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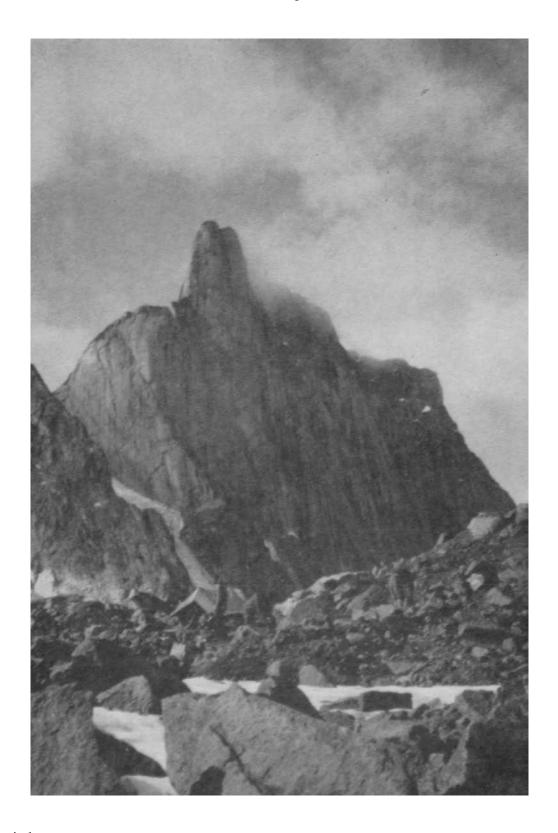
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F. Largiader
"Turnweather" Reffin

"Turnweather", Baffin Island, from the Northeast

SPECIAL NOTE FOR THE CAJ DIGITAL EDITION

An oversized panoramic photograph of "Turnweather" and "Gauntlet" was included in the hardcopy version of the 1964 Canadian Alpine Journal.

It is not included in this digital version due to size restrictions.

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Members are URGENTLY requested to assist by furnishing articles themselves or by informing the committee as to where articles might be obtained. Manuscripts should be typed with double spacing.

Photographs should be finished with glossy surface and on each photo there should be pasted a strip of paper bearing the caption and photographer's name.

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MOUNTAINEERING SECTION

Alpine Club Of Canada Baffin Island Camp, 1963

The following three articles describe this camp:

Camp Organization

By P.D. Baird

At the Club's Maligne Lake Camp in 1962 the President asked me to give a camp-fire talk on the mountains of Baffin Island, and at this I suggested that it would be a good idea for the Club to interest itself in a range of mountains where for 700 miles there are as good climbing prospects as anywhere in Canada.

Several members expressed immediate interest, and others answered the notice in the Club's Gazette, so during the winter I went ahead and made plans, aiming at a 3-week trip with 20 to 30 people. In the end we had 19 climbers—two from Switzerland, one local Baffin Islander, one graduating, and 15 active Club members, plus a "staff" of three, each of whom got in two or three enjoyable days on the mountains.

The party was made up of the following:

Montreal: Pat Baird, Helen Devereaux, Geoff Webster, Gordon Weetman. Ottawa: Katherine Capes, Stan Paterson. Toronto: David Atherton, Wally Joyce, Dick Thomson. British Columbia: Jack Cade. Yukon: Joan Bunker, Joan Shaxon. Pangnirtung, Baffin Island: Rev. Sydney Wilkinson. New York: Ellis Blade, Don Morton. Chicago: Lucio Mondolfo, Vicky Mondolfo. Switzerland: Dr. Bruno Egloff, Dr. Felix Largiader. Camp Staff: David Williams, Daphne Pinhey, Anne Baird.

There may be a dozen equally good climbing areas on Baffin Island, but I knew the merits of the Pangnirtung Pass region from a visit in 1953, when seven major peaks were climbed, and from the account of the Cambridge University party of 1961 which added five more to the list.

The difficulty is access, and we did not arrive at the correct solution in 1963. We planned to fly by commercial airline to Frobisher, then by a chartered Canso in two lifts the 200 miles north to Summit Lake in the centre of Pangnirtung Pass and the best climbing base. This lake was quite free of ice by 26 July 1953, but 10 years later it was nearly solid on 31 July 1963 when we arrived, the season being apparently at least 2 weeks late.

So we were forced to put an alternative plan into action and land on tidewater at the extreme head of Pangnirtung Fiord, the southern entrance to the pass. Here Syd Wilkinson was extremely helpful to us in interpreting with the Eskimo who were up here whale hunting and assisted us in landing our gear.

We had lost 1,300 feet of altitude by not being able to land at Summit Lake but there were good peaks up to 6,000 feet at hand, and there remained the possibility of putting fly camps further



W.R. Joyce

Base Camp on the Edge of Pangnirtung Fjord



W.R. Joyce

Above Pangnirtung Fjord, Near Base Camp

afield for the more energetic of us. But our location posed one main problem—crossing the valley. For two daily periods of about 4 hours each it was possible to row across the fiord from camp, but the rest of the time there was a series of sand bars and swift glacial river channels. The borrowed Eskimo skiff was incredibly leaky, and we found a load of three people maximal, one rowing and two bailing. So to put several parties across meant many trips—a quarter-hour jaunt in calm weather, but a hazardous half-hour pull when the wind and waves got up.

It was impossible to wade the cold main river without several thigh-deep channels, and most people rejected this method without the benefit of hip waders of which we had only two pairs. One pair weighing only 22 ounces was excellent for river crossings and would have been a desirable item of equipment for everyone, because when walking up the valley there were boiling glacial torrents at frequent intervals—no trees with which to bridge them, and usually impossibly high detours to reach glacier ice above.

The weather was brilliantly fine on our arrival, and with 24-hour daylight, expeditions were limited only by the power of human legs or the rigid time-table of the tide. But the nights grew darker and the later weather poorer. All the same, of our 17 days in camp only 3 were totally non-climbing, 3 poor and 11 good. Temperatures ran from 40° to 60° F. at camp; we had some rain but no snow at that level, and even on the tops no new snow appeared until we were back at Pangnirtung village. The rock is almost uniformly granite gneiss, mostly sound, though with occasional rotten fades. Many north faces are smooth and near vertical, but usually southern slopes are easier. The glaciers are comparatively uncrevassed, but two of the party managed to make short and unexpected descents. Seeing that the tree-line is well below sea level, one can liken the climbing to that between 7,000 and 13,000 feet in the Rockies, but snow and ice are less prevalent than would be the case at these heights. The country is perhaps more like inland Norway but on an altogether greater scale.

We achieved some 14 first ascents, plus about 8 summits on Camp Ridge, the 4,000 to 5,000-foot wall to the west of the base camp, which was a splendid training ground with rock buttresses of varying difficulty.

A list of peaks ascended and their approximate heights, identifiable from the accompanying map, follows. Names have not yet been officially accepted.

LOCATION	CLIMBERS	1963
"OVERLORD" (5500 FEET)	(1st— Wilkinson, 1962) 2nd — Cade, Joyce, Pinhey 3rd— Blade, Capes	Aug. 6 Aug. 8
"GAUNTLET" (5600)	1st — Atherton, Williams, A. Baird	Aug. 13
"AEGIR" (5800)	1st — Wilkinson, Paterson 2nd — Largiader	Aug. 2 Aug. 10
"NIORD" (5900)	1st — Largiader, Joyce, Blade 2nd— Egloff, Pinhey	Aug. 4 Aug. 12
"TLROKWA" (6000)	1st — Paterson, Weetman 2nd— Egloff, P. Baird	Aug. 6 Aug. 14
"SANDCASTLE" (5300)	1st—P. Baird, Cade, Joyce	Aug. 8

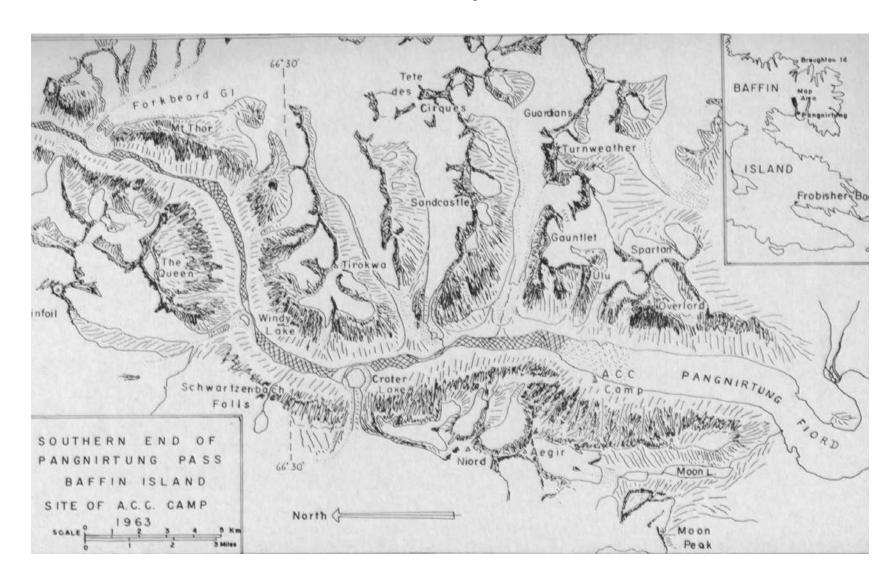
PEAK 1 MILE EAST OF TIROKWA	1st — Paterson, Weetman	Aug. 7
"FREYA" (6300)	1st — Wilkinson, Atherton, Morton, Egloff	Aug. 6
"ASGARD" (6600)	(1st — Four Swiss scientists, 1953) 2nd — Wilkinson, Egloff	Aug. 7
"ADLUK" (6500)	1st — Atherton, Egloff, Wilkinson, Morton	Aug. 8
"FIRST GUARDIAN" (5100)	1st — Wilkinson, Paterson, Largiader, Weetman	Aug. 13
"SECOND GUARDIAN" (5300)	1st — Same four as above	Aug. 13
''TURNWEATHER" (6050)	1st — Same four as above	Aug. 14
"TETE DES CIRQUES"	1st — Same four as above	Aug. 16
"TYR"	1st — Blade, Webster	Aug. 13
"MOON PEAK"	1st — Egloff, Joyce, Pinhey, Bunker	Aug. 17
"MT. QUEEN" (7000)	(1st and 2nd— 1953 Expedition parties) (3rd— Wilkinson, 1962) 4th — Largiader, L. Mondolfo, V. Mondolfo, Devereaux, Bunker	Aug. 7

The following ascents were in the group called the "Camp Ridge Peaks":

"No. 1, 2 and 3"	1st — Cade, L. Mondolfo, Weetman, Webster	Aug. 4
"No. 4 and 5"	1st—P. Baird, A. Baird, Williams, Capes	Aug. 6
"CENTRAL SPUR"	1st — Weetman, Webster	Aug. 2
"SWISS TOWER" (5050)	1st—Largiader, Egloff, Morton	Aug. 1
"SWISS BUTTRESS" (4750)	1st — Largiader	Aug. 5

In addition to these ascents several other climbs were attempted and turned back for various reasons. Don Morton tried two very fierce-looking peaks, as he describes in the following article. A large party went up-valley in the last week but failed to find suitable weather for climbing around the southern end of Summit Lake which, now ice-free, was somewhat fogbound.

Altogether 96 man-nights were spent in outcamps, representing about a quarter of the nights we were in the area; Syd Wilkinson being the chief absentee since he was away for 12 and at base for 4 nights only. This extremely fine and energetic climber has the good fortune to live in this grand neighbourhood, but he has found climbing companions hard to come by, as the local Eskimo usually quit when climbing gets at all difficult. As the foregoing list shows, he had already made some solo ascents of peaks in our area, as well as of others nearer to Pangnirtung including



Southern End of Pangnirtung Pass, Baffin Island

a full-moon climb, on the shortest day of the year.

Syd's route on his earlier (the third) ascent of Mt. Queen was followed by our party this year. This was the longest of our expeditions, taking 21 hours from and to the camp below. They started up the rather steep glacier flowing southwest from the mountain then up a snow couloir to the west ridge. Descent was by a long, partly snow-filled gully straight down from the west ridge foot. Now 11 people have been on this splendid 7,000-footer, but this 1963 ascent was the first for



W.R. Joyce

Looking up Pangnirtung Fjord from Summit of "Overlord"

women, and certainly the first for a grandmother!

