summit. Next day, from the same camp, we climbed "Mt. Sérac" (ca. 9400'), located just south of Moose Creek/Bone Creek pass, by a moderately broken glacier on the north east side, we then spent two days moving our camp down Moose Creek and up Siwash Creek. The travelling in both of these valleys was surprisingly easy—we encountered a total of not more 200 yards of slide alder on the entire route.

From an almost perfect camp at the northern end of Siwash Creek, we climbed the following peaks lining the valley head: "Little Flapjack" (ca. 8400'), located just north of Pancake Peak and on the same ridge, "Leo Peak" (ca. 8400'), located immediately north of the Siwash-Pancake pass, and "Sandman Mountain" (ca. 8800'), located across the Siwash Creek valley from Little Flapjack. All three of these climbs were easy and can be done in one day by following the connecting ridges. Three other minor points along these ridges were also climbed.

On the last day of climbing, John Rowley led Martin, Les and Betty up the easy side of "Mt. Revenge" (ca. 9400'), located north east of the Pancake Glacier and north of Oventop Ridge. Les and Martin also climbed to the east end of Oventop Ridge from the north side.

All of our climbs, with the exception of Oventop Ridge, were 1st ascents and a cairn and register were placed on each peak. Names appearing in quotations were assigned by our group. The rock we found in this area was generally very rotten.

Tom Dabrowski

Häsler and Feuz

The article "A Climbing 'Log' in the Southern Selkirks" (CAJ 1971, pp. 14, 15) refers to Edward Feuz Jr. and Christian Häsler Jr., however the photograph on page 15 shows Edward Feuz, Sr. and Christian Häsler, Sr. For a number of years the CPR brought both men over from Switzerland each summer for the climbing season. Edward Feuz, Jr. accompanied his father for some years. In 1912 he and Christian Häsler, Jr. were brought over and settled in Golden, where Edward Feuz still lives. I feel sure that it is Ernest Feuz, brother of Edward Feuz, Jr., whose name appears after that of Engelhard (Georgia Engelhard, now Mrs. Eaton Cromwell of Zermatt).

Ernest Feuz and Christian Häsler, Jr., were the guides at Glacier when I was there in 1921 and 1923, and they remained there until

the hotel was discontinued. I was also at Glacier Circle in 1932 with Christian Häsler, Jr., Caroline Hinman and Charles S. Hunter. We climbed the Feuz and Häsler peaks (named for the seniors) but left no graffiti in the hut!

The obituary of Edward Feuz, Sr., gives a lot of history of his climbs and also has a portrait (CAJ 1944-45, p. 128). The obituary of Christian Häsler, Jr is in CAJ 1940, and that of Ernest Feuz in CAJ 1967.

Lillian Gest

Trout Mtn.

The 1st ascent of this 8819' peak in the Goat group was made by Bill Fix and two others.

Dag, North Face

Roy Kligfield and I completed this strenuous climb in a little over 3 days, after 2 days of packing our gear through the dense undergrowth' that barricades the Valhallas.

We chose a crack system that, to our advantage, continued from a third of the face to the top. The route is located on the right hand side of the face, beginning at the bergschrund of the glacier and continuing up and right to the large couloir separating Dag from a sub-peak. Were we cut back left onto Class 3 and 4 ramps for several 100'. Class 5 cracks brought us to a large ledge system we named Smorgasbord ledge.

Here the difficulties began. For the next 2 1/2 days, Roy and I cleaned and nailed the moss filled cracks. When the opportunity arose we free climbed, mainly up slanting jam cracks. One vicious chimney, short but sweet, had the best of me, almost. On the morning of the third day we reached the prominent ledge that cuts across the entire face near the top. This was named White Whale. Several difficult leads brought us to the top and a reunion with unexpected friends. We named the route Sweet Judy Blue Eyes Buttress.

Take a good selection of 50 pins, mostly angles up to 3 inches. No climbing bolts. Several belay bolts-hangers in place. VI, 5. 9, A3.

John Raskelly

Gimli, East Face

At 7 a.m., 6 August Doug Fosdick and I scanned the lower portion of the east face of Gimli from the Valhalla hut. We decided to climb the north east buttress of the mountain to approximately one third of the way up the face—then traverse south to the middle of the face. This portion of the climb we completed with several protection pitons. The remaining two thirds of the face was Class 4—except for the last pitch, which was 5.0 and several pitons. The summit was reached by mid afternoon, thence the descent down the south east ridge and a long traverse across the east face back to Mulvey Lake. Ill, 5.0.

Chris Kopczynski

The Bugaboos

1971 proved to be the most active summer in the Bugaboos for at least ten years. Quite a few climbers were active for varying periods of time, and with good weather throughout most of July and August several excellent climbs were made.

The outstanding climb was that of the west face of North Howser Tower by Chris Jones, Galen Rowell and Tony Qamar. It's really amazing that on this 35 pitch climb only two aid pitches were encountered.

Snowpatch in particular was the object of attention. Four distinct new routes were made on the peak and a fifth was so near completion that it surely merits recognition as a new route.

Pete Carman, Yvon Chouinard, and Doug Tompkins made a second route on the east face. This route starts a short distance to the right of the Beckey-Mather route and follows what from below appears to be a single continuous crack to the north summit—certainly the crack in the lower section below the overhangs is too obvious to miss. Three days were required on this predominately aid route.

The south west face of Snowpatch, one of the most attractive faces in the Bugaboos was climbed by Chris Jones and Jeff Lowe. Unfortunately their report confirms what had generally been suspected, that the quality of the rock in general was not up to the usual high Bugaboo standard.

On the shorter west face of Snowpatch two new routes were made. The first, by B. Greenwood and G. Homer, starts on the west face and follows an obvious creek system to a large ledge on the south west ridge, the top part of which is then climbed. The second route by Ted Davies and Pat Derouin share a common start with the first but then follows a more direct line to the top of the face.

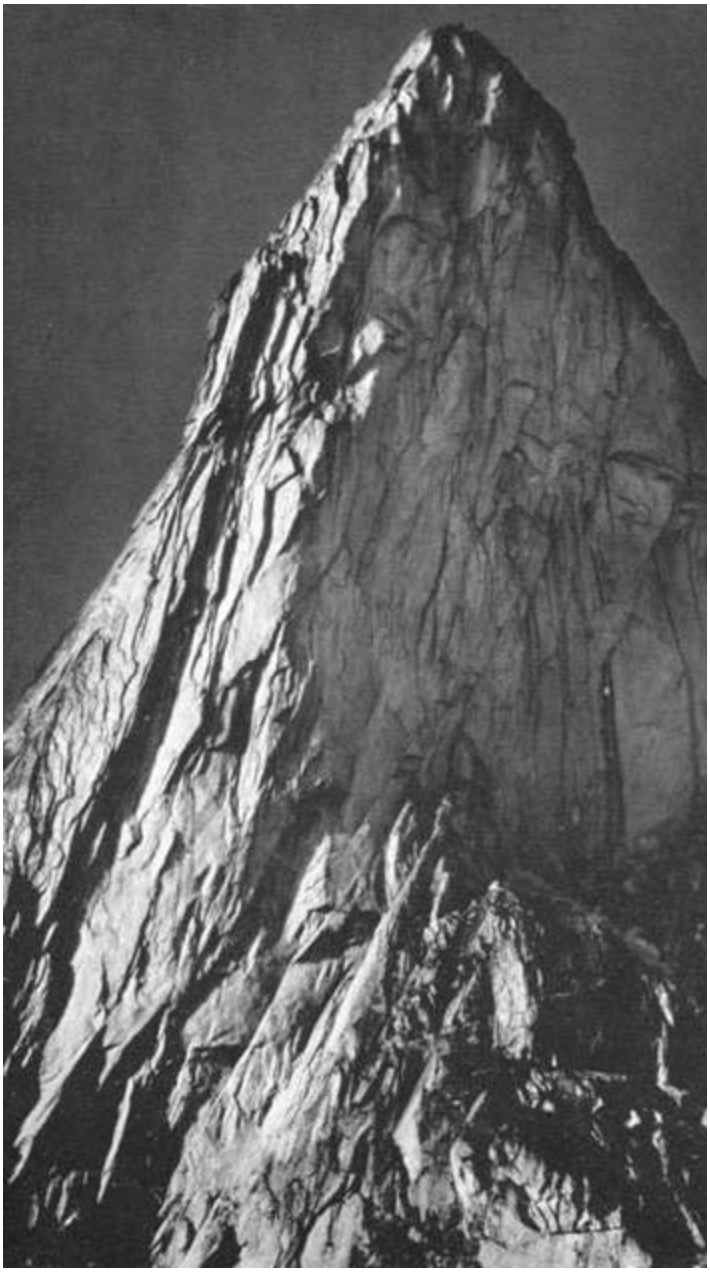
Many climbers on their way to Bugaboo Col have stopped below the col to consider the crack that follows the north east corner of Snowpatch. The big deterrent to climbing it seemed to be that a good deal of aid would be needed, calling for a large number of bongs. It was quite a surprise then to hear that Ted Davies, Pat Derouin and Ian Rowe had climbed it almost entirely free, the climbing being up to 5.9 standard. From the top of the crack they traversed onto the east face and continued towards the north summit. Unfortunately a bad storm forced retreat when they were some 300' from the top, though surely by this time they must have joined the upper part of the Buckingham route.

Brian Greenwood

Snowpatch Spire, South Face

The absolute vertically and symmetry of this classic face have always appealed to me when in the Bugaboos, or looking at pictures of them. A fine route was established on this face by Hudson, Leemets and Williams in 1966, yet a totally independent line lay to the left of their climb. Jeff Lowe and I anticipated much high angle free climbing on perfect Bugaboo rock but instead had to contend with endless nailing in leaning dihedrals on decomposed granite. The climb began in a corner on the left side of the face, then broke out up a right leaning crack. After three free pitches we headed

South face of Snowpatch Spire: the Jones, Lowe route prcbably goes up the big dihedral on the left; the Hudson, Leemets, Williams lies or the shadowed !ace to the right *Ed Cooper*



straight up, hammering all the way; too much hammering, yet the face is so attractive that it was almost justified. Our bivouac was unique in that one end of our hammock was fixed to a jammed nut, a little spooky. The second day's nailing was similar to the first, until we neared the summit for more free climbing. This climb left not strong positive impression on us, but then you can't win them all. NCCS V, 5.8, A3.

Chris Jones

Three Businessmen on Vacation, Snowpatch Spire, East Face

In early August, not finding the ice conditions to our liking, Yvon Chouinard, Doug Tompkins and I decided to finish a route which Tompkins had started years earlier. This route is the obvious diagonal crack leading up the E. Face of Snowpatch from the glacier over the overhangs to the north summit of Snowpatch. Being three businessmen on vacation, myself with little previous big wall experience, we were not altogether surprised to find that we had made only three pitches at the end of the first day and were still below the overhang. This meant that we could sleep in camp rather than on the ledgeless wall, and so we returned the next morning to continue grubbing our way up the overgrown crack. By dark the first ledge was reached, two pitches past the overhangs, and the third day we continued nailing above the ledge for a few pitches, then encountered our first continuous Class 5, dumped extra water and passed Pamplemousse Spring on our way to the summit. Seventeen pitches, no ridge until two pitches past large overhang. Could easily be done in two days. V, F7, A3 (1 bolt).

Pete Carman

Starbird Corrections

On the map accompanying the article "The Starbird Ridge: A Family Expedition in the Central Purcells" (CAJ 1970, p. 35):

3, listed as Unnamed, 9800', is Galloway Peak.

17, listed as unnamed, 9800', is one of the Scotch Peaks, as are 8, 9, and 10.

17, listed as unnamed, 9800', is Galway Peak, 9500'.

21, listed as Galway Peak, 9500', is Dublin Spire, the highest of the Eire Spires (9000').

See also "Treasures of the Starbirds" (CAJ 1971, p. 56).

Andrew Gruft

The Taurus Group (the Starbirds)

Ascents from camp at lower of four lakes in upper Welsh Creek valley:

Galway Peak (9800'), 1/2 mile south west of Killarney (CAJ 1970 p. 35: Peak No. 17, unnamed). Via steep snow slopes of north face gaining rock of north east ridge 300' below summit; 29 July 1971; 1st ascent.

Leitrim Peak (9550'). Via snow gully on west face of Armagh to upper snowfields between Leitrim and Armagh, cramponned to summit; 26 July 1971; 1st ascent.

Armagh Peak (9550'). Traverse from Leitrim Peak; 26 July 1971; 1st ascent.

Mt. Connemara (9450'). Via west ridge and face; 27 July 1971; 1st ascent.

Donegal Peak (9350'), Via south ridge, traverse from Connemara; 27 July 1971; 2nd ascent; new route.

North Star Peak (10,250'). Via Alpha Centauri-Carmarthen col to Alpha Centauri-North Star col, hence up snow of north east face close to east ridge; 30 July 1971; 2nd ascent.

Mt. Alpha Centauri (10,150'). From Mt. North Star, descend to col, hence up snow of north west face close to west ridge; 30 July 1971; 2nd ascent; new route.

Mt. Carmarthen (9650'). Via east ridge of south sub peak; 23 July 1971; 2nd ascent; new route.

Glamorgan Peak (9000'). Via north east ridge; 22 July 1971; 2nd ascent.

Harlech Peak (8650'). Via east ridge; 21 July 1971; 2nd ascent. Merioneth Peak (8750'). Traverse from Harlech; 21 July 1971; 2nd ascent.

Mt. Killarney (9600'). From Killarney-Leitrim col via east ridge; 25 July 1971; 2nd ascent. Party: Arnör Larson and Margaret Lucas. Ascents from camp at Thunderwater Lake:

"Mt. Nanette" (9550'), 1/5 mile west of Mt. Harmon. Via east snow arête; 21 August 1971; 1st ascent.

Mt. Harmon (9650/). Via north west ridge—descent via north east ridge; 21 August 1971; 2nd ascent; new route.

"Pen Point" (8989'), % mile north east of Mt. Harmon. Via south west ridge; 21 August 1971; 1st ascent; aid used in descending moat of glacier.

Mt. Guendolin (10,250'). Via north east ridge from upper Catamount Glacier; 19 August 1971; 4th ascent. Party: Arnör and Aaron B. Larson.

The Whirlpool Glacier has retreated to the extent that there is no evidence of the famous whirlpool, and Thunderwater Lake has expanded to approximately 4/5 mile in length (since 1952).

It should be noted that NTS map 82K/10E is inaccurate in regard to the positioning of Mts. Guendolin and Black Fang. Both names are misplaced Vz mile south east of the true summits in question hence the elevations as given in Putnam's guidebook are also in error.

Margaret Lucas and I witnessed a severe rockslide from the summits of Galway, Alpha Centauri, and North Star on 29 and 30 July 1971. The slide originated at the 8500' level and descended nearly to Stockdale Creek at 4500'. The falling blocks came down in volleys lasting 5 to 10 minutes with a like period of relative silence in between. Further reports indicate that it continued in this manner for over a month.

Arnör Larson

A Ribbon for Sally Serena

Our first encounter in 1970 with the rugged beauty of the Irish Peaks (CAJ 1971, p. 56) had obviously been love at first sight affairs. We could not help but dream longingly about the glacier-fed turquoise lakes, the cascading streams and waterfalls, the quiet pools and idyllic forest glades, and the unclimbed granite faces and spires dominated by Mt. Sally Serena, haughty and aloof.

When, after a dragging winter, summer arrived in the Purcells on July 14 it was hard not to rush right in to the Irish Peaks with the break in weather, but we had a 22 July rendezvous in Radium Hot Springs with Nancy, Mai-Britt (3 years), and Art Maki, and Peggy, Scott (11 years), David (15 years), and Bob West. As we assembled our mounds of supplies for the ten day family expedition we began to consider the use of a helicopter. Unfortunately the two helicopters in the area were already out on fires, so on 24 July we drove up the Forster Creek road to begin our load-relaying pack in at Mile 21 1/2. The jumble of log-cluttered roads south of the main road can be quite frustrating, but the (hard-to-find) most easterly one does lead easily up and southwesterly to the 5100' level just east of Irish Creek, where the trail begins. By nightfall we were all camped on the north west corner of 6100' Tara Lake, with two loads of additional supplies relayed to that point. The next morning two more loads were relayed to Tara camp, and in the afternoon we and the Wests decided to make a high camp at 7200' Shannon Lake. The access route follows the west edge of Tara Lake to the pools at the south end, and then goes along the northeastern edge of the huge area of room-sized boulders south of the lake. This peripheral route leads to a cut at the contact between granite and sedimentary rocks at about 6800', after which a contour southward through relatively open meadows and forest leads to Irish Creek and numerous crossing points, from here on the route ascends more talus on the south side of the cascading creek up to the outlet stream, which we crossed on snow bridges. We pitched our tents on the grassy benches just beyond the vast expanses of granite slabs which make up the northeastern shore of Shannon Lake (a perfect heliport!).

The next morning only Bob and David were eager and ready to do a climb, so they set out for the east ridge of the Eire Spires north west of camp. They followed the ridge all the way to the base of unclimbed Eire Spire No. 1, where they found a series of easy connecting ledges to the north east slopes (our 1970 route had crossed the east face somewhat lower). They then climbed to within 10 or 15' of the top of the sheer granite summit block, complete with an airy split through its middle of 8800' Eire Spire No. 1, which we had skirted in 1970. They returned to the prominent tooth "Mag's Molar", on the east ridge and descended the south couloir to the lake.