Saturday 17 August, our last day in camp, dawned with low cloud but various hints of clearing encouraged three parties to set off. Only one of these managed to push on through mist to what they believe to have been their summit! At noon (and wrong for the tide) the four who had been on the eastern trip appeared across the valley. I tried to get the boat over to them, and wading, but the attempt was not too successful—we all returned in varying stages of wetness. By this time the Eskimo boat had arrived and Syd packed up and took four others back to Pangnirtung, so that he could conduct Sunday services. Later that evening Jim Chapman of the Hudson Bay Company arrived by H.B.C. boat and at early morning tide the rest of us struck camp and departed, leaving the dining tent standing with a good deal of spare food.

Before 8 a.m. we were at the village anticipating a night's stay, or at most two, until the Canso came to pick us up. But the weather now shut down, either on us or on Frobisher, so it was a week's wait after all. Although some patiences began to wear thin at this enforced delay it was interesting to observe the life of this Eskimo village, and we received the kindest hospitality from the various members of the white population.

Now for the next time. If Summit Lake, which is the most desirable base area, persists in being frozen until the favourable climbing season commences, another method of approach must be tried. By sending stores in by dog team (preferably from the north, the easier sledging half of the pass) in late winter, and ideally storing them in a small base hut, a climbing party could walk in light. Better still a very light aircraft could transport them, but this would be expensive unless a

climbing-enthusiast aircraft owner could be found. Anyway, I feel we should make another effort in 1965 in this very exciting region, which has now been sampled by quite a few Club members.

Mt. Asgard —The Abode Of The Gods

By Donald C. Morton

Although the Base Camp of this 1963 Alpine Club of Canada's expedition was surrounded by unclimbed peaks, we could not leave the Cumberland Peninsula without an attempt on Mt. Asgard near Summit Lake. The northern peak of this spectacular double rock tower had been climbed once by four Swiss scientists on Pat Baird's 1953 expedition. Ice on the steep rocks above the col had defeated a 1961 Cambridge party. The slightly lower south peak was still unclimbed.

In response to the attraction of Mt. Asgard, four of us— David Atherton, Bruno Egloff, Syd Wilkinson and myself— prepared 6 days food for a trek up the Weasel River to Summit Lake. Rainy weather on Saturday August 3rd delayed our start along the west bank until 2 p.m. During the next 6 hours we tramped across the flooded grass, climbed the moraine around Crater Lake, and waded two streams, one from the lake and the other from Schwarzenbach Falls. We camped on the grass a little south of Windy Lake, about 9 miles from the sea.

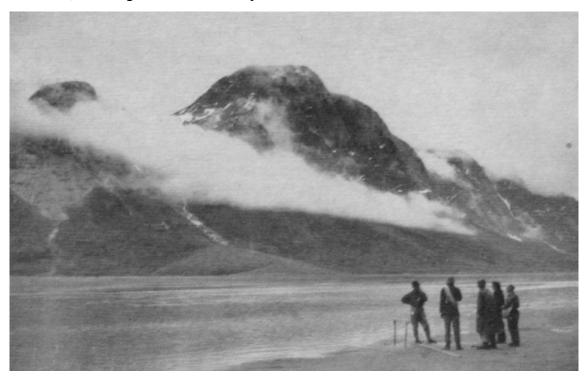
As we struck camp the next morning, August 4th, the clouds began to lift, giving us glimpses of Mt. Queen to the west and Tirokwa (Corner Mountain) to the east, both rising more than 6,000 feet above us. We climbed the moraine damming Windy Lake and were grateful to find a dry route across the outlet stream on boulders just where it meets the main river. Somewhere along the base of Mt. Queen we passed the Arctic Circle. Ahead of us now, and across the river, was the most outstanding feature of the whole valley—a 6,000-foot peak with the upper 4,000 feet a sheer face cut by only two narrow ledges. In keeping with the use of names from Norse mythology, we suggested calling it Mt. Thor. For more than 2 hours we walked beneath this face and its outliers.

In places the river was constrained by banks of ice up to 6 feet thick, remaining from the winter. Fortunately one of these provided an ice bridge over a stream that otherwise would have been an unpleasant crossing. Late in the afternoon another stream, tumbling through a moraine, delayed us for 2 hours. Syd waded across on a belay, but the swift water so nearly overwhelmed him that no one was anxious to follow. After some searching, David found an easier crossing which chilled us only to the thighs. An hour later we camped on mossy ground overlooking the southern tip of Summit Lake, 11 hours from our previous camp.

In the morning (August 5th) we marked the site with half of a caribou antler which Syd found buried in the moss. Then we headed west from the lake, over a moraine and down to a long glacier which we suggested calling the Caribou Glacier. As we climbed higher on the glacier, the twin towers of Mt. Asgard appeared from behind the outliers of Mt. Friga on our right. Soon we rounded this group and walked north up a small glacier towards the Asgard-Friga col, which we reached in 4 hours from Summit Lake, making the trip from the fiord total 2 full days.

A level area on the highest rocks of the col provided an excellent site for our Camp Asgard. Water was available in some small pools near a giant boulder. On the north side of the col, King's Parade Glacier descended to the Turner Glacier in the distance. To the east were the smooth buttresses of Friga and to the west the sweeping walls of Asgard. Stormy weather moved in from the south shortly after we pitched the tents, providing a welcome excuse to spend the afternoon sleeping.

The unsettled weather continued the next morning (August 6th), causing us to postpone our attempt on Asgard. Instead we climbed a steep ice couloir, on the opposite side of camp, to a col on the south side of Friga. Improving weather conditions encouraged us to continue up the rock ridge of the virgin peak on our right. Pitons were unnecessary except for two pitches, but we preferred to belay many of the leads. The rock was pleasantly solid in most places. A little below the summit we were stopped by a vertical step. Syd and David rounded it on the right corner while Bruno and I traversed the north face to the west ridge, which we ascended in an easy scramble to the summit, reaching it before our companions who followed the more direct route. The climb



W. R. Joyce

"Overlord" across Pangnirtung Fjord

from camp took 10 hours and the descent 5 hours. As we set up our one rappel in the ice gully, the setting sun illuminated the clouds hanging on the summits of Asgard, causing the towers to appear on fire. Were the Gods of Asgard angered with our plans to invade their domain?

Wednesday August 7th dawned clear and revived our enthusiasm for Mt. Asgard. After a solid breakfast of ham, potatoes and carrots, we traversed the glacier at the level of our camp to the rocks of the mountain. As we walked up the 40° slabs, we passed a rappel sling, indicating the difficulties the Cambridge party must have had on the verglas in 1961. On our right, but separated from us by a gully 800 feet deep, was the great south wall of the higher tower, while ahead and a little to the left was the unclimbed south tower. We roped at the base of the vertical rocks leading to the col, Syd and Bruno on one rope and David and myself on the other. We rejected the exhausting direct route up the Cambridge chimney and traversed left until some cracks permitted an ascent with a couple of pitons for protection. Another pitch of scrambling over loose rocks brought us to the ridge a little above the col on the side of the unclimbed peak.

First we searched for possible routes on the face of this tower. A series of cracks and chimneys directly above the connecting ridge appeared the most promising, although some artificial aid probably will be necessary to follow the cracks leading to the lowest chimney. I traversed out on the face to the right towards a couloir visible on an aerial photograph. A short rappel would have placed me in this couloir, but Syd and Bruno were anxious to start climbing the other tower, so I retreated before learning whether the route was possible.

For the 500-foot climb on the face of the north peak, both ropes followed the 1953 Swiss route from the col. The climb began with a strenuous vertical crack, followed by a pleasant hand traverse to the right, a walk back to the left, and another vertical crack, even more strenuous. A short scramble brought us to the pitch with the most difficult moves. Syd kept in the wet corner of the left formed by a series of flakes, and led the pitch free. I had no affection for the slippery holds and instead tried some thin cracks a little way out on the face. After one unsuccessful attempt which landed me at the feet of my belayer, I made the move by putting one foot in a sling clipped to a piton. Farther up we found two rappel pitons left by the Swiss. One was in the final chimney where a waterfall greeted them, but for us it fortunately was dry. Easy climbing from here brought us to the summit snow cap for the second ascent of the Abode of the Gods.

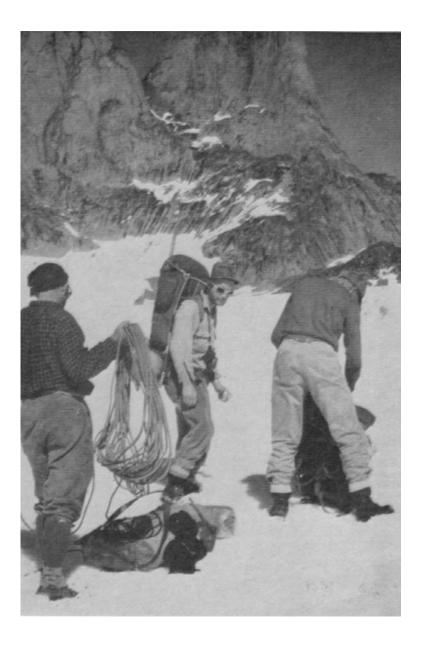
With four rappels we descended to the col. A little climbing and another rappel lowered us down the Cambridge chimney where we found three pitons. The Englishmen must have been too cold to stop and retrieve them. Back at camp after 16 hours we enjoyed our usual evening meal of oatmeal and rye crisp spread with butter and marmalade.

The next day, August 8th, we lazily struck camp and finally departed at 1 p.m. with plans to climb an ice-capped peak we saw ahead of us on the way up the Caribou Glacier. Many of the peaks in this area have easier routes on their south faces, so we turned our objective on the right and hiked far up the Caribou Glacier carrying our packs in case another camp would be necessary. Spectacular rock walls and ice gulleys guarded the peaks to our left, but on the right, from the highest level of the glacier, an easy scramble up a scree slope led to the ridge. This we followed to the base of the ice dome where we roped and strapped on crampons. David led to the summit where he promptly fell into a crevasse! Hence the name for the peak, Adluk (="seal hole").

We were back at our packs on the glacier by 10:15 p.m. after 4 hours on the mountain. Here we decided to use the continuous twilight and proceed down the glacier to our fine campsite at Summit Lake. Now, a month and a half after the solstice, the sky at midnight was dark enough to show third-magnitude stars, but there was still sufficient light for us to find a route some 8 miles down the Caribou Glacier. In slightly more than 3 hours we were cooking oatmeal beside Summit Lake. We observed that the middle third of the lake was free of ice.

Starting late on August 9th, we hiked down the Weasel Valley with a rather strong wind at our backs. The difficulties we had setting up our tents that night, just beyond Windy Lake, demonstrated how well the lake had been named. As we neared Base Camp the following day about 1 p.m., we met Ellis Blade and Geoff Webster starting up the valley into the wind which continued fiercely. We wished them well and headed for lunch in the dining tent.

While waiting at Base Camp for the weather to settle, I made plans for another trip into the Weasel Valley, this time to attempt the unclimbed summit of Mt. Thor. On August 12th, Jack Cade and I rowed across the fiord to begin our hike along the east bank. The route on this side was significantly easier with less-violent streams to cross and level walking except for two rises across from Crater Lake and Windy Lake. We pitched our camp beside a stream at the base of the mountain immediately south of our objective.



David Atherton

Col Leading to Twin Summits of "Asgard"

On the morning of August 13th we climbed the steep moraine on this south side of Mt. Thor and rounded an outlying peak on our left, planning to gain the south ridge from behind. However, it soon appeared that this ridge would require a little technical climbing to pass two vertical steps higher up. Jack had no enthusiasm for this so that we traversed all the way around the far side to the north ridge. There we had some marvellous views of the sheer west face and the river far below. From this direction the route to the top looked somewhat easier, encouraging me to continue on alone. Near the summit the rock was solid and close to vertical. I made a hand traverse up one crack sloping to the left, but finally was stopped by a second crack, longer and steeper than the first. With the safety of a belayer the lead would have been trivial, but alone it was not worth the risk. Reluctantly I descended, leaving Mt. Thor unconquered.