The next day 27 July, Art came up an joined Bob, Peggy, and me for an attempt on the west ridge of Sally Serena by way of Mt. Donard. We hiked a mile up the Shannon Glacier when we saw a promising snow route up the north east face of Donard. We roped across the 'schrund, ascended several steep snow leads to rock on the east side of the couloir, then traversed west below a rock face into the steep snow of the upper couloir, existing at about 9700' on Donard's east ridge. We then spent more than an hour exploring the irregular and tedious west ridge of Sally Serena, finally deciding to abort the attempt. So we turned around and quickly completed the ascent of the east ridge of 9880' Mt. Donard (3rd ascent, new route). We rebuilt the summit cairn left a new record, and descended the south west couloir (route of the 1970 2nd ascent) to the snow and scree ramps that lead around the base of Donard's sheer fest face to the 9000' col north west of Donard. From here we climbed the enjoyable Class 3 granite south east ridge of 9550' Leitrim Peak in 1 hour. On the summit we found a cairn and 1st ascent record left the previous (!) day by Arnör Larson and party, who had climbed both Leitrim and Armagh from the Welsh Creek Valley (north west).

After a day of rest and load relaying, Art came up early on 29 July and joined Bob and me for a concerted attack on the beckoning east ridge of Sally Serena. Rather than following the 1970 route directly to the 8750' col 1/2 mile east of Sally, we started up the

broad snow colour south west of Shannon Lake (in line with the 9400' rock spur on the ridge). We climbed about three quarters of the way up to the headwall of the couloir, then exited left (east) to rocks that took us above the headwall. Angling up southwesterly across the upper snowfield, we reached a rock rib and then climbed directly to the ridge through the cornice. We followed the easy snow ridge over the 9400' granite subpeak to the snow shoulder below the site of the 1970 accident. This year fortunately, the snow conditions were perfect, so that the exposed traverse across the north face after the first snow lead up the ridge was done safely. Then two more steep leads on snow brought us to the base of the irregular upper rock ridge at about 9700'. A short traverse onto the north face was followed by a long lead back up to the crest of the ridge. From here two Class 4 leads up and down over the sharp, jumbled granite blocks and knife edges of the ridge led to a final tiny col at about 9800'. A short lead up the north east ridge of the final summit pyramid and a long traverse across the north face of the pyramid brought us to the easier rocks of the north west ridge, over which the summit was quickly gained. The exciting climb had taken about 7 hours from camp, mostly over continuously enjoyable Class 4 snow and rock! On the summit (9950') we found the answer to the mystery of Sally Serena—a small cairn containing an open rusted Hudson's Bay Company tobacco can, its record of the MacCarthy's 1915 solo climb of the west face having disintegrated years ago.

We had originally intended to climb the 9650' S. Peak too, but instead we spent more than an hour leisurely eating our lunch while watching the entire eastern cliffs of an 8800' peak north east of Mt. Stockdale continuously avalanche down 4000' into Stockdale Creek! It was a noisy and spectacular geological event to witness, and we had airy ringside seats only 3 miles away! Finally we pulled ourselves away from the ongoing spectacle and looked briefly but longingly at the steep rock and snow of the S. Peak. Unfortunately it was now too late to do another peak, so we put our 2nd ascent record in a film can and deposited it in MacCarthy's cairn along with a crinkled orange trail-marker ribbon for Sally that I had been carrying around with me for more than a year... Saying our farewells to Sally, we hurriedly retraced our ascent route along the east ridge and down the north face snowfields to camp in 3 1/2 hours.

The following day Bob, David, and Scott climbed up onto the beautiful Yosemite-like granite buttresses south of camp, getting good views of the Banshee Tower. On Saturday 31 July, Bob and Peggy hiked partway up the Shannon Glacier and then climbed the south west face of 9000' Dublin Spire (roughly our descent route in 1970) for a 2nd ascent. They continued east over 8900' Eire Spire No. 3 (2nd ascent) and 8850' Eire Spire No. 2 (1st ascent), then dropped down to the notch east of Erie Spire No. 1 and descended the south couloir. On the same day David, Gretchen and I, carrying Kara on my back, set out to climb 9000' Mt. Cuchalainn, about 1/2 mile south east of the Banshee Tower. We crossed Irish Creek and contoured into the meadows of the large basin, south east of camp. Crossing snowfields at the head of the basin, we angled up steeper snowfields into the short, steep, final snow couloir that cuts through the north west face of Cuchalainn and leads directly to the north west ridge a few 100' below the summit. Finding no evidence of prior ascent, we built a cairn and left a 1st ascent record. We descended a crumbly spur ridge angling east and north east, returning to camp after 6 hours. That evening a delightful repast of freeze-dried beefsteaks, mushrooms (fried in butter), and tasty strawberries ended another exciting and inspiring adventure in the spectacular setting of jewel-like Shannon Lake and the impressive glacial and granite-walled cirque in which it nestles so peacefully.

Curt Wagner

Farnham Creek; ACC Camp

With a mighty assist from Revelstoke Lumber, which bulldozed roads and put in bridges, the 1971 ACC General Mountaineering Camp at Farnham Creek got off to a good start. Those who missed the directional signs and spent an afternoon digging their cars out of ditches and gullies found the excitement began a bit early, but most participants, over 100 for each week, arrived without mishap.

Main camp was situated in the spectacular valley between the glaciated Commander Group and a set of 11,000' rock peaks surrounding Mt. Farnham. Men and married couples were housed on one side of raging Farnham Creek, women on the other, and for the first week it looked as if the flood might separate us permanently.

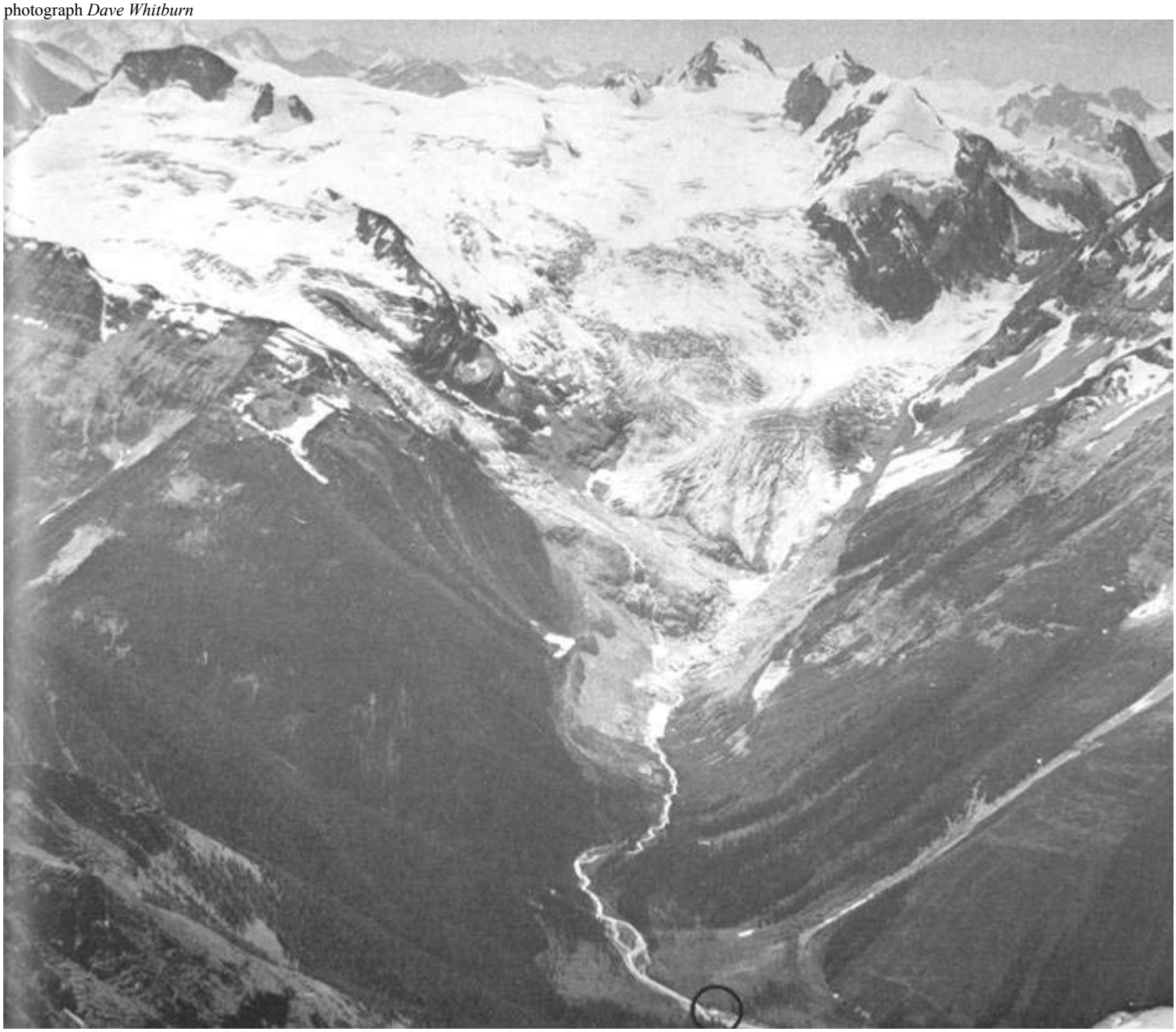
Climbing began on 18 July with ascents of Farnham, Hammond and Cleaver. Lloyd "Kiwi" Gallagher led the Farnham party, which bivouaced after reaching the summit. Bruce Fraser brought back the first of a series of evil reports on Hammond. Roger Neave led the initial ascent of Cleaver.

As the week wore on repeated ascents were made of these three and of Commander, Peter, McCoubrey, Delphine, Maye, Jumbo and Karnak, with leaders and stories too numerous to mention. After the third party staggered in glassy-eyed from Hammond word spread and no one else volunteered to climb it. Cleaver proved the most popular climb, with one party of 28 making the summit. For the photographers the "Nubbin" on Cleaver provided a fine vantage point. Our three professional guides, Lloyd Gallagher, Hans Schwarz and Hermann Frank did yeoman service conducting regular ice, snow and rock schools, leading parties and repairing trails and bridges. Weather for the entire two weeks matched the scenery in beauty.

In addition to the main camp, a high camp was established further up Farnham Creek from which a scenic skyline traverse of several peaks could be made. Floods and blocked trails delayed access to a third camp at Lake of the Hanging Glaciers. Those who finally made the long trek over agreed it was well worth the effort. From this camp Granite Peak and Snow Dome were climbed.

Notable climbs of the camp included: a new route on Farnham led by Roger Neave, and on Commander led by Jim White and Roger Griffiths; a west to east traverse of Commander led by Murray Foubister, and a "wrong way" east to west traverse led by John Tewnion and party; Eyebrow Peak led by Dave Whitburn; the south east ridge of Cleaver from a bivouac near high Camp led by John Tewnion; and a romp over Maye to Lake of the Hanging Glaciers by Russ Varnam and Robin Carter. Kiwi led a small party to Farnham Tower; they decided it was "rather loose" and substituted two unnamed 10,000' peaks. Probably the best climb

Cleaver, Jumbo, Commander and Karnak above the Commander Glacier, from the summit of Farnham. ACC camp is just visible on Farnham Creek at the bottom of the photograph *Dave Whitburn*



of camp was a complete traverse of the cirque from Lake of the Hanging Glaciers, including Sargeant, Jumbo and Commander and return to main camp by Ian Weeks and Kiwi. The 1971 camp was marred by a fatal accident which took the life of Jan Atlung and left its mark on all of us, which our memories of good climbing and good companionship can never quite erase.

Jo Ann Creore

Mts. Jumbo and Karnak from Farnham Creek

At about 5 a.m., 29 July 1971, a party of five, Robin Carter, Dan Hale, Jim Perras, Gary Bruce and Frank Wawrychuk, left the ACC General Mountaineering Camp on Farnham Creek headed for the two highest peaks of the Jumbo massif. The route followed the well worn trail up the Commander Glacier to the Guardsman-Commander col. After moving south over a level snow field crampons were donned to gain the summit of Jumbo (11,117') over moderately steep snow and ice.

After only a few minutes on the summit for photos, we moved to the top of a steep snow gully leading down the north side of Jumbo. Frank and Gary were belayed down the gully on their front points. This was so time consuming that the rest of us moved as a group down the rock to one side. From the bottom of the gully we moved southwest to the base of Karnak's (11,250') short summit ridge. The crest of the ridge was gained after a short pitch of steep, loose snow. A short rock scramble along the crest led to the summit where we were entertained over lunch by a pair of golden eagles soaring below us in the Jumbo Creek valley. We returned to camp by skirting Jumbo to the north and thence via the Commander Glacier. The round trip took approximately 12 hours in fine weather.

This was probably the 2nd ascent of these two mountains by this route as several days earlier Hermann Frank had led a party this way. A week earlier Dave Whitburn took a party up Karnak

Hammond, Farnham Tower, Farnham, Peter and Delphine from Jumbo *Glen Boles*

Sally Serena and Donard from Dublin Spire *Curt Wagner*

first, then Jumbo followed by a rapid descent of the Commander Glacier in a rain storm.

Robin Carter

The High Road to the Lake of the Hanging Glaciers

One of the "posted activities" at the 1971 General Mountaineering Camp was a hike down the Farnham Creek to the Horsethief Creek and thence up the trail to the Lake of the Hanging Glaciers where a high camp had been established. However, a party of five, John Christian, Russ Varnam, George Kamm, Peter Ballantyne and Robin Carter, decided that there must be a more interesting route than that long, hot trudge. Our alternative began at the tea tent and ascended the prominent scree gully west of camp to the ridge running north east from Mt. Maye (10,600'). This ridge afforded easy access to the summit of "Unnamed A" (10,000'). From this point we descended to the snow on the north side. George was the first to reach this snow. His spectacular tumble (fortunately his injuries were minor) convinced us that the snow was slippery enough for crampons. Their use allowed us to pass a larger party not so equipped and to precede them up the north side of Mt. Maye to its summit.

We descended from Maye, traversing east to avoid the steepest of the snow, into a very hot snow bowl north of the peak. Our descent to the Lake of the Hanging Glaciers was via the prominent scree gully in the wall between Maye and Granite Peak. The passage north along the east shore of the lake over mixed scree and snow was "exposed" to the possibilities of a fall into icy water.

After a relaxing day in the area of the Lake of Hanging Glaciers, John, Russ, George and I set out on another alternative to the "Lowlander's Trail" back to the Farnham Creek camp. From the high camp we found easy going up the first 1500' of the west side of Granite Peak (10,100'). Then a short pitch of rock (III-) led to the north west ridge. On encountering snow just below the summit we were induced to don crampons by the sight of Robin's water bottle sliding with great speed down the north side of the mountain! From the summit of Granite we moved north on the north-south ridge over three peaks, the middle one being Unnamed B (9800'). Just north of the third peak we left the ridge by a short rappel and a long scree run. At this point the loss of a water bottle was beginning to be felt, but the streams high on the ridge were cloudy with silt and offered no relief.

Now the pleasures of mountaineering were replaced by jungle bashing and swamp walking. A cool dip in "the pool of the wood nymps" was a welcome relief as the "mountain trolls" returned to the Farnham Creek camp.

Robin Carter

The Lieutenants: East Face

The striking, well-photographed background peak at the Lake of the Hanging Glaciers is simply known as the Lieutenants. On 6 August John Rupley and I climbed its east face from the lower part of the valley glacier beyond the lake. The 3000' climb was about half cramponing and half limestone rock climbing. Fortunately we found sound natural belays, for piton protection seemed nil. NCCS III.

Fred Beckey

"Mt. Meden-Agan" (10,800') and "Mt. Atlung" (10,600')

A reconnaissance I made in 1970 of the two high peaks north west of the Farnham Tower revealed that climbing them from the east would be exceedingly difficult and especially dangerous. So this past summer F. Knight and M. Wilson joined me for an attempt on the peaks from the west. On 11 August we drove up the Horsethief Creek road to the ACC "parking lot" and packed up Farnham Creek about a mile, camping around 5300'. Early the next morning we ascended the steep western slopes just north of the stream draining the high basin between the two peaks. When we reached the 9000' level we contoured eastward until we were below the final south west slopes of the 10,800' peak, the summit

of which we gained over easy talus, about 61/2 hours from camp. Finding no evidence of prior ascent, we built a giant cairn and deposited our 1st ascent record, naming the peak "Mt. Meden-Agan" (after the cryptic message recorded at the Oracle of Delphi, and meaning "nothing-too-much"). We descended to the 9000' level where we prepared a lavish bivouac. The next morning we hiked over to the 10,000' saddle south of Meden-Agan. After a precarious exposed traverse on scree and mud around the base of the eastern buttresses of Peak 10,600, we reached the southeastern slopes. Ascending over Class 3 rock and snow to the summit ridge, we gained the true summit in about 2 1/2 hours from bivouac. We found a cairn and 1st ascent record left 29 July by D. Jones, J. Christian, and L. Gallagher, who had climbed from the southern valley. They had named the peak "Mt. Atlung" after the ACC climber killed 27 July on Mt. Commander. We retraced our route, reaching Farnham Creek in 4 hours.