Back at Base Camp again, David Atherton and I decided to attempt the one peak within

sight which was still unclimbed. This was the Knife-Edge (Ulu), directly across the fiord; there was no easy route from any side. This time we crossed at low tide in hip waders which inevitably filled with water in the middle of the deepest braid. We climbed the mossy slopes facing camp, roping where they became excessively steep and mingled with loose rocks. Once on the ridge we moved continuously except for one sloping chimney where a piton added comfort to the lead. With a little rain now falling, we traversed out on the steep moss slopes high on the south face, and returned to the ridge again just below the summit. Here we were stopped by two vertical steps—problems we had seen from Base Camp. After some exploring I found a route up the first step on the north side. A couple of pitons made the exposure to the glacier below more enjoyable. By now the rain was heavier, making the route over the wet lichen covering the slabs of the second step quite impossible. Within 100 feet of the summit David and I had no choice but to rappel off.

Descending 5,000 feet of mountain in the rain is not one of the joys of climbing, but this was a pleasure compared with crossing the mile of cold river braids at midnight in waders filled with water.

First Ascent Of Mt. Turnweather.

By G.F. Weetman

During the 1963 Alpine Club of Canada Baffin Island Camp a rather spectacular peak was admired by other climbing parties in one of the mountain ranges running at right angles to the Weasel Valley.

This peak is visible from Pangnirtung village where Rev. Sydney Wilkinson had noticed during his residence at the Anglican Mission that the presence of cloud on its peak was a sign of a change in the weather; hence he had called it Mt. Turnweather. In 1962 he had attempted an ascent of the peak alone during one of his series of remarkable one-man trips into the mountains of the Pangnirtung area. He was unable to complete the ascent because alone he could not safely negotiate the climb down a vertical and exposed rope-length cliff onto the short ridge which separates the peak from the main range.

On August 13th, 1963, a climbing party composed of Felix Largiader (Zurich and Minneapolis), Sydney Wilkinson (Pangnirtung), Stan Paterson (Ottawa) and Gordon Weetman (Montreal) set out from the base camp at sea level to climb the peak.

The first day was spent packing up the unnamed glacier which flows from east to west on the north side of Mt. Turnweather. Camp was set up on a moraine northeast of the peak on the opposite side of the glacier. The second day was spent on a traverse of the ridge immediately east of the peak over two summits subsequently called The Guardians, 5,080 and 5,280 feet high. This trip showed, as from most other peaks in the area, the feasibility of climbing the south side of Mt. Turnweather.

Starting at 7:15 on the following day, August 14, the party crossed the glacier and climbed with crampons, and occasional step cutting, up a smooth and very steep ice couloir which separates The Guardians from Mt. Turnweather on its east side. The top of the couloir was reached at 9:45 a.m. Here the party split into two ropes climbing first laterally over the lower slabs and then vertically up the gulch on the southeast side of the mountain. This presented little major difficulty and the top was attained at 1 p.m. under excellent weather conditions. The summit elevation was

determined by barometer to be 6,040 feet, the height of the partially overhanging north face to be 2,990 feet.

The descent was made via the west ridge, which is attached to the main range by about 100 feet of cliff. Its climb would be extremely difficult; this was avoided by traversing laterally, with the aid of several pitons, across an exposed wet slab, to the south side of the main range. This range was followed to its end above the head of a branch of the main glacier. Two long rappels and a scramble reached the snow of the glacier. Camp was regained at 8:30 p.m.

After a rest day with bad weather conditions the same party climbed the highest peak north of the main glacier. This peak is situated at the origin of three glaciers flowing down to the Weasel Valley and a fourth going in the direction of Kingnait Fiord. Therefore the summit (6,535 feet) was called Tête des Cirques.

Canadian Mt. McKinley Expedition 1963 - First Ascent Of The Wickersham Wall

By Hans Gmoser

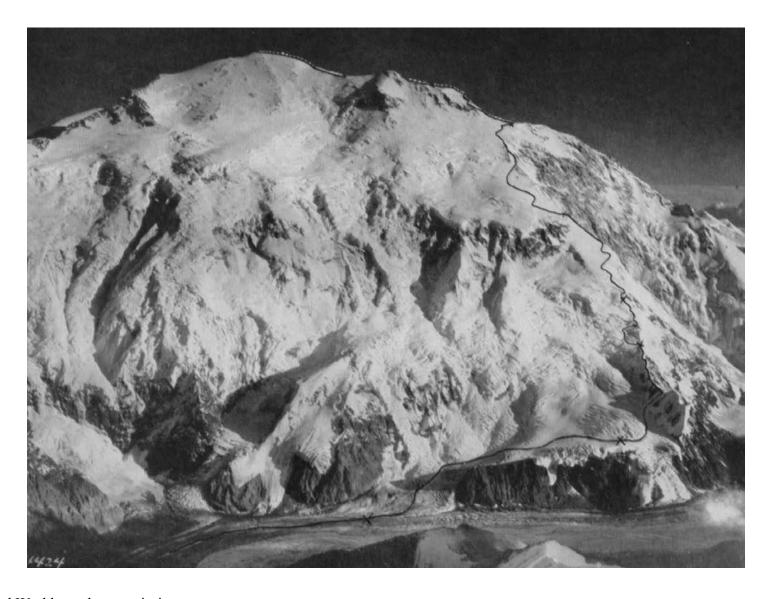
Without pause sweatbeads formed on my forehead, gathered into little driblets, ran down the corner of my eyes where they lingered for a little while before running across my cheeks and then dropping onto the dusty road in front of my feet. I watched this play, just to keep my mind off the murderously heavy load on my shoulders and the seemingly endless way we had to go. When I lifted my head I saw another huge pack ahead of me and the two legs beneath it seemed able to move only with the greatest pain and effort. Beyond that stretched the tundra and in the distance towered a giant white mountain. It seemed so far away and our progress so slow, that I couldn't possibly bring myself to recognize this mountain as our goal. All I wanted just then was to take off this . . . pack and lie down. Anything beyond that didn't interest me in the least.

But our group kept on moving. I couldn't see what made it move, since I as the leader only moved because the group moved and I knew that the group didn't move because I moved. In such a case pride overrules all reason. I am sure there were times when each one of us would have chucked this whole trip for a dime, just to get rid of this heavy load and not to have to walk these endless miles.

And yet, while enjoying the pleasures and comforts of our civilization, we eight had banded together in search of a mountain adventure. Hans Schwarz, a mountain guide from Jasper; Gunti Prinz who works for the Warden Service in Banff National Park; Leo Grillmair and Dieter Raubach, both from Calgary; Pat Boswell from Toronto; Tom Spencer, a mathematician from Los Angeles; and Hank Kaufmann from Anchorage, Alaska.

The many months of preparation behind us, we were now on the trail and it was a rude awakening. For three days we trudged across the tundra, crossed big rivers and tried to avoid the grizzly bears. In this we weren't always so successful. On one occasion a grizzly came to within 100 feet of us and while we stood there banging our ice axes against the packs, one of the fellows said: "Gosh, how much closer do we have to let him come!"—Well, just then the bear took off in the opposite direction as fast as he could and we were greatly relieved!

Finally, on the fourth day we were able to use our skis. This at least made our packs lighter. We now travelled up the true right-hand moraine of the Peters Glacier which flows along the base



Bradford Washburn, by permission

Mt. McKinley, Showing Wickersham Wall (X=Campsites.)

of the Wickersham Wall. The last 5 miles we walked on the Peters Glacier itself up to the point where it is joined by the Jeffery Glacier. Here we spent one day drying out boots and equipment which had gotten quite wet during the march in.

So far we could only get glimpses of this 14,000-foot icewall which rose in one straight swoop immediately above our camp. This was perhaps just as well. The early attempts on Wickersham Wall never really got off the ground as it appeared too difficult. The latest attempt two years ago got well past the technical difficulties, but was stopped when all supplies were lost in an avalanche.

From all the information we had (and there is lots of it available) we knew the route was quite safe up to 10,000 feet. By that time we would have the main difficulties behind us but the biggest dangers still ahead of us. So from 10,000 feet to 16,600 feet we'd have to move as fast as possible and there was only one reasonably safe camping spot along the way. All in all, the risks were more than calculated and in order to pull this venture off we needed a good portion of luck.

In the evening of June 2nd we started up the Jeffery Glacier. For the first hour and a half our route wound through old avalanche debris, while above us threatened giant snow slopes and icewalls. Hastily we pushed our skis along, listening all the time for the sound of an avalanche. At last we were past this unhealthy place and an hour later we made camp near a little rock outcrop at 7,000 feet on Jeffery Spur. Here we were to receive our airdrop.

The following morning Tom, Flans, Leo and I started to prepare a route up Jeffery Spur, while the others stayed in camp to receive our airdrop which we were sure would come today. We used our skis to 8,000 feet, then climbed to the crest of the ridge and followed it for the next 1,000 feet. Here were the main difficulties. The ridge was always quite sharp; however, once we had made a good set of tracks this was no problem, until a little further up we ran into the first icetower. This required a lot of step cutting and 200 feet of fixed rope. Above it the ridge flattened out and over a few knife-edge stretches we reached a good level spot at 9,000 feet. Here rose another enormous 500-foot icetower and we decided to bypass it on the left. This meant climbing up some steep snow slopes and a short (20-foot) but steep ice rib. Above this a huge crevasse blocked the way. There was a shaky bridge across it but it would never have done for our heavy loads. We felt that this place could be crossed with a rope ladder, but we were now close to 9,500 feet and thought this was good enough for one day's work. We retraced our steps on the ridge and after two hours reached the skis. The short run to camp in the evening light was too beautiful for words.

Our friends had waited in vain for the airdrop, and since it had been a fine afternoon we couldn't imagine why Don Sheldon hadn't come. When it started to snow in the evening, we gave up hope to receive the airdrop now. Suddenly at 10 o'clock we heard a plane. It snowed hard and I saw no reason in getting excited as I was sure that the plane would never get near us. But the next thing we knew, Sheldon flew right over us and a few minutes later we heard him cut the engine as he came in for a drop. I stuck my head out just in time to see a gas can land 30 feet from our tent. For the next half hour or so we were literally bombarded as Sheldon dropped our 25 parcels, some of them so close that we were afraid for our tents. This airdrop was one of the best spectacles I have ever seen. Like a ghost the plane would soar out of the driving snow, drop a parcel and vanish into the mist again with the red tail light flickering. This impressed us very much.

Now we were in business. We had all our food and equipment and from here on it was up to us to make a success of this venture.

In the morning we repacked our food. Very little had been lost in the airdrop. Gunti, Pat and Leo took three days of food and then skied down to the Peters Glacier to leave a cache for our

return trip. At the same time they were also to explore and mark the Tluna Icefall, so we wouldn't waste any time there when coming down. The rest of us made up five loads and then we began to carry these up along Jeffery Spur. It was snowing hard as we walked up and suddenly I had great misgivings about having sent one party down Jeffery Glacier, for they could run into serious trouble if a lot of snow fell. In the meantime we had reached the base of the first icetower and we decided to cache our loads here and return to camp. The snow was coming down thick and we were wet. When we arrived in camp, our friends hadn't come yet and I was worrying ever more. But an hour later, to my great relief, they came too and for the time being there was nothing else to do but to take it easy and watch the snow accumulate. Our only problem now was that if it snowed too much we might have to give up our attempt on Wickersham Wall before we got even started.

It snowed all night and in the morning there was no sign of a let up. At first a gloominess settled over our camp and while we didn't dare to talk about our fears, each one of us began to feel that we were being beaten before we even got a chance to try this huge mountain which was hidden from us by those leaden, grey snow clouds. But gradually we settled down and tried to amuse ourselves as best as we could. Anything to forget! It was too depressing to ponder over the situation.

In the afternoon a pale, watery sun showed its outline through the clouds. At first we hardly paid any attention to it. Soon, however, we could ignore it no longer; it was breaking up! There were glimpses onto the Peters Glacier below and the mountains across the valley. As the clouds dispersed, a dazzling panorama of glittering mountains unfolded all around us. And then the Wickersham Wall came alive. Everywhere avalanches cascaded down the steep ice and snow slopes. High, strong winds were whipping up tremendous snow banners and for once things were going 100% our way. But before we settled down for the night, the mountain gave an impressive demonstration of its enormous size and hazards. An avalanche started off the summit slope and, after gathering momentum for 2,000 feet, it jumped the first ice cliff and wiped out the whole slope below, spreading in width to about a third of the whole wall. With ever-increasing speed this tremendous wall of snow hurtled down the mountain and yet it didn't seem to be going anywhere. We felt it must have taken 5 minutes before it hit the bottom and the clouds boiled out across the Peters Glacier. We knew then, if something like this would happen while we were up there, no ice cliff or ridge could possibly protect us; we would be sucked away if we didn't get washed away.

At 2 a.m. the sun looked cold, almost hostile, tinting everything in reddish gold without giving forth any warmth. The weather still appeared unsettled. Hans Schwarz, Tom Spencer and I started up first. At the ice tower we had to clean off the new snow and fasten fixed ropes so we could haul up our heavy loads. During this time the other fellows each carried a load up to the base of the tower and then returned to camp to bring the rest of our gear. After we had prepared the tower, we pushed several loads up to 9,000 feet where we pitched our camp on a small platform beneath another huge icetower. It had started to snow again. That evening we made contact with Radio Fairbanks on our small VHP transmitter. It felt good to know that there was still a link to the outside world in spite of the remoteness of our camp. I prepared a 15-foot rope ladder to use the next day and got my pack ready before turning in.

Next morning Hans Schwarz and I started out to prepare the route ahead. The other fellows followed, carrying heavy loads. We turned the huge icetower above us by going through the icefall on the left. Here the snow was very deep, in places up to our hips. Before we had gone 300 feet, sweat was pouring down our faces and it seemed as though we wouldn't get very far on this day. However, as soon as the terrain steepened we hit ice and in spite of some step cutting our progress



Tom Spencer

Struggling with 60-pound packs

was much faster. Ahead was a very steep (about 50°) snow and ice wall 200 feet high. The last 40 feet led up through a steep crack in the ice where we installed another fixed rope. Some 200 feet higher was the huge crevasse where we would need our rope ladder. I crossed gingerly on the snow bridge and then walked along the upper lip to where it overhung the crevasse. After digging down 4 feet I hit some very hard snow and fastened the ladder with two rappel pickets. When I jumped down to where Hans was standing, my crampons caught in the ladder and I landed head first in the soft snow on the lower lip. Above this spot we put our skis on and by weaving around some huge crevasses, finally got up to 10,000 feet where we found a small spot for our tents beneath an overhanging ice tower. Hans and I continued to explore the route above, while the others took off their climbing skins and with seemingly no effort skied down through the beautiful powder to bring up another load. I am sure these must have been the first ski tracks on the Wickersham Wall. They looked beautiful and daring, winding down the wide open expanse to the rim of a huge precipice where they went in among some huge crevasses, disappearing onto the steep slopes below. Hans and I continued to explore the route ahead. There were still a few steep slopes to be crossed and a few steps to be chopped, but on the whole it was very straightforward. It was 2 p.m. when we arrived at 13,000 feet, our next campsite. Light snow was falling again as we retraced our steps down to 10,000 feet.

It proved to be a hard day's work, as we made our first carry up to 13,000 feet. It brought us to a rock ridge and here it took us 4 hours to chop the platforms for our tents out of the frozen scree.

On the following day we made the same trip in 3 1/2 hours and by 9:30 a.m. our camp was set up. We decided to push some loads still further up so that the next day we could move our camp right up to 16,600 feet, which would place us on the West Ridge above the Wickersham Wall. Leo and Dieter stayed behind to fix up the camp and the rest of us started up. Now the altitude began to

tell on us and our progress became more and more laborious. After traversing some steep slopes the terrain flattened out at 14,000 feet; above, however, was some more steep, broken-up ice. To the right of the ice a broad rock ridge led to 15,500 feet. We decided to take the rock ridge as it would afford faster travelling and by 2 p.m. Hans and I dropped our loads at 15,500 feet. Only 1,000 feet separated us from the top of the wall. We were in good spirits. All we needed was another good day and we would be through the wall. The clouds had boiled up from the valley and again snow was falling as we started back for camp. A few hundred feet down we met Tom who decided to push on to our cache. At 14,000 feet the others had cached their loads. Here it was snowing quite hard and we were glad for the trail markers, which we had placed earlier, to show us the way home.

Four inches of snow had fallen during the night and slowly we moved with our loads up the last 3,600 feet of the wall. When we reached the 15,500-foot level we were above the weather and at our feet a sea of clouds stretched to where it met with the far distant horizon. Here Tom Spencer took over and broke trail for the last thousand feet. It was a beautiful, calm evening as the three of us shook hands on top of the Great Wall. The sun supplied a most appropriate lighting effect by giving a golden hue to our surroundings. Although we were quite exhausted, Hans and I emptied our packs and went down to 15,500 feet to bring up some more food. Tom stayed behind to start setting up camp. A few hundred feet down we met Leo who was struggling under the heavy load. Quite a ways down was the rest of the group. Pat Boswell had slipped on the ice and after a speedy descent of 300 feet plowed into some soft snow which had stopped him. It must have been a bit



Tom Spencer

Hans Gmoser, With Camera Always Ready, Leads Over Steep Snow Ridge Up The Wickersham Wall

demoralizing when you have to struggle so hard for every foot of altitude. After we had picked up our loads Hans and I walked slowly back up. It was 8 p.m. when the last man arrived in camp. What a fantastic evening! The clouds were well below us and a fiery, red sun moved slowly across the northern horizon. But we no longer had eyes for this spectacular display. We were tired and weary and everyone complained of a headache, thirst and lack of appetite. At a time like this it is very important that you still eat properly. While you don't feel like eating, your body needs all the nourishment it can possibly get. The lack of oxygen was quite noticeable and we had the first case of altitude sickness.

The night was calm and cold and we were sound asleep, when all of a sudden the whole tent rocked. At first I thought it was a furious gust of wind, but when I heard the ice crack beneath us I began to think it was an earthquake. This was confirmed when a few minutes later we were bounced up and down by another violent tremor. Then the silence set in again and the night was as peaceful as ever.

In spite of our weariness, I aroused everyone for a hard day's work. The ones least acclimatized (Leo, Gunti, Tom, Dieter and Hank) went down. Leo, Dieter and Gunti to 13,000 feet, Hank and Tom to 14,000 feet, to bring up skis and food. Hans, Pat and I set out to carry loads up to 18,100 feet. After a few hundred feet Pat felt too weak to continue. I, still feeling pretty good, took part of his load and cached the rest of it, while Pat returned to camp. The extra load was almost too much and it took me 6 hours to climb 1,500 feet where I finally caught up with Hans. We were both lying exhausted in the snow while our knees felt like jelly. We were glad to leave our loads and return to camp. I felt it was high time for a rest day before serious troubles could develop. When the other group came up with their loads late in the evening my feeling was confirmed. I promised everyone a rest day. This cheered them up immensely and a happy spirit prevailed in camp.

The following morning the sun shone warm on our tents and there was hardly a breath of air. This being a rest day, there was no point in getting up. However, since on such a big mountain you feel very much at the mercy of the weather, I was very uneasy about wasting such a fine day, and after talking about it with Hans, we decided to move while the weather was fine. Few people in camp appreciated this change of plans and it took a fair amount of coaxing before our group shifted into action. As we had packed only 4 days supplies up to our last camp, a big cache of food and gear was left under a huge rock. This left our loads pretty light. Therefore Hans and I arrived at 18,000 feet after only 2 1/2 hours of walking. It was a striking campsite. By the time we pitched our tent Gunti arrived and when his tent was up the rest of the party dribbled in. I walked a short ways down the ridge and took movies of the tired men as they struggled under their loads.

A brisk wind blew all night and by morning thin streaks of cloud moved high overhead. Did it mean a storm? Morale in camp had reached an all-time low. Tom was moaning and unable to keep any food down. He just lay there in his bag with a blank stare, unable to move. During the night Hank felt very sick. Everyone else complained of severe headache and it seemed to take forever to even lace up your shoes.

Hans and I kept talking and coaxing till finally at 11 a.m. six of us left the camp and slowly started for the North Peak. A pale sun was barely visible through the haze overhead. A sharp, cold wind blew from the north and our down clothing hardly seemed a match for it. Out in front Hans and I moved as fast as possible just to keep warm. We crossed a long flat and at 18,500 feet started on the sharp but gentle ridge which led directly to the peak. To our left we got the most awe-inspiring view yet of the Wickersham Wall. A steep, avalanche-swept slope dropped away and then dipped into the clouds which hid the remaining 12,000-foot drop onto the Peters Glacier. Shortly

after 1 p.m. Hans and I arrived on the summit, just as it started snowing. Lately we had seen only one other fellow behind us and assumed that the others had turned back. There wasn't much to see from the top. It was now snowing quite hard, but luckily the wind had died down. We thought we'd wait for whoever was coming up behind us. After 20 minutes it became too uncomfortable and we slowly started on our way back. Two hundred yards down we saw a figure through the driving snow. It was Gunti. Hans and I waited while he went to the top and then all three of us went back to camp. The storm did nothing to improve our morale. Tom and Hank seemed worse than in the morning and it looked as though we were in for some fierce weather.

All night long the wind tore at our tents and I looked out often to see if everything was intact. By morning there was still no let-up in the storm, but Hank and Tom were so sick that I felt we simply had to take them down and set up our camp at 16,600 feet. This would give them a chance to recuperate, while up here they couldn't improve and would eventually die from dehydration.

However, I completely underestimated the ferocity of the storm. Visibility was nil and at times the wind literally took your breath away. We broke camp, nevertheless, and started to go down the ridge—it was impossible. After we had moved 200 yards we gave up our attempt and pitched the tents again. To do this we had to dig out platforms in the lee of the ridge. At the moment this seemed pretty good; at least we were somewhat sheltered from the wind. But the drifting snow piled higher and higher between the tents and the ridge. Before we went to sleep our tents were covered on one side. I was quite worried; would the tents stand up under this tremendous load or would they collapse? But we were too tired to do anything about it.

Those marvelous tents stood up all night even though 7 feet of snow had piled on them. But there was hardly any room left inside. I began to dig a snow cave. Just then it looked as though it might clear up a bit and we decided to move down to 16,600 feet. The plan was for Hans Schwarz to take Tom down and for me to take Hank. The rest of the group were to dig the tents out and bring them as soon as possible. Hans and Tom started right away. Half an hour later I took off with Hank. The wind was still very strong and bitter cold, but visibility was good. All of a sudden Hank slipped and I found myself hurtling through the air, flying right over him and landing below him in a pile of soft snow. I was shook up! Hank was delirious and didn't seem to care what went on; he was almost sleepwalking. As we continued I was very careful, but felt quite insecure with Hank on the rope and a heavy pack on my shoulders. By the time we came to the rocks the storm had regained full force, blowing snow into our mouth, noses and under our goggles. For a while I thought I would suffocate. Hank just wouldn't move because he couldn't see and it seemed a long time before we got down the few rocks. Once on the snow again, our progress was faster, except that the visibility now was zero. Since the wind blew straight from the north I kept at right angles to it and so hoped to find our cache which was marked by two large boulders in the saddle at 16,600 feet. I worried now about the rest of the party, wondering if they had been able to move at all. If they had, where would they be now? If they didn't come, what could we do? They had all the tents. Would there be suitable snow to build a snowcave?

All the while we staggered through the blinding snow. Suddenly like a ghost the two rocks loomed in front of us. What a relief to see them! Hans and Tom had already been there. They had left their rope and taken the snow shovel. I bedded Hank down in the lee of the rock and then went to look for Hans. This was rather hopeless and I gave it up. All our skis were at the cache, so I began to build some sort of shelter for Hank and myself. Suddenly Hans came out of the snow and said he had found a somewhat sheltered spot and that he had built a snow cave there, but needed



Tom Spencer

Weary from Altitude Sickness

the skis to finish it. We carried all the skis over and completed the cave. It was just big enough for Tom and Hank to lie in. To me it looked like a big coffin. We then dug a hole for ourselves and tried to get some sleep. Would the others be as sheltered as we were or were they still exposed to the raging blizzard? We worried and couldn't get much sleep

It was an uncomfortable night. Early in the morning I got up and walked over to the cache to see if our friends had come. There was no sign of them. I began to work on a big snow cave, one which would hold all four of us. After he had cooked breakfast, Hans helped me and by noon we could move into our new quarters. Things looked much better now and Hank seemed to regain a little strength. In the evening we talked over our radio and asked Don Sheldon to fly in if at all possible and look for our friends. This uncertainty hung over us like a big dark cloud.