Curt Wagner

The Truce Group

On 19 July John Barton, Nick Dodge, Tom Ettinger, Gary Kirk, Mark Temple and I finally met at the end of a new logging road, 11 miles up Glacier Creek. After crashing through a landslide which covered the last third of a mile of the road, we hiked a mile and a half on the old Glacier Creek trail. We crossed on a felled log and bushwhacked two miles up the western bank of a creek spilling into Glacier Creek from the south, and camped on tilted slabs at 6000'. The next day we followed a small creek, and finally splashed through a waterfall to get to the lowest snowfield of the glacier. A steep snow chute put us on the glacier proper. We climbed eastward up scree at an increasing angle. As we traversed upward and northward toward a reddish peak, the rock became so precipitous that we gave up and headed directly upward to the ridge above us. Once atop this, we descended onto "Horseshoe Glacier" to the east and again traversed northward. After gradually ascending along the tops of several steep snow slopes, we got to a broken rock ridge. Several leads took us to the sharp top of "Ocher Peak" (10,000') the last major unclimbed peak of the "Horseshoe" group. The climb had taken ten hours from Camp. On 21 July we again ascended the valley on the west, this time high above the waterfall and climbed the snow chute. We then drearily trudged south across the flat glacier for two and a half miles in the hot sun to the western buttress of Truce Mountain. We swung around the right side of the buttress and traversed upward on soft snow toward the center of the face, directly above. There we found excellent rock mixed with snow. A last rope length, a gentle snow traverse, led to the top. Eight hours from our bivouac, we had completed a new route. We found the first ascent record of Conrad Kain's 1916 party and Curt Wagner's of 1969. We noted that we were higher than Mount Cauldron, despite heights given in the Climbers Guide to the Interior Ranges of British Columbia. Our western approach to the central Truce group from Duncan Lake is the least strenuous and time-consuming route into the area.

James Petroske

"Sawtooth Mountain", Toby Group

On 17 August David, Miram, and Suzanne Ector, Drew Weir, and I left the Johnson's Landing road near Salisbury Creek, at about 1900', and ascended northeastward 21/2 miles through thick forest. We reached the first hump—"The Gums", 7500'—on the Sawtooth Ridge, just above timberline, in about 6 hours. From here Drew and I climbed the firm limestone rock to the 7600' summit of the "Canine Tooth", where we left a cairn and record (1st recorded ascent). All of us also climbed a lower summit of the tooth. Nine days later I and a group of 9 students from a new Wilderness Course at Southwest Minnesota State College approached the Sawtooth Ridge from a 7200' high camp 11/2 miles south east of the mountain. The entire group ascended the first eastern hump—the 7500' "Wisdom Tooth". From here J. Konradi; S. Kragh, S. Scott, and I climbed west over the excellent Class 3 and 4 rock of 7700' "Second Molar", 7700' "First Molar", and both precarious points of 7650' "Bicuspid", the tooth next to the "Canine Tooth". We built large cairns and left our records (1st recorded ascents) on all the summits, and returned to the Wisdom Tooth after 2 1/2 hours total time.

Curt Wagner

Climbing Reports: The Rockies

It appears that information about activity in the Canadian Rockies is extremely difficult to obtain. It could be that there is very little worthwhile activity to report, though I'm inclined to think that there is a newly evolving climbing ethic involved, something about doing your climb and not making a fuss about it. Whatever the reason, it makes things more than a little difficult for an editor committed to preparing a journal for publication. In actual fact rock climbers working out of Calgary had perhaps their most active season yet and many new routes were made.

Of particular significance was the opening up of a group of new cliffs behind Yamnuska. Archie Simpson provided the initial impetus for this when he persuaded a few members of the Calgary Mountain Club that a pile of rotten logs and sods could be converted into a serviceable cabin. As it turned out Archie was correct, and with the expenditure of about $200 and a bit of sweat, provided a comfortable little cabin with room for about 12 people. The cliffs are only about 30 minutes walk from the cabin and by now there are probably some 30 routes in the area. George Homer and Jon Jones have probably been the most active, but at least a dozen climbers have shared the new routes. It is a very pretty valley and the climbing is fun. The significance of the area is that a beginner can start here and work his way from two pitch easy climbs as far as he wants to go, all the way to the Iron Suspender (George Homer and Billy Davidson), an 800' multi-bolt aid route on Wakonda Buttress. The hut is reached by a trail that starts at the quarry below Yamnuska and leads over the shoulder to the east— please stay off Indian land. It is open to all, and route details can usually be found at the hut. The CMC ask only that you look after the hut and the valley.

Yamnuska itself has a few new routes. The various crack systems in the vicinity of Gollum Grooves have been climbed. Billy Davidson and Jeff Home climbed Freak Out (5.9) on a nasty looking line between Corkscrew and Pangolin. Tim Auger and Don Vockeroth managed to connect with the big corner to the right of the Grillmair Chimneys, and called this route Kahl Wall (5.7, A1). Necromancer (5.8, A1) makes use of a big inside corner west of the Calgary Route and Mum's Tears. Climbed by George Homer and Jon Jones, it is on solid rock all the way, with the exception of the last pitch, and should become one of the more popular routes on the Yamnuska.

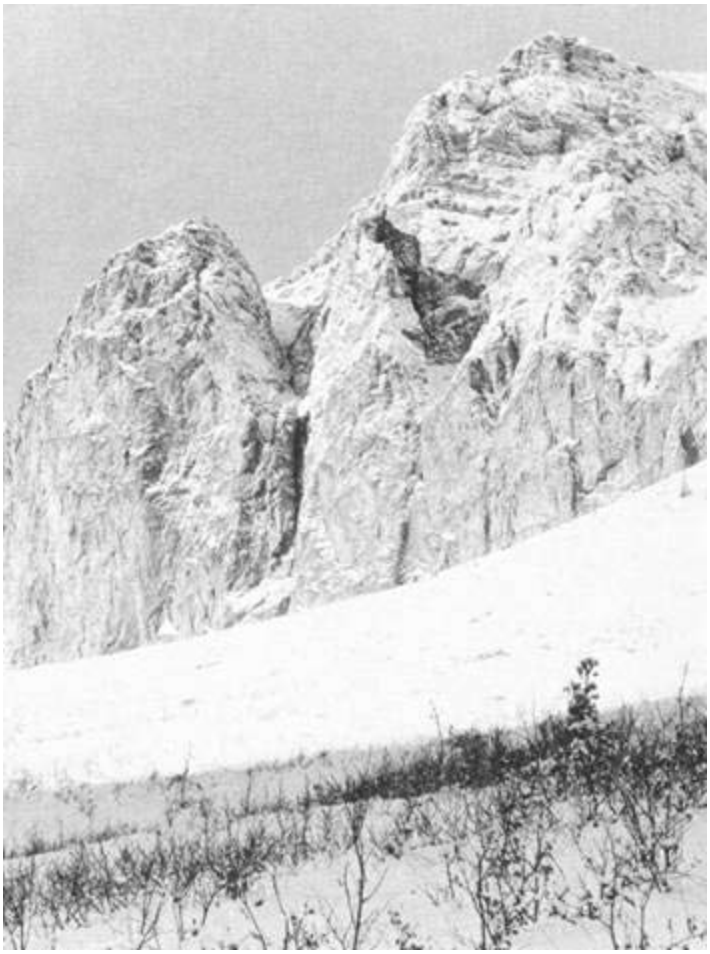
Goat Buttress to the west of Yamnuska still awaits a 1st ascent— it is to be hoped that the use of bolts can be avoided when this classic line is finally climbed. West again of Goat Buttress are Goat Slabs. Several routes have been made here, Bugs McKeith adding two last summer, Dream of an Electric Sheep with Brian Greenwood, and Chocolate Frog with Judy Sterner. There is a lot of excellent climbing on these "slabs and they are well worth a visit. It is possible to wander about quite a lot though, so my advice would be to forget the slabs have been climbed and pick your own route.

While still in the Bow Corridor mention should be made of

First ascent of Necromancer, Yamnuska *Jon Jones*

Pitch 8 on Necromancer, Yamnuska *Jon Jones*

Waconda Buttress, Iron Suspender goes roughly up centre above arrow *Jon Jones*



EEOR (nothing to do with A. A. Milne, but short for east end of Rundle). Lloyd MacKay started things here a few years ago with his Guides' Route. Last year a lot of people started a lot of routes, but only one was finished. Reprobate (B. Greenwood, Jeff Home, Rob Wood and Oliver Woolcock) makes use of an easy chimney system at the left end of the face and aims for a shallow dihedral at the top half of the face. On solid rock, the route was repeated several times and already has a reputation as one of the best climbs in the area. If the ACC establishes its new headquarters in Canmore, EEOR should become extremely popular.

The biggest rock climbing achievement of 1971 was without a doubt the climb on Gibraltar by Billy Davidson and Jim White. This 2000'+ face on the Sheep River south west of Calgary required a total of 9 days for the ascent. Unfortunately they also used an unspecified number of bolts (from 30 to 100). Coming as it did at the time of the great bolt controversy sparked by Mountain Magazine and Reinhold Meissner it gave local interest to the activity of Harding on El Capitan and Maestri on Cerro Torre. Personally I feel the use of bolts detracts somewhat from the achievement, but the conception and execution of the climb was certainly new for the Calgary area. It will be interesting to hear of subsequent ascents and I hope that this route will become a classic.

It is well known that Banff is somewhat deficient in off day rock climbing. Lloyd MacKay made Gooseberry on Tunnel Mountain a few years ago and has now made some routes on one of the cliffs below Cascade—the right hand one, I believe. Cory slabs remain fairly popular, and the area around Cory Crack was further worked out with the addition of two routes last summer. Chris Jones, Gary Pilkington and Gray Thompson climbed the Clockwork Orange, an obvious crack some 500' right of Cory Crack, and Pilkington with Wayne Smith climbed a second crack left of Clockwork Orange which was named Arboreal Delight. Both climbs are rated at 5.6.

I can't understand the generally slow development of Castle Mountain (Mt. Eisenhower) as a rock climbing area. The rock is basically sound, most of the routes that exist are of a good moderate standard (5.6) and quite classic. The hut on the Goat Plateau seems to be known to only a few, but its use alleviates what is generally a long approach. The normal approach to the hut is by trail to the fire lookout, and then by the gully above and right. The big square face above the hut was finally climbed last year by Brian Greenwood and Jon Jones. The route starts to the right of centre and is generally easy in the lower section, the steep upper section is climbed by a large and unfortunately loose chimney on the right of the face. The chimney is a cul-de-sac and the key to the route is a beautiful pitch leading round the roof to the left. The rock is excellent here and situation fantastic. There is also about 40' of unprotected 5.8 climbing. It's because of this pitch that the route was named Catch 22. Bill Putnam and party made two additional climbs from the Rockbound Lake side, one on the Tower and one on the main peak.

In the main range of the Rockies Chris Jones, Jeff Lowe and Gray Thompson climbed the north east face of Kitchener. This followed an earlier attempt by Jones and Thompson on which they were forced to make a dramatic retreat from high on the face. After this attempt Thompson described the climbing as more difficult than anything on the north face of the Matterhorn. The same party

also made an ascent of the north face of Mt. Forbes.

On the north face of Mt. Temple, Paul Ballay and George Homer made the 3rd ascent of the Greenwood-Locke route in a very fast II hours. The North East Pillar received a 2nd ascent by Jeff Home and Gary Pilkington. The Chouinard-Faint-Jones route on the north face of Edith Cavell was repeated by a party of four including Judy Sterner, the first woman to climb the face. Mt. Robson was climbed several times, and of particular interest was what was probably the 2nd ascent of the 1937 north ridge route by an unknown party.

Winter mountaineering continues to attract its devotees. Certainly more planning and better equipment is required in order to make winter ascents, but many of our Rocky Mountains, which technically are little more than a walk in summer, become interesting alpine climbs in winter. The rewards of winter mountaineering are certainly commensurate with the effort required. The unfortunate accident on Edith Cavell points to the far greater hazard of winter climbing, but I hope it will not deter others from attempting it.

Don Gardner's party made a 1st winter ascent of Mt. Forbes. Skip King with Dean Caldwell made a 2nd ascent of Mt. Assiniboine and also the 1st winter traverse climbing the north ridge and descending the south east ridge. The same pair with Pat Morrow made the 2nd ascent of Mt. Victoria, the first from the Abbot Pass. Don Gardner made a climb of a different order when his party made the 1st winter ascent of the north ridge of Mt. Stephen. This route, a Class 5 climb in summer, must have been extremely severe under winter conditions.

Brian Greenwood

New Rockies Guidebook

The new Rockies Guidebook is now in preparation. It will be published in two sections north and south. Any material should be sent to W. L. Putnam, editor, Climber's Guide to The Rocky Mountains of Canada, c/o American Alpine Club, 113 East 40th Street, New York 28, New York.

The Tornado Group

Mt. Arethusa (9550'). South ridge gained north of Arethusa-Storm Col via a snow gulley (gone in September) on west slopes; 29 June 1971; 1st ascent.

Mt. Head (9114'). From headwaters of Stony Creek; 16 June 1971.

Storm Mtn. (10,153'). Via first westerly couloir south of the summit; 9 July 1971; 2nd ascent; unstable rock.

Mist Mtn. (10,297'). South west ridge gained at 9500' from west and followed to the summit; 22 June 1971; 3rd known ascent; minor variation of original route. (All ascents with W. D. Grant.)

Arnör Larson

The North Face of Mt. Douglas

On the warm Saturday morning of 17 July, Don Forest, Gordon Scruggs and I left our car at the end of a lumber road near Burstall Lakes and hiked into a small valley between Mt. Birdwood and the long north ridge of Mt. Sir Douglas.

We set up our tent in the lush meadows at the head of the valley giving us a terrific view to the north of Mt. Birdwood. Don and I left camp in the afternoon and wandering leisurely up over the meadows went to have a look at Mt. Sir Douglas. We were first treated to a view of Mt. King George to the south west, but a rounded snow covered ridge branched out from Sir Douglas's north ridge toward the west and cut off most of our view. We carried on, losing about 200' in the elevation, then climbed the ridge, from the top of which we had an uninhibited view of the north ridge, north west face and the west ridge. We both looked at each other, thinking the same thing, maybe we should try the north west face, it was plastered in snow, but looked pretty good. We searched for a place to descend the far side of the ridge next morning then retreated to our campsite.

Next morning we were away at 5. Making good time we came to the spot we had reached the previous day on the ridge at 6:30, then descended a gully, grass slopes and talus to the basin below the north west glacier, losing about 500' in elevation. A 20 to 30 minute walk over moraines brought us to the foot of the glacier. We then continued over snow until we were under a ridge which retained the west side of the glacier, where we put on the rope.

We now followed a snow trough between some large crevasses on the glacier, and then the rock ridge to our right. It steepened, and after gaining about 400' levelled out. The snow at this point got very bad slowing us up as we floundered along, keeping very close to the ridge on the fringe of the glacier. Plodding on for a short ways, the snow steepened and improved, and we made better progress, noticing that we were gaining elevation rapidly when we glanced around at the surrounding peaks. When we arrived immediately below the face at 8:30 a.m. we stopped for a bite, and put on our crampons for the solid crust.

From our position a tilted snow ramp passed up and across into the middle of the face, and it seemed to present no particular problems as far as we could see. We moved on, kicking steps all the way along the ramp. Half way into the middle of the face we were confronted by a drop off—sort of a large avalanche chute, covered at this point by a thin layer of snow over ice and rock. Above us the rock bulged out, holdless, so we decided to descend the edge of the chute. We did this for about 30', the face dropping off sheer to the glacier below us. We cut through the edge of snow to the chute then belayed each other across. Following the ramp again on good snow to what we figured was the middle of the face, we headed straight up, kicking steps for about 500' on very steep snow, the crust breaking just enough for good footholds.

We were still in the shade, but the top was bathed in sunlight. From our position we could have gone straight up, but due to the amount of snow and the warmness of the temperature we thought we might be bombarded at any time. Our next move found us angling up to the left, following snow under an overhanging wall of rock providing good protection, right out to the north ridge (11:30 a.m.).

Upon climbing 50' up the ridge, we were surprised to find that we had only about 200' of corniced ridge to follow to the east summit, and about the same distance again to the west summit, which is slightly higher. It was so pleasant on the ridge that we took our time, savouring the view. We arrived at the west summit around noon, and spent an hour on the top.

We descended via the west ridge, taking more time than expected, due to bad wet snow. One rappel was required about half way to the col, where we arrived at 4 p.m. From the col we followed the glacier to the valley. This glacier parallels the glacier under the north west face, neither one of which is noted on the latest map, 82J11—Kananaskis Lakes.

Glen Boles

Family Camp: Mt. Assiniboine

Only two families, the Tylers and the Purssells, plus one non family, John Burcombe, attended the Assiniboine Family Camp, 24 July to 1 August 1971. What we lacked in numbers was made up in good measure by the perfect weather conditions and extreme compatibility of those present.

Assiniboine does not have quite enough variety to make it a perfect family camp area, but the scenery, the beautiful alpine meadows and in our case the weather compensated for the all or nothing climbing conditions found in this area. The three adult males in the party had the satisfaction of climbing Assiniboine under perfect weather conditions taking about 6 hours for the ascent from Lake Magog and about the same for a leisurely descent.

Our camp was located at the site of the 1966 ACC Camp near Sunburst Lake at about 7100'. Apart from the Assiniboine climb, the children took part in our activities to Tower Peak, Nub Peak, Sunburst, rock climbing parties and the successful search for trilobites.