Again I walked over to the cache in the morning and was glad to see that the storm had died down. However, there was still no trace of our friends. They would have to show up soon or it would mean trouble. Then at 10 a.m. two figures appeared on the ridge. We waited in vain for the other two, but they never came. What does it mean?

After a couple of hours the two men, Gunti and Pat, arrived in camp. They had left Leo and Dieter behind. Their story was grim: After also digging a snow cave in the storm, Leo passed out and temporarily lost his eyesight. He had been very ill ever since, and Dieter had stayed to look after him.

Hans and I left immediately to bring Leo down. By now we were well acclimatized and

in an hour and a half we reached the upper camp. Dieter was busy drying out things and Leo was propped up in a corner of the cave looking terribly ill. I heated some water to dissolve a fudge bar and then gave him two dexodren and two 292 tablets. The way he looked, I felt he needed some drastic action. Fifteen minutes later I had him tied to the end of my rope and slowly we started down. Hans and Dieter packed up the remains of the camp and followed us. In a couple of hours we were down and already Leo had visibly improved. When Hans and Dieter staggered in, they looked beat under their heavy loads. While we set up the tents, Dieter all of a sudden came around and motioned that he had lost his speech and was paralyzed on one side. I thought we had reached the last straw. Hank and Tom still fairly sick, Leo completely exhausted, Dieter half lame—what next? There was one more tense moment when Hank, a normally very amiable fellow, almost went berserk. By now it took only the slightest disagreement and he would start screaming at the top of his lungs. At last we were bedded down for the night and everyone's condition had improved considerably.

The weather was still good in the morning but looked rather unsettled. We needed about 4 hours to make it to the West Buttress Route. First we skied down a very steep slope, which was laden with bottomless new snow but for some strange reason didn't avalanche. We dropped down 1,400 feet and then we were confronted with breaking trail up a very steep slope for 900 feet. By that time it had almost completely clouded over and the snow was blowing off the high ridges. I left half of my pack at the bottom of this hill and broke trail through the very deep snow. Quite anxious about the weather, I went up as fast as I could possibly go. By the time I came down for my second load it was snowing, and when we all reached the West Buttress a full-scale blizzard was raging. Now we didn't care any more. This route was well marked and to begin with there was even a 1,000-foot long fixed rope. When we reached the end of this rope, a party of four climbers from Vancouver was coming up. They moved very, very slowly in the deep snow. Here we put our skis on and had a fabulous run down to Windy Corner. Unfortunately not everyone thought so highly of the skiing and once at Windy Corner we had to wait 1 1/2 hours before our party was together again. Below Windy Corner the snow was too deep, the terrain too flat and our progress was much slowed down. It was still snowing hard and we just followed a deep trough which a party on foot must have made in the snow. Soon we spotted these people ahead of us. At first it looked like one of the most hopeless undertakings I have ever seen. Here were these people on foot in about 12 feet of new snow—at times they were in it up to their armpits! We soon caught up to them. They were Dick McGowan and his group from Seattle. They had cached their snowshoes at 11,000 feet on the way up when the snow was very hard. Completely surprised by this heavy snowfall, they now had a tough task ahead of them. They explained the route to us so that we could go ahead with the skis and they could then walk in our tracks. It took only a short while, though, before we had lost our way and headed into the steep cirque which drops onto the Peters Glacier. Before we stopped to orient ourselves. I had already committed myself to the first part of this very steep slope. Upon a quick glance I felt I was a dead man. There was no turning back because the snow was so deep and I was certain this whole thing would avalanche any minute. The only level spot in sight was the lower lip of a huge crevasse and onto this I jumped. From here it was a sheer 3,000-foot drop onto the Peters Glacier. Looking back up, it seemed almost impossible to get back again. The snow was bottomless on the steep slope. Not wanting to give up without a good fight, I literally dug my way uphill and finally reached the end of a rope which Gunti had tied to a ski and sent down along my track. I felt somewhat safer now and after four trips up and down had extracted myself with all equipment from this ticklish situation. We then followed our tracks back and shortly caught up

with McGowan's party again.

It turned out to be a beautiful, cold evening, but it hardly made an impression on me. Too much had happened during the day and now that we were safe I was very tired. We decided to camp at 10,000 feet just below Kahiltna Pass. As we began to set up camp, Don Sheldon flew over and began to drop stuff to McGowan's party which at this point was about a mile behind us. We discovered then that we had forgotten our gas up at 16,600 feet and stamped a huge "GAS" into the snow. When Sheldon saw it he tipped his wings and 20 minutes later dropped us 6 gallons of gas!

It was nearly midnight when our camp was set up and we could crawl into our bags. We were cold and hungry and the long day was beginning to tell on us. McGowan's party camped right next to us. We felt that now we were off the mountain. Sheldon would probably fly us out from here. Knowing this made us relax and a tremendous laziness and tiredness took hold of me.

All during the trip one battles with his mind. When your mind tells you "you are tired", you say "I am not!" When your mind tells you "you have a headache", you say "no!" When your mind tells you "you are going to throw up this bowl of soup", you say "I am going to keep it down!" But now we had stopped battling, we let our minds take over and mine told me "you are so tired!". I stretched out in my bag and if felt so good to be tired and lazy and not to worry about anything.

In the morning Don Sheldon flew in around 10 a.m. He dropped some more food and signalled for us to pack him a runway. This we did with our skis. Twenty minutes later and he made a beautiful landing. Dick McGowan decided to fly out first.

Well, for the next two days nothing happened and I had a good rest which I enjoyed immensely. On the second day it was very windy and clouds drifted around the peaks. As I looked out from my sleeping bag I saw Sheldon flying in and without hesitation he made a landing on a badly drifted runway. He took one of McGowan's men with a badly frozen foot into the plane and then tried to take off. It didn't work, so he told us to pack up our camp and ski ahead of him. He could then taxi behind us and in this manner we might get below the bad weather. We had hardly made a quarter of a mile when we had to give up on account of the complete "white-out". We anchored the plane and then pitched our tents. Another two days of wonderful rest went by. Nothing to do, no place to go, no one to bother you—it was great.

On the second afternoon it cleared. We packed another runway and dug out the plane. But it wasn't until 3 a.m. the next morning that the weather was suitable for the take-off. Everyone watched as Sheldon started off. Again he couldn't make it. He threw everything out of the plane, including his passenger. Then he tore along off the runway into the deep snow and got stuck again. We quickly packed our gear and skied to the plane, pushed it across a flat, watched him go down a hill and get stuck again. We packed another runway and finally at 6 o'clock he got airborne and disappeared over Kahiltna Pass.

We skied on down to 7,000 feet on the Kahiltna Glacier where Sheldon said he would pick us up. It was great fun to cruise lazily along on our skis. Halfway down we met four climbers from Seattle who were just starting up. We exchanged greetings and continued on our way. It was 1 p.m. when we reached the landing site at 7,000 feet. Here we met a party of four who were part of the Milton Foraker Expedition under Adams Carter. They were waiting for the rest of their party to be flown in. We camped next to them and found them a most enjoyable group.

Another day went by during which time we tramped a super runway and finally in the afternoon of June 24th Don Sheldon came in and began to fly our group out. By 10:30 p.m. there were only Gunti and myself left. Don said he would be back within two hours. At midnight Gunti and I took the tent down and had everything packed. We then joined Ad Carter in his tent and we

talked till 3 a.m. At that time some of their people left on a climb, so Gunti and I crawled into their sleeping bags. During the next morning Sheldon flew over high and apparently was able to pick up the chap with the frostbitten foot. Finally at 4 p.m. he got Gunti and me and flew us right out to McKinley Park Station. We got there a few minutes before our friends arrived by train from Talkeetna, where Don had landed them.

The Colorado Mountain Club's 1963 Peruvian Expedition

By Roger Neave

The American Alpine Club "News Bulletin" of January 1963 contained the following announcement:

"The Colorado Mountain Club is planning a group expedition to the Cordillera Blanca of Peru in 1963. Base camp will be in the Quebrada Honda north of Huaraz. Four 6,000-meter peaks are accessible from the base camp area, as well as several smaller unclimbed peaks. Departure date is June 22 from Miami. Cost will be in the neighborhood of \$600 for one month from Miami, plane fare included. Information may be obtained from Harold Walton, 750 Sixth St., Boulder, Colorado."

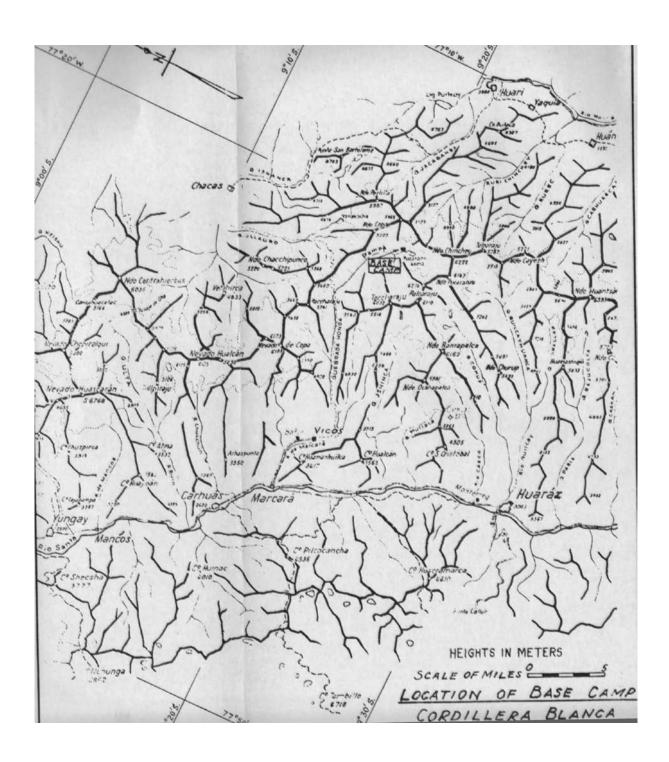
It was really only wishful thinking when I wrote for further details, but the cordial invitation I received to join the expedition made me think "Well, why not?" So that is how the only Canadian came to be on the Colorado Mountain Club's 41-member Peruvian expedition.

Harold Walton and his helpers did a terrific job on organizing the expedition, and anticipation grew as the monthly news letters reported the progress being made in plans and arrangements. When the list of personnel was circulated, I was pleased to see that two other Alpine Club of Canada members were going; Freddie Chamberlin and Don Woods.

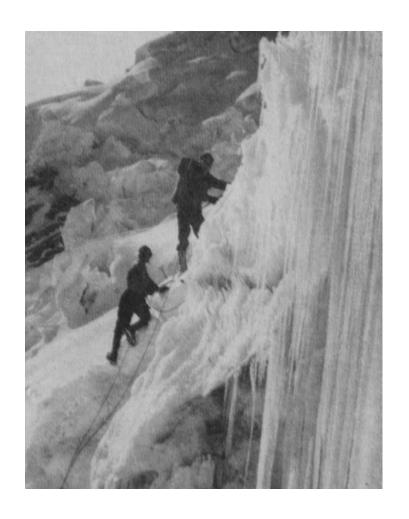
Most of the party assembled in Miami Airport the morning of Saturday June 22, where the Peruvian Airlines had placed the airport "V.I. P. Lounge" at the disposal of the expedition. Introductions by Dale and Julie Johnson and a social hour preceded boarding the DC-6 for the flight to Lima. The California contingent, travelling via Mexico City, joined us in the Peruvian capital next morning. An advance party had already cleared the expedition equipment (previously shipped by boat) through Customs, and purchased food supplies. These latter were all obtained in Lima, though it was interesting to note that some of the items came originally from Toronto, Chatham and Winnipeg!

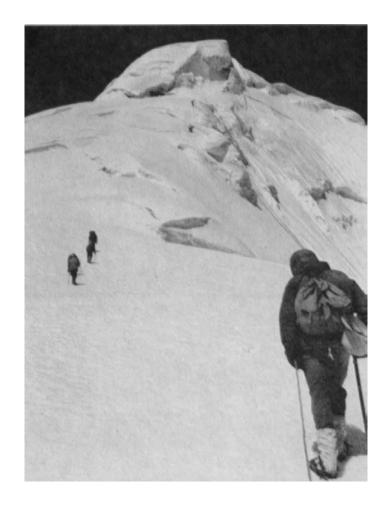
Next day, while the hardworking Waltons organized transportation to Huaraz, most of the party took a guided tour which included the Inca ruins of Pachacomac and the City Museum, with its huge Inca collection of beautiful pottery, stone sculpture, fabrics, mummies and skulls, showing major brain surgery carried out by these ancient people.

Our convoy of four cars and a bus left Lima early on June 24 for the 250-mile drive north to Huaraz. The route first followed the good Pan American highway through the coastal desert, then turned inland for the long climb to get over the Cordillera Negra. From the pass at 14,000 feet we got our first spectacular view of the beautiful snow-clad peaks of the Cordillera Blanca—such a contrast to the desolate and barren country through which we had been driving for hours. A short descent to 10,000 feet brought us to Huaraz in the fertile Santa Valley, and the attractively located Monterray Hotel with its hot springs and swimming pool. Our native drivers were reasonably capable and careful, so that we could enjoy the scenery during the drive and did not feel, as did a



Location of Base Camp, Cordillera Blanca





Roger Neave
Crossing Lower Bergschrund On Nevado Tocllaraju

Roger Neave
Summit Of Tocllaraju From High On Northwest
Ridge

previous mountaineering party making this trip, that when they reached Huaraz they knew that the most dangerous part of the expedition was over!

In order to start the acclimatization process, and also to let some of our baggage catch up to us, an interesting day was spent shopping in Huaraz, swimming and sunbathing at the Monterray, or exploring the country around the hotel. For the next stage of the journey the baggage and people were loaded into a large truck for the 20-mile drive to the end of the road at the Vicos Hacienda. Arrangements had been made for a pack train of 24 burros, with drivers, to meet us here and pack the expedition equipment and supplies the 25 miles into base camp at the head of the Quebrada Honda. With the casualness typical of this country, not a burro or driver was in sight on arrival at Vicos. Some time later they started drifting into the walled square of the Hacienda, a few at a time, and the animated operation of loading these tough little beasts of burden got under way.

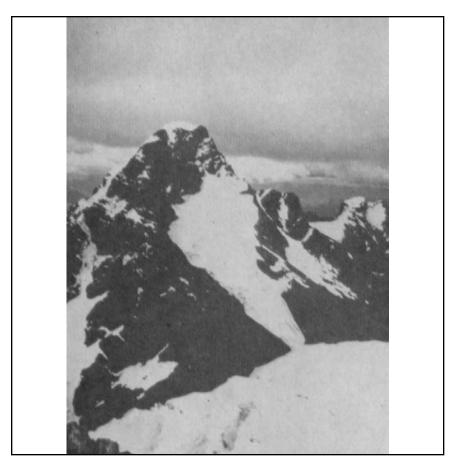
It was planned to take 2 days for the trip into base camp, as a climb of several thousand feet was involved. We therefore carried sleeping bags, personal equipment and a minimum of food, as it was uncertain whether the pack train would be with us that night or not. After a steep hot climb from Vicos we passed the "Portada", and entered the Honda, a huge U-shaped valley with tremendous cliffs along both sides, over which lacy waterfalls tumbled in a sometimes unsuccessful effort to reach the bottom of the cliff. The trip to base camp was most interesting. For two-thirds of the way we followed one of the main pack routes over the Andes. The trail was a busy thoroughfare with many kinds of animals being driven along or used for packing; horses, burros, cows, oxen, goats, sheep and pigs. Many of the natives go barefoot on the hot stony trail. Others wear a simple type of sandal cut from an automobile tire and bound onto the foot with a thong. These tire tread marks on the trail puzzled us until we discovered their origin! The inherent politeness of the natives was evident even in this remote and primitive area, and we were greeted individually with a friendly "Buenos Dias" every time they passed.

A bushy kind of lupin growing 4 to 6 feet high made a sea of blue over much of the valley, and many strange plants and flowering trees and bushes added brightness and splashes of colour to the landscape.

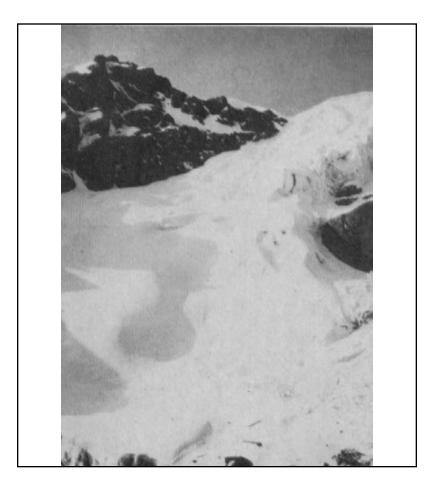
A beautiful sharp snowy peak which had been a prominent landmark coming up the valley gradually drew level. This became known as C.P.R. Peak, not through any association with the railway of that name, but from its real name of Copapamparaju. At this point the valley opened out into a relatively level grassy "pampa" where many horses and cattle grazed, and the ancient well-worn trail we had been following left the valley floor and started to zig-zag up the steep slopes to a high pass leading over to the Amazon basin on the east side of the Cordillera Blanca. We continued up the valley and by the afternoon of the second day (June 27) reached the gay base camp with its many coloured tents.

The location was ideal; a wide dry grassy area between two old terminal moraines, with a lovely clear stream tumbling down along one side, and a carpet of flowers covering the ground. And surrounding the end of the valley and extending down both sides there was a semi-circle of beautiful white fluted peaks, some of which rose to over 20,000 feet—6,000 feet above our base camp at 14,000 feet. There were many interesting little valleys between the multiple moraines, and a few hundred feet above camp a beautiful blue lake made an ideal foreground for Nevado Pucaranra and the large glacier descending from the Chinchey-Pucaranra col.

After a day spent in settling into camp, exploring the immediate neighbourhood, and getting cooking groups organized, climbing parties were anxious to get going. Our leaders continuously warned us to take it easy and acclimatize gradually. This good advice no doubt helped reduce the



Roger Neave
Nevado "Pacarish". Route was up glacier and right
skyline



Roger Neave
Nevado Tomalaraju and route up to the plateau

number who suffered seriously from the effects of altitude. John Filsinger, one of our climbing leaders, took a party down the valley and established a camp high on Novado C.P.R., from which on June 29 they made the first ascent of this prominent peak, after some exposed ice climbing. On this same day other parties explored the approaches to various peaks, while I lead a party of ten up Chaco, an unclimbed 17,400-foot peak not far from camp. No difficulties were encountered and it proved to be a good training climb. The last few hundred feet involved a good deal of step-cutting (exhausting work at this elevation!) as the snow was frozen hard and none of us had brought crampons. The actual highest point consisted of a very narrow cornice curving out into space onto which we stepped one at a time, well belayed. The weather was perfect, and the view magnificent. All the main peaks of the area were visible, and we could look across the rolling foothills to the jungles of the Amazon basin.

Darkness falls early and quickly at 9° south of the Equator, so we hurried down, hoping to get across the creek before dark. We failed in this, but a brilliant half-moon did a good job of lighting our way and made the use of flashlights unnecessary.

Six native porters were permanently stationed at base camp and were used for establishing and supporting the various high camps. Four such camps were established. Two of these were on the route up Nevado Chinchey, (20,413 feet) the highest peak in the district, and one on the glacier at the head of Quebrada Cancahua, from which Tocllaraju (19,790 feet) was climbed. The fourth, on C.P.R. Peak, has already been mentioned. A number of parties made the 5-day round trip to the summit of Chinchey and the 3-day trip to Tocllaraju. A second attempt to climb C.P.R. Peak failed just short of the summit, and from then on this peak received little attention.

To the east of base camp a high ridge formed the eastern wall of the Honda and the western rim of the Copap Plateau. This large high glacial plateau is surrounded on three sides by a series of unclimbed peaks. Several short side valleys drop steeply from the plateau to the main Honda valley, and the glaciers which fill their upper part have impressive icefalls which make their ascent difficult or impossible. Between these valleys, ice cliffs and hanging glaciers prevent access to the plateau.

During the first week of camp several attempts were made to reach the Copap Plateau by way of the two side valleys closest to camp. While one of these attempts was successful in reaching the plateau after some difficult climbing, the route was considered unsuitable for use by future parties.

On the evening of July 3, I organized a small party to explore a third side valley the next day in a further attempt to find a practical route to the plateau. By the following morning two of the party were suffering from the effects of altitude and were unable to go, so the trip was called off. After an idle morning in camp, I decided to carry out a one-man recce and set off down the valley. Angling up the slopes through a blaze of purple lupin, and then following a little native trail, I rounded a ridge high up the valley side and looked down on the Tomalamano mine and its cluster of thatched huts. Turning up into the side valley, a climb up steep grassy slopes brought me to the south lateral moraine, which was followed to its highest point. Looking across the glacier from this vantage point, an easy snow route to the plateau could be seen close under the cliffs of Tomalaraju Peak.

On July 5 a party of five of us left camp at 8 a.m. for unclimbed Nevado Copap (about 18,000 feet). The route to the plateau proved to be quite straightforward and the col was reached by 1 p.m. From there a simple snow climb took us to the summit in a little over 1 1/2 hours. As usual, it was a beautiful day, and the view in all directions was breathtaking. Across the plateau the pure

white wall of Nevado Perlilla (18,300 feet) rose in a series of almost vertical flutings from glacier to summit ridge. To the north a fine-looking peak (later tentatively named "Pacarish") of slightly lower elevation than Copap, but standing alone at the head of the Quebrada Pacarish, looked like an interesting climb. Some of us made a mental note of this for future reference.

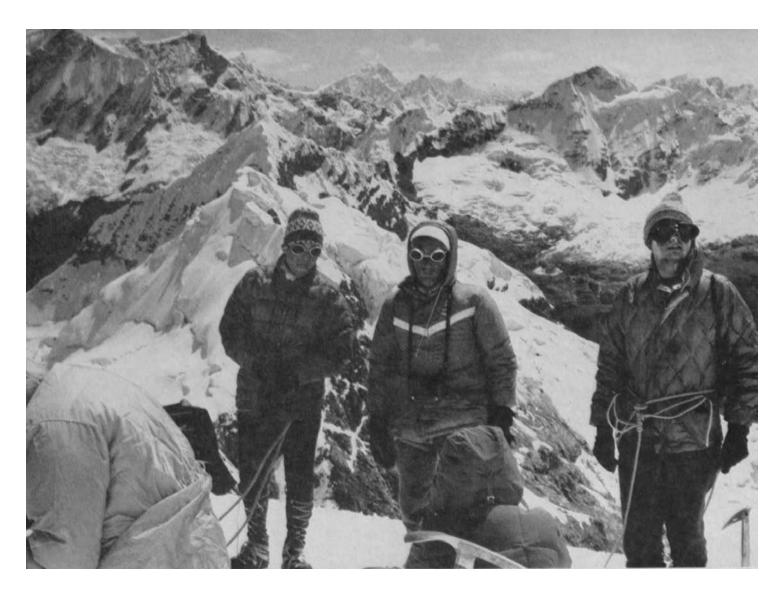
The route to the plateau became a well-used trail for the rest of camp. One party used it to make the first ascent of Tomalaraju. Other parties climbed Copap, and a party crossed the plateau, bivouaced at the base of Nevado Perlilla and attempted to make the first ascent of this lovely peak. They failed high on the ridge due to technical difficulties. Still another party, composed of Freddie Chamberlin, Bob Strader and myself followed the route part way, then turned up a steep couloir in the cliffs of Tomalaraju. Ascending this we crossed a small bergschrund and gained a snow saddle on the west ridge. Continuing west we made the first ascent (July 13) of an unnamed snow peak of about 16,400-foot elevation which is quite prominent as seen from the Honda valley. On the return trip we circled to the north of Tomalaraju, found a snow-filled couloir and made the second ascent and first traverse of this peak.

On the morning of July 8 seven of us, with Dale Johnson as leader and a porter to help carry supplies, left base camp for the Tocllaraju high camp. This camp was located part way up a large glacier that descends into the Quebrada Cancahua, a side valley 2 1/2 miles down the Honda. A good trail helped somewhat to alleviate the weight of packs and lack of oxygen as we toiled up the jumble of rocks between a large lateral moraine and the cliffs. The reason for this trail became obvious when we reached a little deserted village beside some extensive mine workings. This was the Esparta mine, said to date back to Inca times. Although it is no longer worked, the adobe buildings with their thatched roofs were still in good condition, and contained some interesting relics.