Floyd Smith packed our equipment in from his camp on Spray Reservoir. With light packs the 14 mile hike over Assiniboine Pass proved most enjoyable, even to 3 year old Peter Tyler, who must have wondered whether he would be able to grow fast enough to make up for the wearing down process his family was inflicting on him.

Our equipment was thoroughly tested by a few hours of rain one night, but apart from a morning of cloud following, it became steadily hotter as the week progressed, culminating in a really hot day for our walk out on the Sunday. We chose the Wonder Pass route for going out and with food supplies depleted elected to dispense with horses. Wonder Pass is all and more than its name infers, but the trail is dry and exposed to the morning sun and our heavy load took some of the edge off our enjoyment of the scenery. The creeks were all too infrequent but each provided welcome rest and refreshment. Finally the cars were reached and the road seemed much less formidable than it had appeared on the way in.

The year 1971 represents an historical landmark for the ACC in Assiniboine Park and we were pleased to be there to witness the birth of the new order. The ACC cabins on Lake Magog have been taken over by the B.C. Provincial Parks Branch and in the fall it is planned to reroof and put them on permanent foundations. They have become open shelters and will undoubtedly be used by hikers on the Great Divide Trail which passes through Assiniboine Park. As we walked out, we were also heartened by the sight of a helicopter which was shuttling pieces of the cabin which members of the Calgary Section were erecting at the foot of Mt. Strom, in an ideal location for the use of mountaineers.

Norman Purssell

Buller Creek Area

In mid June Don Forest, Bruno Struck and myself spent a weekend climbing from Buller Creek on the fire road which runs along the east side of Spray Lake. On the first day we climbed Mt. Buller from Buller Creek valley via the south col. On returning to the col we traversed the ridge to the south climbing an unclimbed 8500' outlier to the south west.

On the second day we again followed Buller Creek until directly north of Mt. Engadine (7:45 a.m.), we then ascended the slopes east of the north ridge to about 7500', here we roped up and climbed first on snow then steep moss covered ledges to the north ridge (11:30 a.m.). The ridge was followed to within a short distance of the final summit ridge where a sharp overhanging drop-off forced us to descend and cross over to the west ridge which we followed to the summit (2:30 p.m.). We descended for 400' down the south ridge then cut into an old avalanche bed between the south and west ridges, and followed this to the tree line, requiring less than 30 minutes to descend from the summit.

Glen Boles

Climbs from Tower Lake

Mt. Eisenhower, one of the better-known landmarks visible from the Banff-Jasper Highway, has long been recognized because of the high rock climbing challenge it presents. As far as can be determined, however, the only route put up on its northern side prior to our visit was that of the 1st ascent by Professor A. P. Coleman, in 1884. Starting out 3 August 1971, a group made up of Jamie Fitzgerald, Gordie Freedman, Bill Putnam, Lowell Putnam, Rob Wallace, Arnold Wexler and I reached camp on this northern side by way of the excellent trail beginning at the Warden's station on Route 1A. This is a well graded line that winds its way around the massif distance of 5 miles to Tower Lake, where we camped at about 6500'. On subsequent days, we put up a new route on both Mt. Eisenhower and the S.E. Tower.

The first climb was on Mt. Eisenhower proper, on the buttress just north west of a waterfall about 1/4 mile from the gully splitting the S.E. Tower from the rest of the peak. The party consisted of Bill, Lowell, Rob, Arnold, and I. We started initially in a gully, then exited left onto the buttress. In three pitches, the third of 5.6 difficulty, we gained the crest of the buttress. Three more pitches of easier climbing led to a broken area where no belay was needed. A short scramble led to the final pitch on an impressive tower of exposed, but not difficult rock, the summit plateau being reached in 6 1/2 hours from camp. We descended by the Coleman route.

The climb was done in two ropes with Rob leading the first and Bill the second. We used quantities of pitons and had to fend with

Castle Mountain (Mt. Eisenhower)
South Tower on right: A Calgary Mountain Club hut, 1 Regular route (Feuz, Häsler, Hickson), 2 West Face (Lofthouse, Scharanth, 3 Original route Cerutti, Grassi, 4 Brewer Buttress (Brewer, Greenwood, Irwin), 5 Becky, Marts ,6 Catch 22 (Greenwood, Jones), 7 Bass Buttress *Ed Cooper*

much loose rock. Lowell filmed the entire endeavor.

The following day, Rob and I climbed the S.E. Tower by the north west buttress. We passed the lower cliff band via a large gully in line with the split between the Tower and Mt. Eisenhower proper. We continued up this split to a point about 150' above the scree slope, where a large, chockstone barred further progress. We exited left and in one pitch (5.6) gained the crest of the buttress. We continued along this for three pitches on loose rock, then angled up and to our right, staying just to the left of the large gully of Route One for four more pitches to a large flat area where we crossed the gully to the right. One more exposed pitch brought us to the summit, 71/2 hours from camp. Our descent was by way of the standard route; four long rappels brought us to the col between the Tower and the massif, and four more taking us to our start. We then descended to Tower Lake via the gully, arriving about 5 minutes after dark, 51/2 hours from the summit.

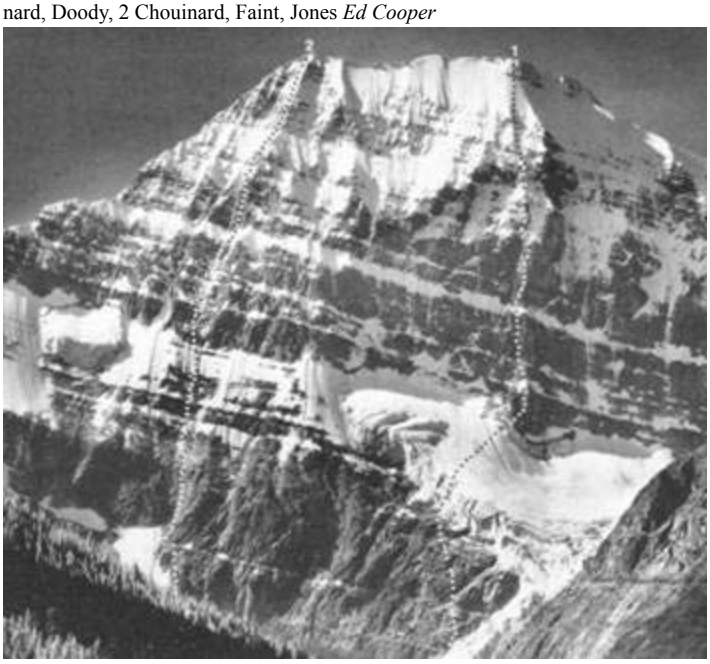
Eugene Boss

Takkakaw Falls: Cave Route

In the spring of 1966 Sid Marty and I decided to try to scale the wall to the north of Takkakaw Falls. After scouting it with a spotting scope we felt we had the route figured out. On a Saturday morning in mid June we started off early, and put the rope on about 300' north of the falls, at the base of the cliff. We climbed up 200' (3 pins, 1 sling) and arrived at a bowl-like depression in the face. This far the rock was good limestone, and as we got into the bowl we found we were climbing on marble! We climbed together for 400' in the bowl, and followed it to within 50' of the falls, where it ended beside a prominent buttress. From the buttress a 6' ledge leads to the falls and gives you a chance for refreshments.

250' of varied rock climbing from the buttress takes you to an overhanging band. Here you can go over the band, north 200' and around it; or can go through a small tunnel to the south for 250'

North face of Mt. Edith Cavell, the bottom 1000' is hidden: 1 Beckey, Chouinard, Doody, 2 Chouinard, Faint, Jones *Ed Cooper*



and end up at the top of the falls. Descent is via the north and to the Yoho River.

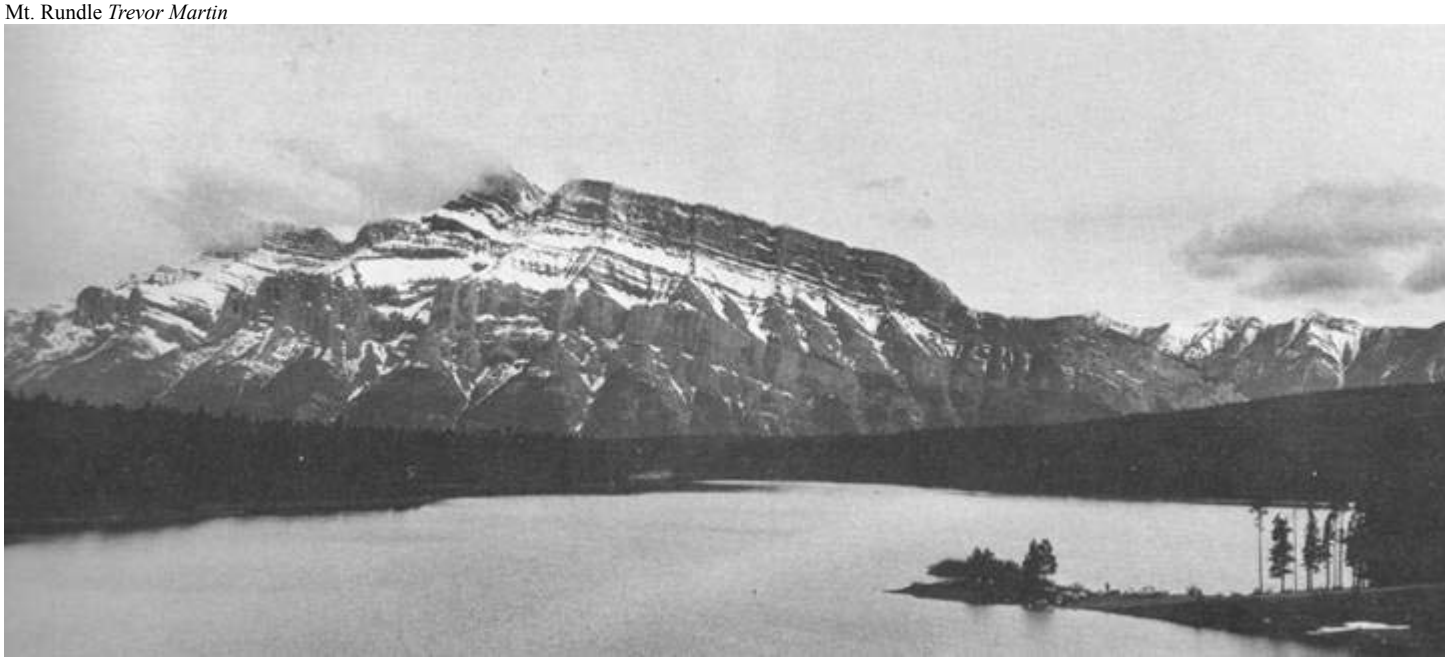
Bernie Schiesser

Mt. Lefroy from Glacier Peak

Peter Vermeulen and I climbed Glacier Peak via the ice couloir and south ridge of the original route, then continued along the ridge toward Lefroy. It appeared as though the best traverse ledge was quite high on the mountain, although one difficult spot seemed to exist at the Abbot Pass end of the traverse. Lower traverse lines appeared to cross rotten rock ribs instead of remaining as scree. After crossing the ice ridge between Glacier Peak and Mt. Lefroy, we lost virtually no elevation, traversing a steep, narrow, and quite loose scree and dirt ledge at the junction of the uppermost cliffs (yellow) and the main black band at 10,500. At the end of this traverse the ledge ended completely, becoming a vertical wall. Since we wanted to climb Lefroy anyway, we ascended the

Mt, Lefroy from Glacier Peak *Glen Boles*

Mt. Rundle *Trevor Martin*



northernmost couloir on its right side gaining a rib as soon as possible. When the rib merged with the west face we traversed right above a second major couloir to a chimney which led to the summit ridge. The rock was reasonably good but care had to be taken not to bombard the belayer when climbing the chimney. Time from Glacier Peak was 5 hours. Most of the climbing was F4, except the final chimney, which had sections of F5. The normal traverse is several 100' lower and is much better when Abbot Pass is the objective rather than Lefroy (CAJ 1963.)

Skip King

Family Camp, Lake O'Hara

Four families established camp in the tented suburbia which is the meadow above Lake O'Hara in a hot July.

Escape to the higher valleys and ridges was encouraged by both a succession of fine days and the voracity of the mosquitoes. The area's excellent trail system makes it ideal for modest family outings. Our's tended to be undertaken by individual families, which best accommodated the varying gaits of seven children ranging in age from 21/2 to 9 years. In this fashion most of the trails were explored.

Climbing too had a place. Mt. Odaray was climbed early in the week. Later Roy Preshaw and Peter de Ruyter traversed Mt. Huber and Mt. Victoria, to return to camp via Abbot Pass.

George Clark co-ordinated arrangements for the camp. The tangible evidence of this, a club tent and stove, gave excellent fine weather service as a playhouse for the children.

Lyndis Davis

Winter Ascents of Yukness Mtn. and Mt. Temple

On 10 March 1971 Tom Udall, Doug Skidmore and I ascended the north peak of Yukness Mtn. (9342') from Lake O'Hara via the west face. A system of easily visible gullies was followed to the summit in a time of five hours. Most of the ascent was made on fairly stable, packed snow slopes, the angles of which varied from about 40 to 70 degrees. Near the summit, there were magnificent cornices overhanging 20' on the east face. Our descent, to Lake O'Hara, was made in 2 hours following our ascent route. We believe this to be a 1st winter ascent.

On 5 January, Rick Kolestad, Doug Skidmore and I snowshoed through deep powder snow to the base of Sentinel Pass where we established camp in the last trees. The next day we reached the summit of Mt. Temple (11,626') via the standard western route late in the day, and made the last part of the descent to our camp in darkness. The only real difficulties encountered were a 40 degree wind packed snowslope of about 200' in height, and winds gusting to 70 mph which were encountered above 10,500'. An inspiring climb made with good companions.

Scott Udall

East Ridge of White Pyramid

On 29 August 1971 Klaus Hahn and I probably made a new route on White Pyramid. From the Chephren-White Pyramid col the route follows the exposed snow and ice ridge for approximately 800' emerging on the summit crest a few feet north of the true summit. This late in the season conditions seemed to be quite favourable as sections of bare ice and minimal cornice hazard made for fast moving. Due to some sections of bare ice, several pitches needed belays. The summit was reached 11/2 hours after leaving the col.

A traverse south around a short unnamed peak followed leading to the west glacier on Howse Peak, where a bivouac was established. Next morning a meandering ascent up good snow and ice brought us to the summit of Howse, offering fine views of the Freshfields.

It is felt that a reasonably competent party on snow and ice

White Pyramid from Chephren, east ridge in centre *Glen Boles*

could down-climb this route and combine it with the scramble up Mt. Chephren. Alternative descents exist to Howse Pass (an exhausting walk over fallen timber to Saskatchewan River) or down to Lyon's Gap between White Pyramid and Epaulette.

A primitive bivouac site for 4 to 5 persons exists slightly above the White Pyramid-Chephren col under the short yellow cliffs on Chephren side.

Murray Toft

North Kaufmann Peak

On 8 August 1970 Jim Tanner and myself hiked 9 miles up the Howse River to a high camp at 7000' just below Mt. Sarbach, about 6 hours in from the road. Next morning we scrambled up the previously unascended N. Kaufmann Peak via easy scree and cliff bands on the west side, reaching the summit in 3 hours. A cairn was built and a record left in it. The major difficulty of the climb occurs on by-passing the cliffs above the valley floor, one short rappel being necessary on the descent. This was the only time that the rope was used.

Skip King

Skiing in Little Yoho

The 1971 ACC Ski Camp (the Club's 33rd) was held in the ever popular Little Yoho Valley. There, at the club's Stanley Mitchell Hut (7000') for 8 days from 27 March to 3 April 15 members and friends of the club enjoyed what in retrospect would seem to be the most successful winter camp yet.

The before and behind the scene organization by Pat Boswell and Hans Gmoser should not be left unmentioned. Among other things, they had seen to it that the camp's food supply was helicoptered in—creating a pleasant departure from earlier Yoho camps where packs were considerably heavier. Gueseppi ("Seppi") Renner, a first year guide, Swiss, 24 years old, proved that a "professional" guide on club ski trips can be invaluable. And while the cook happened to be the youngest member of the trip, Barbara MacGougan not only did wonders in the kitchen with steaks, roasts, soups, breads, etc., but she also managed to clean up after breakfast, prepare lunch, leave camp 1 to 2 hours after the main party, catch up, and—with Seppi—demonstrate how powder snow should be skied; their splendid duo run down the steep, powder laden north face of President was something to be seen!

The 15 attending members and friends included Jack Cade (Williams Lake, B.C.), Jerry Wright (Lethbridge, Alberta), Mary Read (Conshohocken, Pennsylvania), Bill Louie (Calgary), Ruth Reinhold (Edmonton), Moira Irvine (West Vancouver), Russell Varnam (Blairmore, Alberta), Walt Davies (Calgary), Maureen Moonan (Point Claire, Quebec) Charlie Littlewood (Edmonton), Vivian Freedman (Montreal), Susan Lipman (Montreal), John Burcombe (Montreal), Dick Roe (Taber, Alberta), and Bruce Harding (Vancouver).