The camp, consisting of two high-altitude tents, was located on a level shelf of the glacier. Behind, the glacier rose steeply to the northwest ridge of Tocllaraju. Although we arrived at camp about 4 p.m. it was already in shadow, and the temperature was dropping rapidly. Pulling on down jackets and filling up water pots from the as yet unfrozen water hole, we crawled into the tents and cooked supper on primus stoves. A beautiful alpinglow brought the photographers out briefly, before darkness settled down.

Our porter, Hacinto, was to go back to base camp in the morning, but when we were putting on crampons at 6:45 a.m., there was Hacinto putting on crampons too, and obviously expecting to go with us! So Dale decided to let him come. Perhaps this was the easy way out, as none of us could speak Spanish.

After a long grind up undulating snow slopes we reached the first bergschrund, above which a fluted 60° snow slope of several hundred feet took us to the broad northwest ridge. The bergschrund was beautifully decorated with huge icicles, and a little winding staircase cut in the ice took us to the slope above where a previous party had placed a fixed rope. While the fixed rope was not too essential on the way up, it gave a reassuring feeling when darkness caught us at this point on the descent. Another long plod up the broad snow slopes of the ridge, and a second bergschrund blocked our way. At its narrowest place there was an overhanging gap of 7 or 8 feet. After several attempts Dale was boosted over the upper lip, and hacked out a platform on the 70° slope above. With the aid of a stirrup and a pull from Dale, I too hoisted myself up, but the effort at 19,000 feet left me gasping like a fish out of water for several minutes. With two of us above, the others soon joined us, and we continued to toil slowly upwards. Dale's rope was making faster progress and soon got out of sight above us and reached the summit. All of us on my rope were



Sue O'Brien

View from Ridge of Tocllaraju.

feeling the effects of altitude, and progress was very slow. Two or three hundred feet below the summit one of the party became quite sick. As it was getting late, with little more than 3 hours of daylight left, we decided that discretion was the better part of valour, and turned back. As mentioned, darkness caught us near the lower bergschrund, and for the last hour of the descent we followed our morning's tracks back to camp with the aid of flashlights.

Rest days between climbs were necessary for most of us who had not been previously acclimatized to these elevations, but life around base camp was very pleasant. The weather was beautiful for the whole time, and only on two or three days were the higher peaks covered with cloud. There were many pleasant walks around camp; to the old Condor mine workings, to the Tomalamano mine which is being actively worked, to the lovely Lake Pucaranra, and along high trails above the valley. While trees were not very plentiful around base camp, the porters would drag in enough wood each day for a good camp-fire at night. One night the porters were prevailed on, after much persuasion, to sing some of their native songs. One of the girls had brought a small portable tape recorder into camp, but expecting the porters would not know what it was, she tried to conceal it as much as possible while she recorded their songs. However, they were more observant than we thought. After they had finished singing, one of them turned to Jane Wyss and said something in Spanish. Jane laughed and interpreted, "They would like to hear the recording played back". That brought a big laugh on us, as we had not expected that a knowledge of this modern electronic equipment would have penetrated so far into the hinterland of Peru!

All cooking and eating of meals at base camp was done outdoors. The camp was divided into groups of 8 or 9 and each group cooked for themselves, using a common menu. Cooking was done on kerosene pressure stoves which had worked well when tested in the United States. Perhaps due to the elevation, or perhaps due to an inferior grade of kerosene, a great deal of patience and perseverance was required to get these started. The one Coleman gasoline stove worked well and gave little trouble.

The expedition suffered a few casualties from altitude sickness. One member of the party was a serious case and had to be taken out to Vicos on horseback and given oxygen at intervals on the way. Two others were less seriously affected, but left base camp for lower elevations. Quite a number of the personnel suffered mild effects of altitude of a temporary nature, and sleeplessness was a problem with some, particularly at the high camps.

Towards the end of camp some of us decided to make an attempt on Pacarish, the good-looking unclimbed peak which we had observed from Copap. So on July 15, Freddie Chamberlin, Jim Petroski, Bob Strader and I left camp soon after 6 a.m. and followed the well-used route to the plateau. From the ridge, an hour's walk across the wide névé and a descent of about 1,000 feet brought us to the base of the peak. A narrow thread of snow between steep walls of glare ice gave easy access to the glacier which extends three-quarters of the way up this side of the peak. Picking a somewhat tortuous route around crevasses, we reached the top of the glacier. After 2 weeks of crampons on snow or ice, it was a pleasant change to have a few hundred feet of good rock climbing. A series of short easy pitches, a 50-foot chimney, and some good steep scrambling, brought us to the large snow cap on the summit shortly after 1 p.m.

As we sat on the summit and ate our lunch we watched a couple of condors soaring around in the valley below. One of them finally became curious about the strange creatures that were

invading his domain, and came circling around very close to us. These immense birds, with their wing spread of about 10 feet, are most impressive when seen at such close range.

Although we were at about 17,500 feet, the warm sunshine and lack of wind made it so pleasant on the summit that we stayed for an hour and a half. Then we made a hurried descent, hoping to get back to camp before dark. The long haul up to the ridge of the plateau seemed endless, but once this was reached we were able to make good time down into the Honda, and reached base camp at dusk.

Our pleasant and colourful base camp was dismantled on July 17 and we walked out to Vicos, where we spent the night in rather primitive quarters. Next morning the truck took us to Huaraz and the Monterray Hotel, where the expedition finally broke up. One group, which had left base camp a few days early, climbed 22,200-foot Huascaran. Another group of us took the two-day trip by bus and train down the spectacular Santa Valley to Chimbote on the coast, and then back to Lima by bus down the Pan American Highway. Some then continued on south to visit the famous Inca ruins of Machu Picchu, while those of us who were less fortunate, and had run out of vacation time, were forced to return to the North American Continent, carrying with us memories of a most interesting visit to Peru, of a lovely base camp in the Quebrada Honda, and of the beautiful peaks of the Cordillera Blanca.

Lang Tang Himalaya, 1963

By Peter Taylor

"... this rather grim business of mountaineering in the Himalaya."

— Colin Kirkus

The customs officer at the airport in Kathmandu slowly shook his head and looked apologetic. "I am very sorry, Mr. Taylor. You cannot bring this food into Nepal" he said.

He was referring to some high-camp rations clearly marked 'Dehydrated Beef Stew'. I had forgotten that the eating of beef in Nepal was contrary to religious custom. I pointed out that I myself would be the one who would be eating these rations. However, the issue wasn't as simple as all that. We considered this latest faux pas of mine from all angles; I was allowed to keep the rations provided I gave my word I would not offer them to any Nepalese.

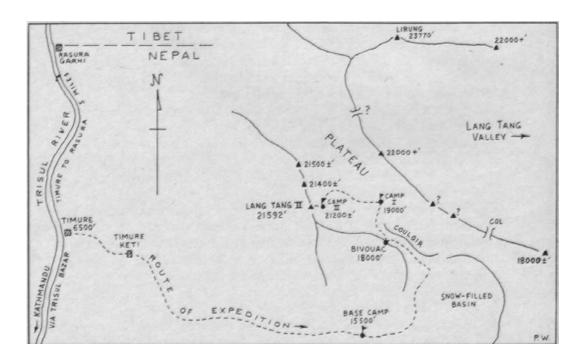
The problem of the beef stew was almost the last in a long series. Most of the problems were, I must admit, due to my own inexperience. This was my first attempt at taking an expedition to the Nepal Himalaya.

A detailed account of my first 3 weeks in Asia would make a sorry tale. I'll make a bid for your sympathy with a choice selection: personal luggage lost in Rangoon for 12 days; a mad scramble to get an import license for my equipment and enough money for a bond to cover its transit through India; heat exhaustion and a sprained ankle in Calcutta.

Life was much simpler for me when I was satisfied with mountains like Assiniboine and Temple!

I arrived in Kathmandu on April 25th. I limped off the plane carrying my ice axe and a suitcase containing, among other things, my 7-year-old climbing boots. I didn't feel or look much like an expedition leader.

Three weeks were to elapse before my equipment arrived in Kathmandu. There were times



Sketch Map of Lang Tang Group, Himalaya Mountains. Not to Scale

when I decided to give up the whole idea. In time, I corrected my mistakes, and learned more about customs regulations in India. Always during periods of gloom there came help from an unexpected quarter.

No doubt you are beginning to wonder what all this is about; it's time I let you in on the plot.

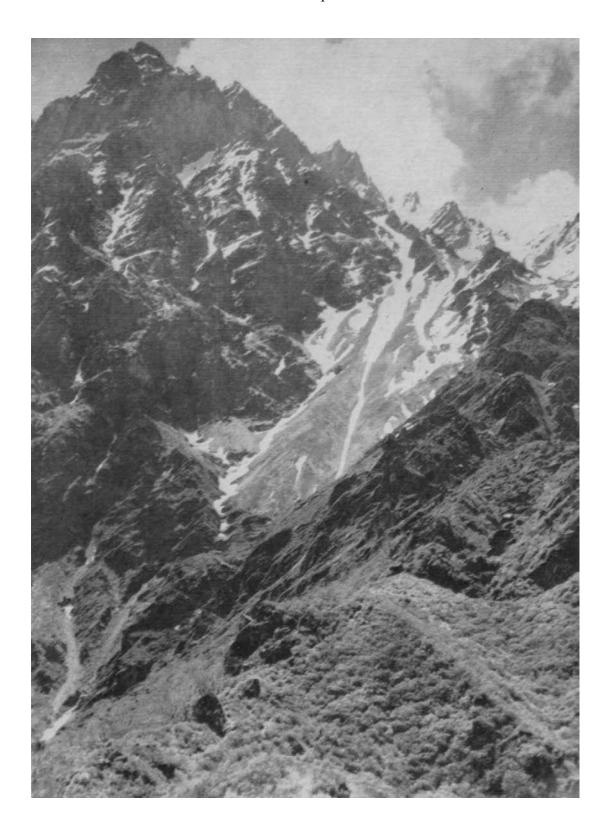
This is a narrative about 28 men and one mountain. Let me tell you about the men first. Two of them, Pasang Phutar III and Pasang Sherpa, were experienced mountaineers from the Himalayan Institute in Darjeeling. They arrived in Kathmandu on April 20th. Three other Sherpas, Ang Tenji, Shakpa Norbu and Pasang Tenji, arrived about the same time. They came on foot from Namche Bazar in the Everest area. The journey took them 3 weeks.

The expedition's Liaison Officer was Mr. Janardin Raj Bhandary, a 19-year-old college student from Kathmandu. The others: Jitman Tamang, mail runner; 14-year-old Ang Nima, camp boy and son of Ang Tenji, our cook; and eighteen coolies, hired in Kathmandu shortly before the expedition left, whose job was to carry the stores to base camp.

An unexpected addition to our little band was an Australian, Mr. Graham Rogers-Homan who came along as first aid man and base-camp supervisor. He was at a loose end in Kathmandu, having been a member of an overland party to England which had parted company there.

I first met my Sherpas in the office of the Himalayan Society, on Putali Sedek, Kathmandu. I was quite anxious to see them; until that time I had only met one Sherpa. This was in Darwin in Australia's Northern Territory. During a stop-over en route to Singapore I was introduced to Tenzing Norgay. He had been on a lecture tour of Tasmania and was on his way to Japan.

We talked of the Lang Tang Himalaya and he recalled with some amusement his experiences in the area with Tilman during the monsoon period in 1950. As I listened to Tenzing my mind drifted back over the years and I visualized him with Hilary on Everest's final ridge as they made mountaineering history.



Peter Taylor

Lang Tang II. West Face.

And now, as the taxi picked its way through the narrow streets of Kathmandu, I was to meet two Sherpas he had trained at the Himalayan Institute.

This was my first close look at the capital of Nepal. Children dressed like little dolls played in and around the many temples. Ringing bicycle bells, barking dogs and fluttering pigeons added to the atmosphere. At a water tap a line of women would be waiting patiently with brass pots. A market place would have its collection of idlers watching the industrious buying, selling and arguing. There would be the occasional Tibetan with his long black pigtails and heavy woollen clothing. Here and there a Nepalese girl would glide by, jewelled and as pretty as a butterfly.