As for the weather, while there were very few hours of real sunshine there was also very few hours when the weather prevented us from climbing. Thus, of 6 potential climbing days only 2 days saw us relinquish our intentions short of a peak. And, on those 2 days, we still climbed to the President-Vice President col, and to within 50' to 100' of the peak of Mt. Des Poilus (10,371'). The other 4 days saw us on peaks: Mt. Kerr (9394'), Mt. McArthur (9892), Mt. Vice President (10,059'), and Mt. President (10,297'). In all then, we climbed two graduating peaks and missed a third by what seemed like inches. Certainly the weather was not unfavorable, but there was an unspoken consensus that Seppi had not only kept the party together, safely, but got many of us to the top where without him we would probably have attempted much less.

The climb to McArthur was an example; the second third of the trip was on the flanking glacier in a complete whiteout. Then within 1/4 mile of the top the sun came out, we climbed to the top and then started down the easier south slopes as the clouds settled in again. In other words, there was bad weather, there was avalanche danger, there were crevasses, there were inexperienced members of our group-all of the same factors which had kept previous trips off of these peaks—or at least off as many peaks. Since 1966, when Leo Grillmair was the first professional guide in attendance, club ski camps seem to have fared better. Seppi's constant looking at his altimeter to read changes in the weather, his instinctive matching of daily peak objectives with weather conditions, his instinct for avalanche and crevasse danger, his tireless trail breaking and his general cheerfulness and leadership must be accorded due credit. Word has it that Seppi will also be the guide on the 1972 ski camp into Glacier.

Snow conditions were excellent. Except for the peaks and the most exposed ridges, which were windblown, the snow was a fairly constant 6 to 12 inches of medium weight powder. This was beautiful to ski in, although it was something short of the ultralight powder which when 12 to 18 inches deep will billow up like a sea of down feathers around a skier's chest, and when enhanced by bright sun will infuse him with a feeling of eternal weightlessness and almost manic exhilaration.

The mood of the camp in Little Yoho was convivial. Water hauling, wood chopping, and dish washing chores were dispatched with alacrity by all. Evenings were spent comparing mountaineering

experiences, repairing equipment and clothing, reading the comments and records of former visitors to the Little Yoho Valley (winter and summer) in the log book and celebrating a birthday or two. The singsongs and skits of the earlier ski camp trips, especially in 1950's (as recorded in the Journal reports), seemed to escape us—a symptom of changing times perhaps?

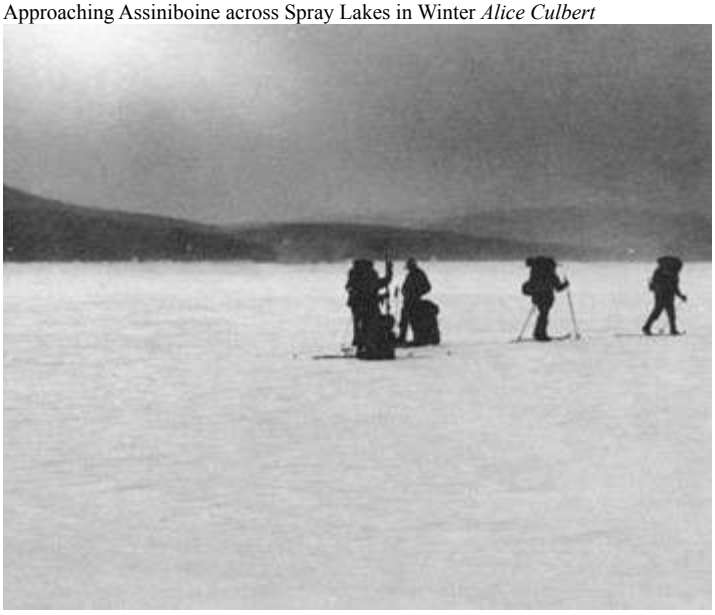
At a time when the philosophy of huts in the national parks system is being seriously questioned, while at the same time large scale development is being considered, the 1971 ski camp seemed so much of a spiritual experience—so many levels of consciousness above that which can be experienced on holidays at a "bump skiing" resort—that a cry must be raised!

While we were comfortably warmed by the efficient and economic "airtight" stove, we all stared at the empty fireplace with a plywood board in front of it, and conjured up visions of the added cheerfulness, warmth, shooting flames and glowing coals that might have been. ACC journals of former years attest how much the crackling fires were appreciated.

It might be of interest that the 32 previous ski camps were held at the following locations: Little Yoho (13), Tonquin Valley (4), Columbia Icefields area (3), Glacier (3), Mt. Robson area (3), Maligne Lake (2), Mt. Assiniboine (2), Lake O'Hara (1), and Skoki (1). A review of the records of these camps suggest that both professional guides and earlier ski camp scheduling have done much to improve ski camps. At Little Yoho, avoiding the middle of April in favour of the end of March appears to improve the odds of good weather and snow conditions. For the ski camp at Glacier, substituting February for April should do the same. Surely there can be no more pleasant experience than celebrating the first few days of spring in good snow at high altitudes, perhaps under blue skies and blazing sunlight. Until Glacier—

Bruce Harding

Approaching Assiniboine across Spray Lakes in Winter *Alice Culbert*

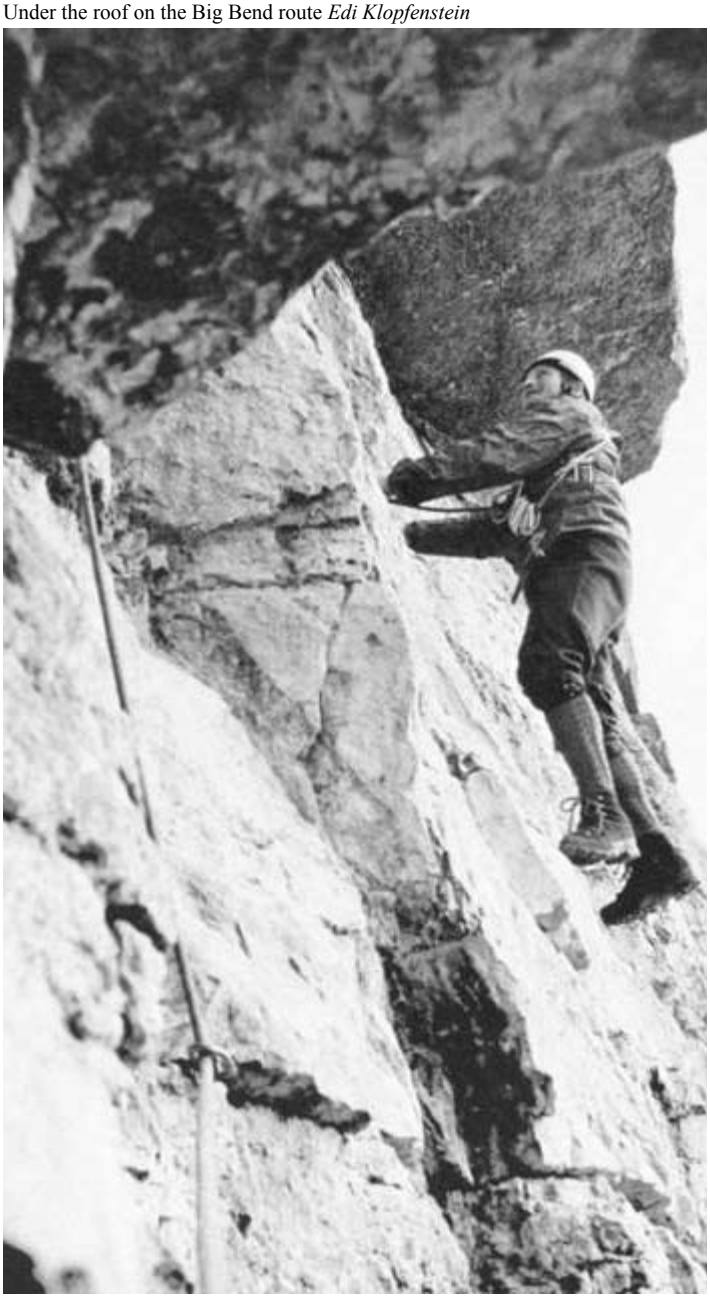


Mt. Forbes, North Face

One of the signs on the Banff-Jasper highway points to Mt. Forbes and I had always liked the look of the peak. It was only in 1971 that I discovered that the sign crew had aimed at Mt. Outram in stead of Forbes, a detail that would certainly never have bothered the hurrying motorist, for whom the sign was intended. Jeff Lowe, Graham Thompson and I walked in to Glacier Lake, and the following day forded the stream emerging from the Lyell Glacier to bivouac on a moraine near the junction of the Mons and N. Forbes glaciers. The climb was directly up the north face, which was in excellent condition for front pointing. We belayed over one short section through the rock band but otherwise moved together on the 2000' face, the weather being cloudy throughout. NCCS III.

Fording glacial rivers has always been an ordeal for me so when Archie Simpson told me that New Zealanders just waded through fully clothed I listened carefully. A technique we used last summer was to put on our rain pants then tie them tightly over our gaiters

Under the roof on the Big Bend route *Edi Klopfenstein*



making a virtually watertight seal. This was so successful that we never hesitated to ford rivers from then on, the main hazard being cracking up from laughter at the antics of the guy in front.

Chris Jones

The Big Bend Route

In the Columbia Icefield area the weather can often be discouraging. Climbers get restless and sit around in the campground drinking coffee and talking about the weather. But just over the Sunwapta Pass to the south, the weather is often quite different. Coming around the long road loop at the gravel flats (the big bend), a rock face stretches from the Pantherfall area over to the south side of Parker Ridge. The face is also called the "Goatcliffs".

Dave White and I put up a route on the face which is most enjoyable, and can compensate for waiting out storms at the Icefield campground. The climb take approximately 2 hours, the route is fixed with pitons, and can be graded as 5.6. The rock is of very solid limestone. After the main route many exit cracks can be chosen, with various degrees of difficulty.

Full route description and picture are at the self-registration box at the Columbia Icefield Information Bureau.

Hans Fuhrer

Mt. Athabasca and Mt. Andromeda North Ice Faces

The Columbia Icefield area is one which has fast and easy climbing access. The closest attractive mountains are Mt. Athabasca and Mt. Andromeda with their variety of easy and challenging routes on snow, glacier and ice; even combined rock and ice climbs.

The two ice faces on Athabasca and Andromeda have attracted many climbers over the last few years. They are climbed frequently from June until September. During mid-summer the faces are free of snow and can be upgraded to high class ice climbs. Climbing times have been varied on both faces due to changeable conditions and the experience of the climbers involved.

Mt. Athabasca North Ice Face:

Via the standard route, traverse to the Silverhorn centre ridge, then proceed via the flat glacier towards the north face. The angle until half way up the face is 45 degrees, but steepens towards the narrow ice couloir 50 to 55 degrees. The couloir, the key to the climb, leads through the rock face to the summit ridge and steepens to 60 degrees. In case of a bivouac, to the right of the couloir is a big rock overhang, with a comfortable ledge underneath. Height of the face ca. 1800'. From the bergschrund sixteen 120' rope lengths on the fall line. Times have been 8 to 14 hours from the parking area. Mt.

Andromeda Ice Face (The Skyladder):

From the snowmobile parking lot traverse over the right moraine towards Andromeda hanging glacier No. 2. Up the left side of the glacier to avoid the big crevasses, then up towards the bergschrund to the face (21/2 to 3 hours). The face starts at 40 to 45 degrees

On the north face of Mt. Athabasca *Hans Fuhrer*

Mt. Athabasca (left) and Mt. Andromeda from Mt. Wilcox; the north ice faces can be seen clearly. Mt. Bryce is on the far right *Ed Cooper*

and steepens to 50 and then 55 degrees. As the angle changes to 35 degrees, climbing becomes easy to the summit. Times from the parking lot 6 to 12 hours. Some parties have had to spend a night on the summit.

Andromeda is easier than Athabasca as the easy part comes toward the summit.

Hans Fuhrer

The snout of the Athabasca Glacier *Trevor Martin*

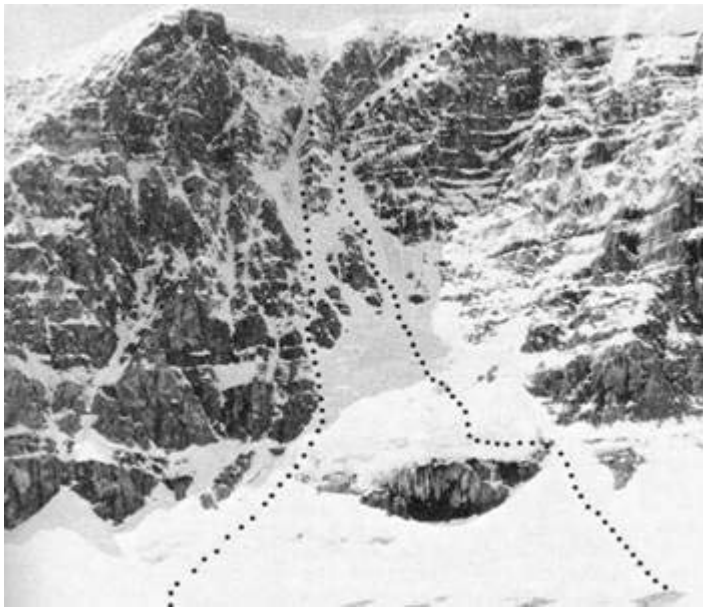
Mt. Kitchener, North Face

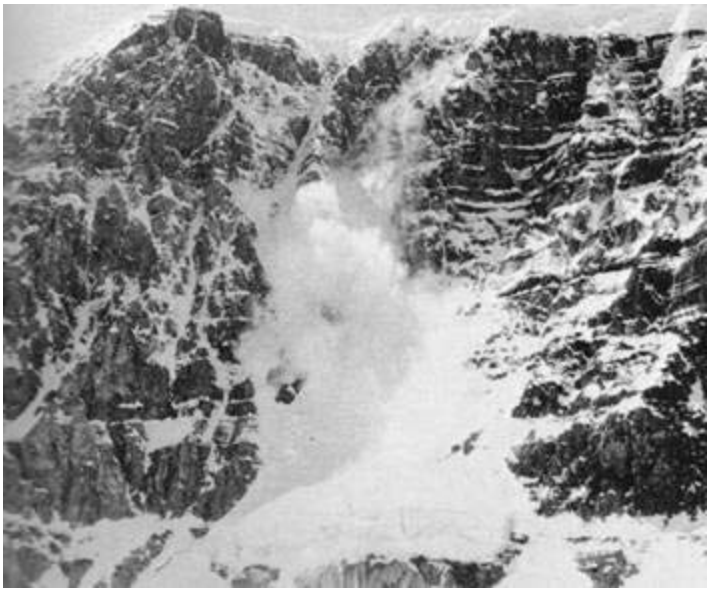
The north face of Mt. Kitchener was one of those climbs that I knew of long before I had courage to attempt it—an awesome pile of rock and ice. In mid July Graham Thompson and I hiked into Kitchener and found the face plastered in snow. The wall has a prominent ice field and this was our intended route. After some very hard ice climbing we took the buttress that splits the ice fields and soon encountered even harder rock climbing. On our second day we retreated, thoroughly beaten.

When we returned in late August we had Jeff Lowe with us and knew better than to climb the rock, choosing the right hand ice field. After a midday start we bivouaced in the top 'schrund, then climbed the ice face to bivouac in a miserable spot on the right leaning ramp. On our third day more mixed climbing took us over the summit cornice at 6 p.m. after one of the best climbs we had ever made. NCCS V.

Chris Jones

Mt. Kitchener, north face. First attempt line on left, successful route on right; bivouacs are marked *Chris Jones*



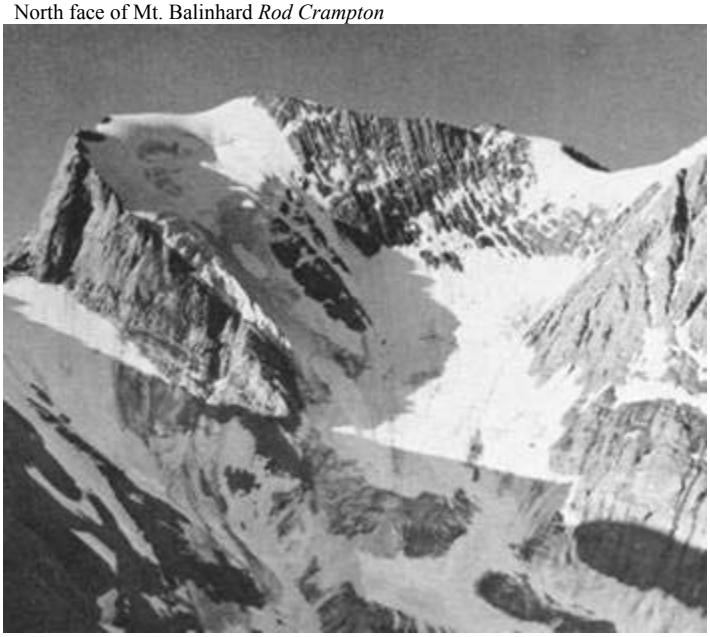


Mt. Shackleton, North Face

On 21 August 1971, Mike Heath and I climbed the north ice face leading directly to the highest summit of Mt. Shackleton. From the Tusk-Shackleton col, we climbed some steep ice and some glacier to the base of this 55 degree, 450 metre face. This late in the season the face was entirely water ice, with an inconsistent surface from late summer storms. Our descent was down the west ridge a jog back along the base of the face, and then back to the col.

Bill Sumner

North face of Mt. Balinhard *Rod Crampton*



Mt. Balinhard

A direct ascent on the north face of Mt. Balinhard (10,270') was made in early August 1971 by Rod Crampton, Rick Hancock and Jim Carlson.

The peak is located in the angle between the Rocky and Medicine Tent rivers in the eastern part of Jasper National Park. Approach to the peak was made from the north east. On the day prior to the climb we had trekked in from Grave Flats located 3 miles south of the coal mining ghost town of Mountain Park. From Grave Flats the top 500' of Mt. Balinhard is visible.

Linking a series of game trails and mountain side clearings we descended from Grave Flats to the Cardinal River, forded it, and packed up into the Park through Rocky Pass. Following a good trail we lost 1000' descending to the Medicine Tent River which was followed southward for 2 miles before making a ford and then pitching our tent at 5700'.

The next morning we followed a tributary that drains from the range to the west of the Medicine Tent. Reaching an 8300' col at the head of the stream, we commanded a beautiful view of the north face of Balinhard about a mile away to the south west. We descended about 800' to the glacier and began the ascent, 4 hours after leaving camp.

The route follows the centre of the glacier until the bergschrund is crossed on snow bridges (photo centre). A 300' traverse to the left (east) crosses a rock fall zone and ends on unstable snow. This is climbed to the large rock islands or ribs on the right of the funnel of the upper glacier. These interspersed with patches of snow and ice, are climbed directly upwards, until they terminate in 50 degree snow about 800' below the summit. Ascending the snow slope (snow slides) the rock is gained just above a large snow couloir that rises diagonally to the right and about 300' below the summit. Broken rock is climbed until one's handholds become the summit and you peer down the south face. Time of ascent from the glacier 8 hours; no evidence of previous ascents.

Due to the late afternoon snow slides precipitated on the ascent route by the rock booted down, descent was made following the east ridge until it ends abruptly in the east buttress. The top of the east buttress was followed down 45 degree snow of the north face until the icefall forms above the buttress. The glacier was then traversed to the ascent route.

Traversing the rock fall zone high on the snowslope, an explosion shook the quiet of the evening, filling the sky with rapidly expanding block dots that thudded onto the snow around us and skipped on down the face. Miraculously we were all missed.

A few hours later we were down off the glacier, the descent took 6 hours. We stumbled in darkness over moraine for a 1/2 hour and then laid our exhausted bodies down beside Balinhard Creek.

Jim Carlson

Southesk to Maligne Lake

Judging by the well-used appearance of two packers campsites in the fine meadows at its north east end, Southesk Lake seems to be visited fairly regularly by fishing parties who approach it by trail up the Southesk River. Ted Sorensen, Chet Jablonski, Peter Kazmaier and I had reached the lake a rougher way, by back-packing through the Cardinal Pass, down the Medicine Tent River, back up the Rocky River, and over the pass to the Southesk drainage. Between Rocky Forks, which we had left three days earlier, and Southesk Lake, we had seen no signs of recent human use.

The old Indian trail, said by A. O. Wheeler in 1912 to have existed, had disappeared and the going had been tough, apart for the magnificent high-alpine section around the big glacier-fed, sunken lake and the pass to the Southesk Lake valley. The lake is about 3 miles due north of Maligne Mountain. The Rocky River drains from the lake underground, and not, as the 83C/11 1:50,000 Topographic Map (1954 first provisional edition) suggests, by a surface stream.

Our objectives were to climb what Thorington had described (AAJ 1946-47, p: 450) as the most important unnamed peak in the terminal of the Southesk River, 10,600' high, rising 5 miles south east of Southesk, and then to attempt to make our way through to Maligne Lake.

We planned to put in our key camp at the high lake some 3 miles south of Southesk Lake. So we forded the Southesk River about 1/4 mile below the lake, followed the river for about another mile and then swung south through the forest to pick up the next valley. This was attractively open, with a meandering stream, and we made rapid time to the cliff down which cascaded the stream from the hidden lake. A scramble up the scree and we emerged by the very murky glacier-fed lake, changed places with a herd of elk and made camp in meadow on a shelf to the east behind the lake.

The 10,600' peak was about 3 miles to the east across the valley. It was very Rundlesque, and next morning only I could be persuaded to accompany Ted on the 4000' scree slog required to reach its summit. As we came up the west ridge however, the 3000' drop-off on the east face was most impressive, as was the view, particularly to the west, and compensated for the grind.

We had thought that the peak was unclimbed, but upon reaching the summit we found what appeared to be a small collapsed cairn. No conventional record could be found, but a rusty sardine can provided indisputable evidence of prior occupancy. The summit hardly seemed to be suitable for helicopter landing and, in contrast to climbers, sardines do not seem to be established items of helicopter crew-diets so we presumed at least one prior ascent. But by whom? We returned to camp reflecting on the appropriate morals: you can't win them all; there's trash everywhere today. It had taken 4 hours to climb the peak, and 2 hours to return.

Our remaining project went smoothly. From our camp we followed the stream back a mile east to the glacier toe. The glacier was relatively flat and uncrevassed, and we walked up it for about a mile before taking the scree slope to the west. A short climb and we were on top of the ridge at 9200' and looking down another scree slope to the east drainage of Warren Creek. A quick run down the scree and a 6 mile hike along the general line of the ever-increasing stream took us past Mary Schaffer's pixies, with magnificent views of Mt. Brazeau and the surrounding icefield, and out to the delta. We celebrated our arrival at Maligne Lake with a most refreshing, albeit brief, swim.

For those interested in the history of the area, Mary Schaffer looked for a pass up Pixie (Warren) Creek leading through to Brazeau Lake (CAJ 1912, p. 96), while A. O. Wheeler speculated that there would be a pass through to the Rocky River "which is said to contain many delightful features" (CAJ 1912, p. 79). However, so far as I can make out, no one has recorded making their way over our route, through the Southesk country.

Our expedition, which had taken 8 days, had coincided with a heat wave. In consequence Jasper Park had been closed-off for back-country camping, and the morning after our arrival at the delta Warden Mack Elder appeared in his launch and whisked us, all too quickly, back to civilization at the north end of the lake.

M. H. Benn

Climbs in Le Grande Brazeau and Peaks above "Swan Lake"

About 10 miles south east of Maligne Lake near the headwaters of the Brazeau River exists a relatively virgin area which still contains unclimbed peaks, some of which exceed 10,000'. Into this wilderness area Bill Putnam and Hans Gmoser organized a week's climbing trip along the lines of last year's joint venture.

On a glorious sunny and warm day at the end of July our advance guard, consisting of Bill Putnam, Jack Cade, G□nther Hintringer (Han's nephew from Austria, visiting ostensibly to improve his English, more likely we suspect to serve as another convert to alpinism), Dieter von Henning, and Rob Wallace departed the Jasper-Banff highway via the excellent trail along Poboktan Creek. Two victims of an overzealous airlines agent, Ed Johan and Frances Chappie, whose luggage was ticketed from Portland to Toronto instead of Calgary, were to follow with Hans. After lunch at Poligne Creek, we left the comfortable trail at the next eastern tributary of Poboktan Creek to practice our scrambling and bushwhacking techniques, and eventually reached the gravel flats, at the end of which camp was set up just below Le Grande Brazeau. The rear guard joined us at sundown, complete with misdirected gear.

The next morning we ascended that 8600' col at the south east of the end of our unnamed valley in continuing beautiful weather. A mountain goat, following our tracks, assured us of no stragglers. From the col Bill took Fran, Ed and Jack to climb the peak to the north. The remainder joined Hans to ascend the southern peak off the col via a straightforward snow and scree climb. A small cairn near the summit indicated that others had visited here. Nevertheless, the spectacular views of the continental divide ranges and peaks are far distant as Edith Cavell more than compensated for this discovery. Returning to the col, we descended eastward to the valley of the lakes to camp at one of the southernmost.

The next day a 9750' snow-capped peak just south east of our camp was climbed. Bill, Jack, Dieter, and Ed ascended via the north ridge. Hans and the remainder attempted a route via the west face of south west ridge, but finding nothing suitable retraced their steps to a gully that placed them also on the north ridge. Ominous cloudiness inspired us to hasten back to camp and move it across the Brazeau River to be closer to our other objectives and hopefully save the sunny weather for climbing. A rain storm gave us additional inspiration to pitch our tents below Swan Lake next to a lovely stream which empties the pond through which Swan Lake drains. The sun reappeared, and a rainbow provided an optimistic setting for dinner, the first meal that could be served in one sitting

since eating utensils forgotten in the excitement of the misdirected luggage had now been supplanted with handsomely carved spoons that would have been the envy of any pilgrim. One resourceful member ate in regal style off a moose antler, which lends itself to ready balancing across the knees like an airline food tray.

The next day dawned bright and clear, and we headed east to a small upside down U-shaped valley having mountains on three sides and a small lake at its open western end. Bill, with Jack, Fran and Gunther climbed the 9500' peak at the northwestern tip of the U. Hans, Ed, Dieter and Rob meanwhile climbed the opposite peak at the southwestern tip, where evidence was found near 9500' summit of a previous visitation. Again, however the beautiful views across the Brazeau valley to our previous climbs and the exquisite profusion of wild flowers during our return to camp through the meadows made it a most enjoyable day. A cooling swim in the stream next to our camp, followed by a whirlpool bath at the foot of the falls topped off the day. In lieu of a sauna a few of the hardier types were seen scrambling up alongst the falls au courant with the latest in the nude look. The local vigilante group (squadrons of voracious mosquitoes) quickly restored decorum to acceptable standards, however, we are able to assure our readers.

The following day Bill took Jack, Gunther, and Dieter up the triple summit at the centre peak of the previous day's U-shaped valley. First, the westernmost peak was climbed via its crumbly east ridge. Then we went back down to the saddle, had lunch, and scrambled up loose scree to the 10,200' central summit. The eastern summit, some 50' higher, was gained by rappelling down to a notch and then ascending a rock slab. Meanwhile Hans took off up the next northern side valley with the remaining eager rock-hounds in search of more challenging fare. What they found is not exactly clear, although they did get most of the way up the peak on the extreme east of Le Grande Brazeau. The last day saw Hans' group depart again to the west for rockhound activities, about which we have yet to receive a lucid report. Bill meanwhile took the same group up the easternmost peak of the next U-shaped valley to the south—which turned out to be a relatively straight-forward climb up rock and snow.

On our last day we departed from the valley of the lakes via the Mt. Brazeau icefield and out the same valley and trails used on the way in.

Dieter H. von Hennig

Snake Indian and Snaring River Drainages

One area in Jasper National Park of which little is known is that of the Snake Indian and Snaring River drainages. As found by DeWolf (CAJ 1971, p. 90), some of the peaks of the area have been climbed in the past, yet no records seem to have been made of these ascents.

Hector McKensie, Brian Dill and I set up a camp at the head of Vine Creek in July 1970 for exploration of the north west ridge of Mt. Gargoyle and a climb of Roche de Smet. A cairn with an old stick protruding was found on Roche de Smet, yet when the more difficult route up Mt. Redan was climbed to gain the north west ridge of Mt. Gargoyle no cairn was found.

During further exploration of the area in July 1971, Murray Hindle and myself again made camp at the head of Vine Creek. To obtain a better look at the area we hiked up Mt. Cumnock (8000', Jasper Park North Sheet Township 48, Range 2) on which a cairn was found. The next day the unnamed peak (8400') directly to the south of Mt. Cumnock was ascended and a cairn was found. The ascent proved easier than anticipated giving us time for further exploration. Turning south over expanses of alpine meadow and a large boulder field we climbed a snow and ice couloir in the presence of whizzing rocks to a col between two other unnamed peaks. From here a ridge of large slabs was climbed to the summit of the most easterly peak (8100') where no cairn was found. Much of the north side of this peak has fallen away leaving the top in an overhanging and seemingly precarious position. After building a small cairn descent was made down the slabs of the south face. Camp was reached at 8 p.m., after following a large unnamed creek through the bush for about 4 miles.

Loren Hettinger

"Mt. McGuire" and "Mt. Weiss"

There was very little known about the valley west of Jonas Creek before we started exploring this summer for lakes, fauna and flora, and of course, looking for climbing possibilities. The valley, so close to the highway, is cut off by swift Sunwapta River, and is a paradise for wildlife.

On 24 August 1971 our climbing party started out—Brent Martin, Hans and Lilo Fuhrer. This time we decided to take the boat from Jonas Creek Campground down 1/4 mile to the Sunwapta River, as the last foot crossing of the river was sort of a wild experience, and the extra effort of carrying a boat would be worthwhile. After crossing the river we started walking with our heavy loads beside the creek to the valley, then kept to the far left in the forest to avoid the creek canyon. A high game trail led us to the open valley above the canyon. The going was very easy, and as we talked away, a grizzly crossed our trail, which startled us and the grizzly. He decided to get out of our way and ran up the scree and talus slopes like an old steam engine, then looking back at intervals to see whether we were behind him or not.

The 21/2 hour walk brought us to a lovely campsite below the broad mountain. There was still enough daylight to establish camp, and then after eating, looking around and listening, everyone found their place in the sleeping bags. In any new area sleeping is a problem, thinking too much of the bears. Only the "very brave" ones pretended to be sound asleep, but still turned around with every little noise. When daylight came everyone could have slept on, but the morning was too beautiful and inviting, and we had our new land to explore. Soon we left the camp behind us and headed towards the mountains. Its peak was glowing in the warm morning sun, and reflected in the lake below. A big hanging glacier comes down the centre of the mountain, and below is a huge moraine area and lake. The south east glacier led up to a 40 degree ice chute to the col and north east face. Easy Grade 3 climbing led us to the east ridge. Climbing the ridge was easy, and the last summit tower offered good Grade 4 climbing. After 5 hours we arrived at the main summit (ca. 10,000') where we found a small cairn, but no

registration. We built a new cairn and put a registration tin in it.

We named the mountain and valley "McGuire", in honour of Micky McGuire, retiring Chief Warden of Jasper National Park, who served for 34 years, deserves to have a mountain named after him.

I assumed the mountain had been climbed from the Gong Lake side before. The summit offers a splendid view of Gong Lake, Mt. Confederation, Mt. Palmer, Thorington Tower, Mt. Smythe, Mt. Nelson and Mt. Gee; also the whole of the Columbia Icefield area can be seen. South of our peak is the high, horn shaped tower of Mt. Gong. Between this tower and Mt. Smythe is the impressive icefield of the Athabasca/Sunwapta divide.

To make a complete traverse of the mountain ridge, we continued descending to the north col. Ahead of us and above the north col was the next unnamed peak, and its north east ridge could lead us back into the valley again. Climbing this peak we could finish the whole mountain cirque blockading the valley. The ascent was easy and no evidence of previous climbers was found. We named this peak "Mt. Weiss" (ca. 10,150'), in honour of Joe Weiss of Jasper, an old pioneer and guide of the Canadian Rockies. Opposite our summit to the north is the Mitchell group, and we saw the cairn of last year's 1st ascent on the south summit.

After admiring the surroundings it was time to leave, as we didn't know what the descent ahead of us would be like. Descending over the north east ridge we climbed over a series of sharp towers towards our high camp. The towers offered quite challenging Grade 4 climbing, and we used some piton belays to descend instead of rappelling. The ridge seemed endless, with very loose rock in places, as only the steep towers are of solid quartzite. At the end of the ridge a steep talus and scree slope led us to the high camp, at an elevation of 6500'. We arrived by dark, after being away 13 hours, 4 1/2 hours for the descent. A pot of soup, bread and cheese tasted like Thanksgiving dinner, and our tired limbs needed a good night's rest. The next day, a leisurely walk with stops to pick blueberries took us out of the valley and down to the Sunwapta River.

Mt. McGuire is visible 1 mile north of the Jonas Creek campground. It is the broad massive mountain at the end of the valley with a hanging glacier. Mt. Weiss is the long ridge to its right. The ridge extends far over to the west and main summit (cairn) can be seen from the valley of the Mitchell group. It is the first summit to the left behind Mt. Mitchell's south peak.

Hans Fuhrer

Lightning on Mt. Brussels

When Hans Schwarz knocked on the trailer door at the Columbia Icefield saying, "Let's climb Mt. Brussels", our enthusiasm rose fast. It didn't take long to prepare, and the two of us walked into Fryatt Creek Valley on 24 August 1970. On the way we met a party coming out, and to our surprise they had climbed Brussels. It must be a good year! Giving us some pointers, they wished us a good climb, and on we went towards the high camp below the Brussels-Christie col. Spending rather a restless night with wild clouds and strong wind accompanied with rain showers, our interest calmed somewhat. Still, after a good hour's delay, we worked our way up to the col. Getting higher the weather improved. There stood Brussels, black and rain washed, the eastern clouds still red.

The warmth of the morning sun pushed us on. We roped and climbed directly over the east ridge to the point, coming up from the east glacier and face (rappel anchor). Climbed up a steep overhanging cliff to the right, then up the left crack to the first step (rappelling anchor). Climbing from here was straightforward, we kept to the left of the ridge, and on to the point directly under the main east buttress, where a stuck rappel rope hangs off the face.

A long 100' traverse leads right into the north east face. Instead of traversing, we rappelled down 70' to a broad ledge, then traversed right and climbed up to the so called Formidable Crack. The crack is difficult and overhanging, and leads into a small cave. From there we traversed out to the left (difficult move) into another cave. Traversed further left, then up the steep north east buttress to a big ledge (last step). Climbed out left to the east face, then a smooth overhanging crack led straight up towards the summit ridge.

The very exposed ridge led us to the summit. There was not much time for looking around. We found the tiny registration tube in the partly blown off cairn, and signed our names on the torn slip of paper as the 8th, and 2nd Canadian, ascent.

A lightning storm was building up from the west and we left our target area as fast as possible. The rappels went fast, but as we approached the Formidable Crack our two 120' ropes proved too short, and we had to swing ourselves from the overhanging face into the Formidable Crack, and climb down for the last 20'. Here we got held up in the worst lightning storm. Our position was not safe in the crack, so we rappelled once more to the broad band, and traversed out onto the ridge. As Hans went over the arête his eyebrows stood straight up from the static electricity, and we knew a second storm was near. Getting into a well protected place behind the ridge on the east face, we watched the lightning flashes strike close, thundering at the same time sounding like rifle shots. Every time it hit that close we looked at each other, always surprised we were still alive.

The main lightning target was Mt. Christie, whose summit ridge stretches far into the main valley. The thunderstorm went on for 2 hours, and then a snowstorm started, cooling things off rapidly. Descending further took a little more time, with iced up and stiff ropes. There was still some lightning activity, but we had to rush to make it to the valley by daylight. We moved camp lower into the timber, where we stretched out over the willow bushes and found ourselves sleeping through pouring rain the whole night. The next day we walked out of the valley in beautiful weather. I estimate the difficulties of the climb as: the lower ridge to the steep east buttress, 5 to 5.6; from the Formidable Crack, 5.6 with moves to 5.8. Advisable equipment: two 140' ropes, assorted angles from 1 to 21/2 inches for the upper cracks which give no possibility of using horizontals, various pitons and some jam-nuts, and rappel slings.

Hans Fuhrer

Entertainer, Bon Echo *Imre Michalik*

Climbing Reports: Ontario

1971 was an active exploratory year; one of unprecedented attendance at the two annual rock schools held in April, of extensive use of Bon Echo and its many facilities, and of great wanderlust in the search for new cliffs to be scaled. It was also a year which made eastern Canadians aware that climbers and the ACC exist.

Many new routes were added to our favourite haunts of Rattlesnake Point and Bon Echo, some of impossible standards (5.9, 5.10) but many within everyone's capabilities. Many old climbs have been done free as the quality of rock climbing continues to rise. Organized meets are rapidly multiplying to accommodate the many areas within reach of Toronto and Ottawa, and there are few weekends without some groups going somewhere, be it bitter January or scalding July.

New explorations for potential climbing areas farther afield than Bon Echo ranged from the Sleeping Giant near Thunder Bay to the Pare des Laurentide east of Quebec City. These included Lake Superior Provincial Park, Agawa Canyon, Killarney Provincial Park, the Kimberly area, and Petawawa on the Ottawa. Traditional climbing areas—Val David, the Laurentians, and the Airondacks— are being rediscovered. The 'Gunks in New York remain a popular old favourite. Part of the increased attendance, especially at the swamped rock schools this year, was due to the ACC Toronto Section's Sportsman's Show booth which advertised climbing of all types. Although successful in terms of the number of people made aware that climbing as a sport is a thriving concern in Canada, the number of lasting interested people was not in proportion to the amount of money and work expended. Hence the proselytising drive has subsided and the usual channel of sport stores, the YMCA, and educational institutions advertise our existence.

There were seven serious accidents this year, including one fatality. It is felt that length of fall and seriousness of accident, could have been greatly reduced had protection been placed or used properly.

The annual summer exodus from Ontario found climbers on Logan, in the Battle Range and Yosemite among points west; and in Chamonix, Hungary and Yugoslavia in the east. Winter is a time for reliving all these adventures in vivid colour and thinking of even whiter or rockier pastures for 1972, and that's just what everyone is doing!

Judy Cook

Climbing Reports: Quebec

The climbing scene in 1971 has been one of increasing activity due in large part to the influence of La Fédération des clubs de Montagne du Québec (FCMQ). The Fédération and some of its activities were described in the May 1971 issue of the ACC Gazette.

The school committee (I'école de formation de cadre) received government grants and conducted two sessions, one at the end of May at Val David and one in Chicoutimi at the end of August. At present, after the fifth climbing school held in Chicoutimi, the Fédération has distributed 96 certificates made up of 12 "instructeurs", 19 "moniteurs", and 65 "initiateurs". Some of these certified climbers have obtained part time and summer work as climbing instructors. The school committee has now reached the stage where it has become autonomous, and has become incorporated under the name of École québécoise des sports de montagne, incorporée. They expect over one hundred climbers to attend their school in 1972.

The long-awaited guidebook to the climbing areas of the Montreal region made its appearance. It is the work of the popular Montreal climber, Bernard Poisson. It is in pocket-book form and contains a complete list of climbs of the most frequented areas, with excellent drawings accompanying the descriptions.

The Paul Larue Hut was completed by late autumn at Lac Quenouille near Ste. Agathe in the Laurentians. It accommodates 18 people and is used by cross-country skiers during the winter. Huts are expected shortly at Val David, 50 miles north of Montreal, and St. Urbain, just east of Quebec City.

The FCMQ has received government funds to hire a full time executive director in the person of Denis Gravel. Because of this, several projects are underway and we can expect an even more fruitful climbing season in 1972. It is interesting to note that climbing is being introduced in some of the colleges and universities of the province as part of their physical education programs.

There is a definite trend for the numerous climbers from western Quebec to venture towards the big walls of the eastern part of the province. This is borne out by the growing popularity of the St. Urbain area.

La saison a été bonne pour le Club d'Escalade Laurentien (CEL) principalement dans le recrutement de grimpeurs "mordus". Depuis quelques années le CEL stagnait légèrement, mais maintenant tout semble vouloir redémarrer.

II c'est fait, ou refait, dans la région de Charlevoix environ 50 voies, presque toutes à St-Siméon. Cette année, seulement 10 premières ont été faites.

Nous avons reçu au refuge des groupes de d'autres clubs de toute la province variant de 4 à 50 personnes à 3 ou 4 reprises.

Le gouvernement aménage un réseau de sentiers (1er du genre dans la province) de randonnées aux pieds des parois grâce à l'initiative de quelques membres du CEL.

Nous avons eu trois incidents qui auraient pu avoir des suites fâcheuses. Deux sont imputables à l'imprudence la plus vive. Mais il n'est rien arrivé de grave.

The McGill Outing Club completed its most active year in climbing and mountaineering. The annual Fall Climbing School was very well attended with over 60 new participants.

Club members made trips to Whitehorse and Cathedral ledges in New Hampshire and Mt. St. Hilaire.

The club once again benefited from members who had been out climbing in western Canada over the past summer. Several winter mountaineering trips have been held already, to the Adirondaks and White mountains.

Three club members organized a trip to Mexico for the purpose of climbing some of the high peaks in January 1971, and an exploration of the La Huesteca Canyon de Santa Catarina was carried out as well with a view to possible future climbing trips.

Two briefs were submitted on Conservation issues in the National Parks, one on Forillon and the other on the Western parks. A position paper and petition on the skidoo problem on cross-country ski trails in Quebec is presently being prepared. The development of climbing routes on the Shawbridge cliffs located near our clubhouse in Shawbridge, Quebec is continuing. Several new routes were put up in the fall, most of which are variations or extensions of past routes. As no really adequate description of climbs in this area has yet been published, the club will probably undertake to catalogue and publish descriptions of climbs in this area this coming year. Most of the pitches are short but interesting, and some are quite challenging. It is suggested that climbers in the area contact the club for further information.

François Garneau

Onglée

En cette fin d'octobre, les nuits sont fraîches dans le Parc des Laurentides, à la hauteur de St-Urbain, dans la région de Bale Saint-Paul. Le bivouac a été très confortable et, frais et dispos, nous engouffrons le petit-déjeuner et pénétrons dans I'épaisse forêt qui nous sépare de la paroi. Après une demi-heure de marche ardue dans cette forêt vierge, nous voici au pied de cette belle paroi Sud du Dôme. C'est ma seconde visite à St-Urbain, pittoresque région située au nord-est de Québec.

Habitués que nous sommes aux petits rochers de Val-David, nous avons un peu négligé de bien situer la partie supérieure de la voie que nous voulons ouvrir. Qu'importe! Dans ces belles dalles raides mais assez faciles, une voie directe ne semble pas offrir trop de difficultés. J'attaque la première longueur et enlève en quelques instants cette première longueur. Le temps est gris et frais, mais il devrait tenir. Au relais, un joyeux yodel nous annonce que nos compagnons, tant attendus la veille, attaquent un itinéraire parallèle au nôtre. Pierre poursuit par une belle fissure d'environ cinquante pieds et découvre, au-dessus, une large bande de rochers parsemés de trous d'érosion que nous baptisons «l'Autoroute à trous». Nous empruntons cette voie naturelle et nous nous élevons dans la paroi avec précaution, le pitonnage étant quelque peu délicat.

Au relais, je scrute ce que sera «ma» longueur : «l'Autoroute à trous», toujours louvoyant à travers une immense dalle sans défauts. Je médite sur la possibilité d'y progresser en sécurité et surtout d'y installer un relais. Seul un petit dièdre coiffé d'un non moins petit surplomb semble offrir une possibilité. Ce dièdre

Banana Split, Le Mont du Gros Bras, St. Urbain *François Garneau*

L'Initiation, Le Dôme, St. Urbain *François Garneau*

devrait être fissuré. Nanti de cette certitude toute philosophique, j'aborde doucement la dalle. Chaque doigt trouve ici sa prise et je m'élève sur le bout des orteils. Mais le relais est encore loin et il est impossible de planter un seul piton. La cordée voisine, à cet instant toute proche sur la droite, m'enseigne les subtilités de l'utilisation des «clogs». Avec un haussement d'épaules qui se voudrait indifférent, je poursuis l'ascension et parviens au fameux dièdre au fond duquel je peux enfin pitonner.

Les pieds à plat sur le rocher, suspendu par mon baudrier, j'assure la progression de Pierre qui me rejoint et entame une délicate traversée oblique qui l'amènera au pied d'un ressaut situé entre deux importants surplombs. Pendant qu'il essaie de pitonner une petite fissure, je regarde le paysage: il neige! Le vent balaie d'épais flocons dans la belle vallée encadrée de parois qui s'ouvre à nos pieds. Je commence à frissonner et mon compagnon atteint finalement le relais. Je le rejoins assez rapidement, le bout des doigts engourdis. Le rocher est déjà glacé et humide par endroits. Je traverse légèrement vers la droite, les doigts dans une fissure qu'on voudrait, en ces occasions, plus large et j'arrive près d'un surplomb que j'évite par la gauche par un rétablissement douloureux. Mon second s'agrippe littéralement à la fissure et me rejoint, dérapant en marmonnant quelques jurons. Nous avons rejoint ce bosquet d'arbres qui marque la fin de la voie directe. En nous réchauffant, nous baptisons d'emblée la voie «l'Onglée» (un froid piquant qui gèle les ongles et le bout des doigts.) Nous calculons que nous nous trouvons approximativement aux deux tiers de la paroi. Après un rapide casse-croûte avalé dans une atmosphère alpine magnifique, nous redescendons en rappel cette belle paroi, dans laquelle nous comptons revenir l'an prochain.

Jean-Pierre Cadot.

Une bien jolie voie

Au cours de l'automne dernier, plusieurs nouvelles voies ont été ouvertes à quelques milles de St-Urbain au Mont du Gros-Bras et au Dôme. J'ai eu bien du plaisir à ouvrir I'une d'elles, quoique pour cela, j'ai dû embarrasser de mon peu d'expérience et de mes nombreuses hésitations le patient premier de cordée, Régis Richard et notre gentille co-équipière, Anita Petitclerc.

Mélangez sept cents pieds d'escalade de beau rocher, de petits passages intéressants à une vue splendide et vous aurez alors un avant-goût du plaisir que vous réserve I'ascension de la «Tour de contrôle». Cette bien jolie voie offre un plaisir esthétique appréciable, tant par le trajet que nous suivons, que par le panorama environnant.

Cette voie aura une saveur toute particulière pour le grimpeur qui aime se servir presque exclusivement du bout des pieds et à avoir comme prises les trous faits par la pluie dans le rocher. Cette voie coté IV est des plus soutenues.

C'est au mois d'octobre dernier que la première a été accomplie. Pour notre premier de cordée, c'était sa première grande voie qu'il ouvrait. Je puis affirmer qu'il s'en est très bien tiré et qu'il a un talent fort prometteur. Pour nous tous, ce fut une expérience de plus enrichissante.

Pour ceux qui sont intéressés à en faire l'escalade, ils n'ont

qu'à prendre la route 56, passer St-Urbain d'une dizaine de milles et à se rendre au Dôme. La voie se situe entre «l'Initiation» et «l'Onglée».

Pierre Pilon

Banana Split

C'est en octobre 1971 qu'est enfin arrivé le moment de faire une première sur un grand mur vierge; cela est rare dans la vie d'un grimpeur. Notre ascension fut accomplie après deux tentatives en 1970. La veille, j'avais téléphoné à Jacques Lemay et il m'a exprimé sans hésiter son intérêt de m'accompagner.

La face est du Mont du Gros-Bras, montagne rocheuse à I'allure alpine, présente une immense muraille d'environ 800 pieds de hauteur. II est difficile de ne pas être impressionné par ce massif que l'on aperçoit à courte distance de la route 56, au nord-est de la ville de Québec.

Après une vérification très soigneuse de notre matériel et un coup d'oeil anxieux vers le ciel nuageux nous sommes partis dans le bois. C'est après dix minutes de marche que nous avons atteint le début de notre voie. Nous revêtons notre quincaillerie et nous nous encordons. Je prends la première longueur. Deux raisons ont gardé le choix de notre itinéraire: tout d'abord, les trois premières longueurs ont déjà été faites lors d'une première tentative, il y a un an, et ensuite, il me semble, après avoir longuement scruté une photographie, que c'est le trajet qui présente le moins de difficultés. Ainsi, nos chances de succès seront meilleures, (je n'avais pas le goût de faire une troisième tentative).

La première longueur consiste en une cheminée qui n'est pas commode. Je m'assure au relais, Jacques me rejoint et continue sur une traversée vers la droite. Une petite fissure verticale lui permet finalement de s'installer au deuxième relais. À mon tour, j'aborde une fissure assez large avec de petites prises. À cet endroit, il faut être très prudent car la fissure est très verticale et la situation est telle que toutes mes connaissances de pitonnage doivent être mises en vigueur. Jacques me dépasse et part en tête sur la quatrième longueur, la première dans du territoire inconnu. II s'élève lentement mais sûrement (V-) le long d'une fissure parallèle et à droite de la mienne. II trouve un relais confortable sur une bonne vire. Lorsque j'arrive à sa hauteur, je puis bien apprécier notre situation impressionnante; entourés d'un beau rocher franc, quelle joie! À mon tour de partir; à ce moment-là je ne le réalise pas, mais c'est le passage clef. Jacques murmure quelque chose à propos d'une possibilité un peu vers la droite. Je jette un regard rapide (trop rapide) et opte au lieu pour le côté gauche. Très lentement je m'élève; j'arrive au bas d'une petite dalle qui est contournée par une fissure à droite. Mes deux ou trois tentatives de conquérir cette dalle à prises minimes demeurent vaines: mon sac à dos me rend la tâche plus ardue. J'informe Jacques que je vais traverser vers la droite à moins qu'il ait l'intention d'essayer le passage—il veut tenter sa chance. Je lui passe la tête. II s'aventure dans la fissure à droite de la dalle avec de nombreux coincements. II respire laborieusement. II s'arrête, étudie la situation un moment en reprenant son souffle, puis descend. Après un moment de repos, il traverse vers la droite et dans un très beau passage (V), il réussit à atteindre le cinquième relais. Je prends quelques pas sur la vire vers la droite et je me rends compte que je puis le rejoindre en ligne directe (le passage que j'avais ignoré au début).

Une longueur dans une dépression parsemée nous permet d'atteindre le bas du grand éperon doté d'une tache blanche. Là, nous prenons le temps de bouffer. Jacques me renseigne sur les délices du pouding au chocolat en boîte. Nous reprenons notre ascension en suivant le bas du mur à droite de l'éperon. II y a un changement d'allure dans cette partie de la voie. Nous nous sentons plus renfermés dans les prochaines cinq longueurs, qui consistent de petits murs (qui sont quand même assez intéressants) et de sections boisées. Près du sommet, la voie devient plus ouverte encore une fois. Nous posons le pied sur le sommet six heures et demie après le départ. II y avait déjà là quelqu'un pour nous accueillir, un ours!

Le temps de manger quelques graines, de construire un cairn et nous descendions les têtes remplies de notre belle réussite.

François Garneau

Climbing Reports: Yukon and Northwest Territories

Pangnirtung Pass, Baffin Island

An expedition comprising Doug Scott, Dennis Hennek, Phil Koch, Guy Lee, Steve Smith, Ray Gillies, Mick Burke and Rod Wood spent seven weeks in the Pangnirtung Pass area in July and August bent on big wall climbing. Pat Baird accompanied the group for the first two weeks. From a base camp at the extreme south end of Summit Lake, eight new ascents were made, and a number of fine rock routes resulted, notably:

MT. ASGARD

Lee, Wood and Koch made the 1st ascent of the unclimbed South Peak via the south ridge (Grade IV, 5.7; 3000'). The climbing was mainly pleasant, but the climb turned into a minor epic near the summit; bad weather closed in, and the climbers had to bivouac on the summit plateau. An exciting retreat down the ridge took place the following day. An attempt was defeated by bad weather.

MT. BALDR (BREIDABLIK), NORTH FACE

This very elegant rock face yielded a superb rock route (V, 5.8, Al; 2000') to Lee and Koch. The rock was excellent throughout, and they were able to place good nuts wherever aid was necessary. Hennek, Scott and Wood made a 2nd ascent, which was filmed by Burke.

MT. FREYA. EAST PEAK

Scott and Hennek made a new route on the great apron north east side. (IV, 5.8; 3000' of slabs, topped by a 12,000' headwall). Smith, Wood and Gillies made a 2nd ascent.

First ascents of Anaqaq I and II, Bilbo, Frodo, Ungardaluk, and Pingo were also made.

An article on the above expedition by Rob Wood, now back in Calgary, will appear in the next CAJ.

Pat Baird

Looking up the north face and ridge of Mt. St. Elias from Russel col *Alice Culbert*

Unnamed peak above the Newton Glacier *Alice Culbert*

Lotus Flower Tower, Logan Mountains

On 12 August a British Columbia-Yukon Air Service seaplane took Joel Coqueugniot, Patrick Cordier, Mlle Marie Francoise Gay and me to Glacier Lake. The weather was gorgeous, but we learned that two other expeditions had failed because of rain to climb the Lotus Flower Tower (First ascent: Bill, Frost, McCarthy, AAJ 1969).

The next day, after a heavy and painful ten-hour carry, we reached the flat at the foot of the glacier. The best route seems to follow the edge of the forest on a moose path and then to climb a huge scree slope that descends from Mount Sir Harrison Smith. That night it began to rain. We waited for three days under a boulder while snow fell on the summits. On 16 August we went to prepare a rope length on the vast dihedral described by Sandy Bill on the 17th the weather continued unsettled. While Marie-Francoise packed supplies up from the lake, we climbed halfway up the wall to the "meadow", a lovely climb at first artificial in the dihedral and then nearly entirely free. The next day in beautiful weather we got to the second bivouac site, but returning bad weather forced us to continue to the summit, which we reached at 4 a.m. on the 19th, being the second ascent of the route. We descended the south ridge to its lower point and with numerous rappels gained the foot of the face at 1 p.m. by a deep, wide couloir.

Bernard Amy

Mt. St. Elias

It is believed that a strong Italian team comprising Giovanni and Antonio Rusconi, Giuliano Fabbrica, Elio Scarabelli, Georgio Tessari and Rino Zocchi arrived on the mountain in June, hoping to climb the east ridge and the north east spur. Their attempt on the east ridge failed at half-height when, after some bad weather, they were confronted with a double-corniced ridge of unconsolidated snow and considered further progress unjustifiable. Turning to the original Abruzzi Route (north ridge), which they climbed in order to view the north east spur, Antonio Rusconi, Zocchi and Fabbrica reached the summit. But the attempt on the north east spur finally failed. After placing two camps and climbing some very steep sections on a snow and ice ridge, they were about 2000 feet from the summit when the weather deteriorated rapidly. An 800' rope was produced and the Italians made good their escape with a mammoth rappel.

California Mt. Logan Expedition

After a six day wait at Glennallen, Alaska, six Californians were flown to the May Creek landing strip on 25 June 1971. The following day Rich Gnagy and Dick Beach were landed at base camp on the King Trench route but due to bad weather it was not until 5 July that Bill Feldmann, Barbara Lilleyand Alex McDermott were flown in to join them (the sixth member had left Alaska to return to his job.)

Camp I was established at King Col (13,500') on 6 July. With the help of a 400' fixed rope on the steep slope above the Col, Camp II was set up at 15,200' on 9 July. After a day of storm, Camp III was established at 17,200' on 12 July. On 13 July, in a single carry, they crossed an 18,000' pass south of "Prospector Peak" and descended to the Arctic Institute's camp at 17,500'. Here they were joined by John Hall's Logan-St. Elias party and after several days of storm, members of both groups set up a camp at 17,500', below the W. Peak and 2 miles from the Institute, on 16 July. As a storm was developing, some chose to return to the Institute that day but a 16 hour break in the weather permitted Dick Beach and Barbara Lilley, along with John Hall and Toby Wheeler, to reach the summit of Mt. Logan at 8 p.m. on 17 July in bright sunshine and calm weather. After a stormy morning, they returned to the Institute the following day. On 19 July the Californians returned to their base camp and were picked up on 22 July. (The other members of Hall's party, Stanley & Lucille Adamson and Joan Deery, also reached the summit of Mt. Logan after the California party left; all but Toby Wheeler were killed in an avalanche while climbing Mt. St. Elias in August 1971.)

Barbara Lilley

Lucania and Steele

We ascended the five-mile-long south east ridge to Mount Steele (16,644') and then traversed the south face of Steele from 15,000'

to 16,000', a rising traverse which took us to the south west ridge of Steele, from which we could easily strike for Lucania. The south face traverse was the only new part of the route; it involved mixed steep snow climbing and 60° ice climbing and was about a mile long. From the south west ridge of Steele we descended to 13,000' in the col between the two peaks, and then traversed around the north side of Lucania. From our last camp (13,000') we did a 4000' summit day up the north face to the top (17,147'). We then returned by the same route. We were picked up on the upper Donjek Glacier by Phil Upton, the Arctic Institute Pilot, who had brought us in. We were on the mountains for 15 days with only one stormy day. The members of the party were Jurg Hofer, Taina Dutescu, Liz Witherill, El Gemmil and the writer.

Joseph C. Labelle

Mt. Stephen Leacock (10,200')

Martyn Williams, Jim Boyde and Monty Alford devoted Easter week, 9 to 15 April 1971, to a 1st ascent of the peak in the St. Elias Mtns. at 60° 38' N, 138° 43' W named in 1970 by the Canadian Permanent Committee on Geographic Names for the renowned Canadian author, humorist and economist. It seemed fitting that the 1st ascent was made by a Canadian party.

Monty Alford

Mt. Jeannette (12,050')

Two Japanese climbers are reported to have reached the summit after approaching via the Agassiz Glacier.

Failure on Mt. Logan

And so it begins again. This time it is Mt. Logan in the Yukon, rising from a base of about 5000' to a summit of nearly 20,000' creating a 15,000' massif of enormous proportions.

Dick McGowan, our expedition leader, and John Marshall, our photographer arrived and the three of us loaded our personal equipment into my station wagon along with about $30,000 worth of photographic equipment and wife Lucy drove us north. We rendezvoused with Jack Walston, Steve Trafton, and Gordon Doty, M.D. They explained that Tensing Norgay, Lute Jerstad, and Jay Ullin would fly up to meet us in the Yukon in a few days. Wayne Smith M.D. would meet us in Whitehorse.

At 11:15 p.m. with a gray light still haunting the northern horizon we rumbled over the dusty, gravelled road into field headquarters of the Arctic Institute of North America (AINA) to be greeted warmly by several members of the institute.

From 24 to 29 July we waited for storms to clear from the 10,800' level of the King Glacier, or the "Trench", as it is called. We received word that Tensing Norgay would be unable to join us because of our shrinking time and his New Zealand commitments. Then on 30 July Steve routed everyone out of bed at 6 a.m., with the report that the weather was clear on Mt. Logan and that today was the day.'

Waiting for the final flight, Dick Gordon and I sat in the sunshine at Kluane Lake and talked, shirtless, absorbing the warm rays. It seemed strange that in a few hours I would begin an ice-bound existence. At 4:15 p.m. with a roar of the supercharged engines Phil Upton powered us into the deep blue sky. For well over an hour we flew over vast glaciers and between peaks of immense ruggedness, many unnamed and even more untrodden. We swung to the west and then to the north side of the Logan Massif in an effort to spot the Hall party from Oregon, who had been out of radio contact for many days. Finally, we spotted the black dot of a tent on the Seward Glacier at about 6250'. Continuing over the Seward Glacier around King Peak we spotted a single orange tent in the Trench, and then the waving members of our party. We bumped down on our skis close to the camp and jumped out. Quickly unloading, we looped a rope on the tail wheel and hauled the tail end of the plane around so he could take off before settling into the snow. With a roar of propeller and a snowy gust out the back that blew down the snow block latrine wind wall, the Beaver took off.

We were awakened several times during the night by the wild wind flapping of the tent. The weather was deteriorating. At about 8 a.m. we radioed Kluane to report our activities and a wind blowing from the south. All the predominant storms are southwesterly in origin from the Gulf of Alaska. Our stove hissed throughout the entire morning, melting snow to water. It was almost 1 p.m. before we picked up our loads and started climbing.

One of our missions was equipment testing. We found Dick's newly designed cagoules (long wind parkas) really great. They come all the way down to mid-calf. In their light blue we looked like a bunch of penguins, but the weather protection was exceptional. However, we found the elastic in the wind pants a bit weak, so that the pants gradually moved down to your knees while walking. As Dick explained "That's why I made the Cagoules so long."

Sunday 1 August we woke at 5 a.m. By 11:30 a.m., we were ready to move up on snowshoes but winds gradually increased to over 75 mph. The shrieking and flapping, as if seeking a crescendo, suddenly found it with a rip of the tent around one of the poles, the collapse of half the tent, and the tearing loose of most of the guidelines. We seized the thrashing fabric while Jay and Dick stitched the grommet back in place with pieces of leather and nylon.

By 1 p.m. the winds had slackend and we prepared again to move a load of food and supplies up to 12,000'. We travelled as a patchwork of orange parkas, yellow snowshoes, pale blue wind clothes, dark blue packs and green stuff sacks, connected by a thin line of red rope, across a desert of white snow.

Next day we were roped up with packs on and ready to move up when there was an echoing rumble from high above. Our eyes apprehensively scanned the hanging glaciers on the King Peak Ridge and then we saw it... a roaring mass of white avalanche. Dick said, "We better drop our packs, unrope and get ready to run. It may reach us." As the tons of snow struck the glacier it exploded into a huge white cloud, then boiled along the surface toward us. Just as we were ready to run, it became clear that the fury would not reach us. Slowly the white cloud rose to fill most of the valley before it finally settled. We reroped, crawled into our pack straps and headed up, the sun ricocheting off every sparkling ice crystal to

focus intense heat upon us. Our campsite at 12,000' was dramatic. Our tents located beside a giant sérac, a polyhedral of ice canted at an absurd angle, while several more protruded at various heights up the slope toward Logan summit.

In front of us the King Trench was a mass of crevasses lacing the surface. King Peak itself rises straight up from the Trench, a rugged face easily matching the famous north face of the Eiger We picked up loads at our cache of about 50 pounds apiece. This weight in addition to 20 pounds of personal gear grinds deeply into the shoulders. This modern age of convenience seems excessively weighty with the transporting of walkie-talkie radios, single and double band radios, cameras, light metres, batteries, generators, pounds and pounds of film more cameras, tape recorders, pounds and pounds of tapes, binoculars, and extra everything. Our climb up to 14,000' was done largely in a cloud which helped shield us from the punishing sun of yesterday. In spite of massive amounts of sun creams of various kinds, lips and noses were beginning to get sore. Wayne, Steve, and Jay were building an igloo at King Col when we panted our loads up.

On Wednesday morning, 4 August, radio contact with Kluane indicated that Lute Jerstad was expected there tonight. The problem still remained as to how he would join us. Wayne, Steve, and Jay spent the day pioneering the route up to 16,000' while Dick, Jack, Gordon, John and I moved loads up to 14,000'. As I moved along I was conscious of the intense alpine stillness, broken only by the slight moan of packing snow under my boots, the squeak of snowy complaint as my ski poles twisted into the surface, an occasional groan of my pack as the weight and strap shifted, and my own super-imposed heavy breathing.

On Thursday Lute was flown into camp II at 14,000'. It was 3:30 p.m. before we were ready to move a load up the route put in by the advance party to 16,000. We started up a very steep snow slope and into an enormous mass of giant crevasses. It was starting to snow and visibility was deteriorating rapidly. At 9 p.m. we reached the campsite. The Logan tent was erected and six of us crawled in for some hot tea, sausage, and cheese while awaiting the rope team of Lute, Steve and Gordon. Nearly an hour passed before their arrival. Lute called into the tent for me or Wayne to examine Gordon. They had left his pack a short distance down the slope. Gordon crawled into the tent and we brushed the snow from him. He looked gaunt and blue-lipped. He explained that he had been seeing floating objects, followed by double vision. He had been hearing strange noises and seeing ghost figures standing alongside the route. We gave him some hot soup and he sank into a corner to sleep. By 11 p.m. it was essential for the rest of the party to move Gordon down to camp II, regardless of his weakened condition. It was dark, snowing, and the wind was howling. We hated to see them leave with a couple hours of threading their way through a crevasse field ahead of them, but there was no choice.

Next morning it was snowing heavily, but the wind had died down. Visibility was poor—too poor to try to push a route through to 17,000'. Jack tried radio contact with camp II at 8, 9, 11 and 12 but to no avail. After several more failures to reach them we decided to move several hundred feet down in an effort to establish radio contact. Communication was difficult, words frequently blotted out, and we finally moved even farther down. They indicated they had been receiving our messages but we had been unable to hear theirs. "How is Gordon?" The ominous answer came through clearly, "Pulmonary oedema."

By midmorning on 7 August we decided there was no reason to stay longer. The storm was worsening. We knew Gordon could not be evacuated out of camp II for some time, so the efforts of the party would have to be directed toward his movement to base camp.

Packing was a very difficult task. Our sleeping bags and all other gear was covered with a heavy layer of snow driven into the tent by the storm. The tent danced in fitful frenzy. By noon we moved out into the storm, with heavy loads. Visibility occasionally was as good as 75', but with our faces and goggles glazed with ice, usually much less. Route finding was very difficult. Some wands were blown away and some covered by the 30 hours of continuous snowing. We stumbled down, hoping to avoid the crevasses, oftentimes being knocked off balance by the wind.

Finally we reached camp II. "How is Gordon?" we asked. Wayne explained that it was 1 a.m. before they got him down. At that time he was developing wet sounds in his lungs. Wayne had started treatment orally and intravenously with furosemide. In less than 7 hours Gordon had passed 4 quarts of urine. He had slept the entire next day and was now feeling weak but otherwise pretty good.

In the evening the skies began to clear and plans were elaborated. Assuming favorable weather, in the morning four would move back up to 16,000 and re-establish camp III. Since food was running low, two would move a load up from camp I. Dick and I decided to move Gordon all the way down to base camp at 10,800' for air evacuation and then return to camp II at 14,000' the next day with a load of food from base camp.

We radioed our plan to Kluane and prepared to move down. As we put on our snowshoes, a black stormcloud developed behind us and I could see Dick weighing its speed against our potential speed down the mountain. To be caught halfway down to base without a tent would be bleak. Not wanting to have Gordon stuck for several more days up high, we decided to race it. We moved rapidly down the mountain.

At camp I site at 12,000', while Gordon rested. Dick and I strung out an aerial and radioed our position and the weather to Kluane. The black cloud still was following us and it gained a bit during our communications. We moved on down.

Straining my eyes for evidence of wands or the partially collapsed base camp tent, I trudged onward, frequently stopping for Gordon, since his fatigue was great. Finally I spotted a vague shadow that hopefully was the tent. No? Yes, it was. We moved on exhaustedly and re-erected the half collapsed tent. Dick and I strung out the aerial on ski poles and tried to radio Kluane to announce our arrival. It was beginning to snow lightly. The cloud had finally overtaken us. There was a bit of static and a series of clicks on the radio: "Glad to hear you made it safely," came the friendly voice from CJQ 755.

Sunday 8 August we awakened to a whiteout and snowfall. We spent a quiet day. The occasional light snowfall and complete whiteout hovered over us throughout the evening and night. Successive radio contacts indicated no foreseeable change.

Up at camp II meanwhile they had been storm-lashed for two violent days and nights. Continuously digging could not keep up with the 6' of snow and two tents had been hopelessly buried and lost. Neither could a third tent withstand winds of 120 mph. It had ultimately given out with a shriek and ripped material.

Monday we again reported to Kluane that clouds and whiteout still persisted. It seemed as if we had spent days living in clouds. Food, equipment, and especially time were running out for all of us. We kept looking up the slopes, expecting the rest of the party to return to base anytime.

Sometime after noon the weather cleared and we radioed for air evacuation. Restlessly we watched and listened for the airborne speck that would slowly grow into a ski-equipped aircraft and reconnect us with civilization a100 miles away. A distant hum and then the speck finally appeared between distant summits, circling to the right, then to the left, working for altitude like a mosquito in a wind. Finally, with a long direct swoop it slowly took the form of an airplane and bounced to the glacier beside us. Phil, our pilot, greeted us warmly. We loaded equipment and ourselves for the first of several shuttles. Rumbling down the glacier and bumping over rough snow, we lifted off. We swung to the north and the wind bounced the small craft violently up and down and back and forth as we flew over and between some of the most rugged and remote mountains in the world. We caught a last glimpse of cloud—enshrouded Mt. Logan.

Gene Mason