Presently the taxi drew up outside the Himalayan Society office and a few minutes later I was being introduced to the Sherpas. I noted that they all looked fit and strong. It was important for me to get to know them for the expedition was, in fact, a Nepalese one. I saw myself only as the man who would hold the nail; they would be the hammer which would drive it home.

At the Ministry of Foreign Affairs, I saw Mr. Narendra Shah, whose duties included the issue of documents pertinent to the launching of expeditions to the Nepal Himalaya, and the control of such expeditions both politically and geographically. I was surprised to learn that neither Lang Tang II nor the Lirung Peak had been climbed. There was no record of any attempt on the former. I also learned that up till now all approaches to the Lang Tang Himal had been from the south via the Lang Tang Valley.

Mr. Shah asked me why I had chosen this particular mountain and why I had decided to approach it from the west, or, more accurately, from the Trisuli Valley.

I explained that I had only a limited amount of time, and couldn't afford to waste any of it on a long trek to a distant peak. The mountain I had chosen was only a 5-day hike from Kathmandu. Also it seemed to be about the right height and size for the expedition to handle competently.

I had studied a detailed topographic map of the area and noted that the south aspect of Lang Tang Himal was one of extensive glaciation and probable instability.

An approach from the west, say from the village of Timure in the Trisuli Valley, seemed a more direct and reasonable approach and free from the danger of avalanche. There was only one catch to my plan: the close contours on the map indicated that Lang Tang II had a very steep west face. We might find ourselves trying to do Grade 5 rock climbing at over 20,000 feet.

As I wandered back to the hotel I pondered over the task I had set for the expedition: the first ascent of a virtually unknown peak by an unknown route; the first ascent of the 21,592-foot mountain called Lang Tang II.

The prospect scared me a bit, but the fear was mixed with that indescribable feeling one gets when lacing up climbing boots, tying on the rope, or watching the ice chips go tinkling off into the depths.

The expedition left Kathmandu by truck for the 25-mile journey to Trisuli Bazar on May 18th. By 5 p.m. on that day we had set up our first camp on the west bank of the fast-flowing Trisuli river.

The daily routine did not vary much. After a quick cup of tea we would be off by 5 a.m. Raj Bhandary, Graham and I would lead the parade with Ang Tenji and little Ang Nima in close attendance. The latter carried the cooking utensils so that the sahibs would not have to wait for their tea when we halted at 9 a.m. for breakfast. About an hour later the coolies would arrive under the supervision of the Naike and the other three Sherpas. I always enjoyed the breakfast halt. It would still be cool in the valley and Graham and I always managed to find a waterfall to shower under. We would then move on until 2 p.m. By this time it would be fiercely hot and we would

trudge along streaming with perspiration despite the shade of our black umbrellas. The coolies would wander in about 4 p.m. and by that time the evening meal would be almost ready.

Pasang Sherpa looked after me on the trail and on the mountain. Throughout the expedition he was the first man I would see each day as he brought me my morning tea, and the last I would see at night when he looked into my tent to see that everything was in order. He was an immensely strong man; later I was to draw on his strength when my own failed.

Pasang Phutar was the most skilled and experienced as a mountaineer. He had been on Everest twice with the Swiss, Dhaulagiri with the Argentines, and had made the first ascent of Chamlang (over 24,000 feet) with the Japanese. He was agile rather than strong and had the calm and detached attitude so often to be seen in men who know what they are about.

Ang Tenji, our cook, was something of an 'old soldier'. He and I had a long and friendly contest trying to outsmart each other over the camp funds. For a while I thought that it ended in a draw; today I know he emerged an easy winner.

Raj Bhandary was very fast on the trail. Quite often as Graham and I were labouring up some hill, Raj would flash by with a big smile and a dry brow. As he was not a climber, he would be coming only as far as base camp. This was something of a relief to me. I did my best to wear him down but it was no use. My only consolation was that I was more than twice his age. I nicknamed him 'Flash'.

After tea at 6 p.m., Graham and I would sit around discussing the day's events and watch the shadows lengthen in the valley. Like myself he had had something of a chequered career so the conversation never lagged. At almost every village he would dispense tablets to the ailing. If the sickness was obscure an aspirin wrapped in bright green tin foil was sufficient to cheer the patient up.

It was a cheerful and well adjusted group which reached Timure on May 22nd. Here we would leave the Trisuli Valley and commence the long climb up to the base of Lang Tang II.

There is a good trail leading up to the scattered farms and patches of cultivation above Timure. The end of the day found us camped in a small settlement some 3,000 feet above the Trisuli. We could no longer hear its roar or see its foaming surface. This was to be our last night in Arcady for some time. Each day brought the monsoon a little nearer. Already I had decided there would be no time for either acclimatisation or reconnaissance. The three weeks set aside for this were already lost.

As we moved up on the 23rd there was less time spent looking at the scenery and fewer occasions for laughter. The coolies knew I wanted the base camp set up at 15,000 feet that day. They moved up steadily and without complaint, their bare feet treading the harsh rocks.

At midday we reached an estimated altitude of 12,000 feet and for a few minutes the clouds drifted apart. For the first time I saw our quarry; it was not an encouraging sight. During the few minutes Lang Tang II was visible I saw that the west face would be a rock climb of a very high order. The face was seamed with narrow gullies; there was very little snow. High above the lower buttresses was a rock wall about 1,500 feet high. It sealed off any easy approach to the summit. It looked rather like Yamnuska perched on top of a 20,000-foot mountain. There seemed little chance that laden porters could go up there to establish high camps.

There were three distinct summits. The one to the north is, according to the map, $21,500 \pm$ a few feet. The centre summit looked about 200 feet lower. From this vantage point the south and highest summit seemed much lower. Even as I glanced quickly over the west face I was already deciding against any attempt on it.



Peter Taylor

Looking South from Bivouac at 18,000 feet.

At 4 p.m. on the afternoon of the 23rd the last coolie deposited his load at the site we had chosen for base camp. I estimated our height to be about 15,500 feet. We were slightly higher than a peak to the north which was given as just over 15,000 feet by the map. I was very pleased with the coolies' performance. At 5 p.m. they were paid off and lost no time in descending to the warmth of the valley.

Little Ang Nima had already found a water supply and was trotting around looking for firewood. There were a few bushes among the rocks and patches of snow.

Later the clouds cleared again and I was able to look at the south ridge of the mountain which loomed above the camp. It looked better than the east face but there were many steep pitches hundreds of feet high. I was doubtful.

The following morning while Pasang Phutar sorted out our climbing gear I set off on a lone recce. The slopes above the camp were quite easy although there was quite a bit of hard snow. After a thousand feet or so the slope eased off and I found myself looking into a vast amphitheatre of rock.

At the far end was a snow-covered col, flanked on the right by an easy-looking peak. I consulted my map and was pleased to note that the contours matched the view. The peak was shown to be about 18,000 feet. On the left the col was flanked by a series of small peaks which seemed to lead to two satellite peaks of the Lining Massif. Between these peaks and the lower reaches of Lang Tang II I saw a part of a snow-filled couloir and guessed it led up to a point where the east face would be visible.

I descended to base camp with the news and hopes started to run high. Pasang and I decided

we would move up the next day with Pasang Sherpa and the two local porters and attempt to put our two high-altitude tents at 19,000 feet. This was the height I guessed the top of the couloir to be.

We left at 6 a.m. I led off up the slope above base camp and was presently cutting a line of steps in the hard snow to make things easier for the laden porters. I was carrying 30 pounds, the others about 40 pounds each. We moved into the flat area below the col and by 9:30 a.m. we reached the foot of the couloir. With some relief I discovered that a firm step could be kicked quite easily. Pasang Phutar and Pasang Sherpa shared the lead now and I was quite content to let them show their worth.

By now I had discovered that it takes time to get accustomed to the scale of things in the Himalaya. The couloir was taking longer than expected. By 11 o'clock we were only half way up.

Suddenly the weather broke. The cloud came down and snow began to fall. Despite the fact that we were putting out markers (we had 70 with us) I began to wonder if our two local porters would get down without trouble later in the day. I decided not to take the risk of having them bogged down in a heavy snowfall. The two tents were hastily erected on a rock ledge above the couloir and we prepared to bivouac until the following day.

I looked around for Pasang Tenji and Shakpa Norbu to give them a climbing rope and instructions, but I was too late; they were already on their way down. Pasang Phutar told me not to worry about them. If the weather improved they would come up again the next day and help put the camp higher.

We were at 18,000 feet and I was, so far, not feeling any ill effects. I was able to eat well and had a good night's sleep. The following morning, the 26th, I was up early and looking up the couloir, wondering what we should find at the top.

Rather than wait for the two Sherpas to come up from base camp (the weather was fine) I decided to climb up alone. After about 500 feet of step kicking I was beginning to tire. I thought the rocks to the left of the couloir might be easier. I was soon to find out that rock climbing at over 18,000 feet was not easier by any means. I found myself getting into difficulties and scrambled back into the couloir again.

I was quite exhausted when I reached the top. But the sun was shining so I sat down on a rock and waited for the others to come up. The first to appear was Pasang Sherpa. He had my pack tied on to his own. He strolled over to me with his 70-pound load, gave me a big smile and asked: "You like some tea?" He produced a full thermos, some chocolate and biscuits. It was an enjoyable lunch.

Beyond the top of the couloir was a broad plateau. My guess had been correct: to the right were the two satellite peaks of the Lirung Massif and on the left were the lower slopes of Lang Tang IPs east face. They looked easy for the first thousand feet at least. Above that I could see nothing because of cloud.

The two tents were set up and the five of us settled down in our sleeping bags quite early. Pasang Phutar and I discussed the situation. My idea was to move up the following day and try to reach the summit. However, he felt we were moving up far too quickly and should rest for a day and get used to the altitude. We had all started to cough, and breathing, for me at least, had now become a conscious effort.

In the back of my mind was the thought of being caught up here by the monsoon. I wanted to get the climb over with as quickly as possible. Accordingly, it was decided that we should

continue the ascent at 7 a.m. on the 27th.

In order to get a good night's sleep I decided to take a couple of sleeping tablets (although I had been warned off them). They gave me hallucinations and I spent the whole night trying to get out of the tent. Fortunately I was trying the wrong end; otherwise I might have gone wandering off somewhere.

As the three of us set off on the morning of the 27th I wasn't feeling too bright. It was a calm day but grey and miserable. We moved up steadily; here would be a patch of snow to cross, there a few slabs and a bit of scree. We avoided an occasional rock wall without too much difficulty. We were climbing up into the unknown of course, as visibility was down to about a hundred feet.

My coughing grew worse and just after midday I decided I had had enough for a while. We sat down and had some lunch and reviewed the situation.

Above us the rock rose sharply and I had a glimpse of a long ridge of snow above it. We had come a fair distance but it seemed to me we had not gained much altitude. I felt sure that we still had between 500 and 1,000 feet to go. Moreover, it didn't look too easy higher up.

They could both see I was not going well and that I would need rest before tackling the climb to the top. I wasn't even sure if we were in line for the summit anyway. Perhaps the following day would bring an improvement in the weather.

We found a site for the tent. Pasang Sherpa unpacked my gear for me while Pasang Phutar prepared a meal. I climbed into my sleeping bag and read for awhile. I was unable to concentrate on the book and lazily studied the interior of the tent instead. The sparkle of frost crystals on the red fabric looked quite festive. I dropped off to sleep for a few hours.

I woke up at 2 a.m. My coughing had returned and I was alarmed at my harsh breathing. At first I thought it might be the onset of pneumonia. However, my breathing rate was only twenty per minute and I had no other symptoms such as high temperature or a feeling of definite illness. So I took some penicillin tablets.

Pasang Phutar, who was sharing the tent with me (Pasang Sherpa had descended to Camp I at 19,000 feet), woke up at 6 a.m. He was surprised to see me already awake and sitting propped up by my pack. He more or less told me that I wasn't looking too well, so I took out a small mirror and had a look for myself. He was right. Pouches of fluid had formed under my eyes and my face generally had a puffy look. It seemed I was allergic to penicillin. After some warm tea he asked the all important question: "We climb?"

It was quite a while before I answered. The way I felt at 7 a.m. I didn't think I could go much beyond ten feet. I was also thinking about that rather nebulous line which separates determination from foolish obstinacy. I decided to get up and try walking around for a while. 1 spent about two hours putting my boots on and getting into my windproofs. I finally crawled out of the tent and lurched to my feet at 9 a.m. It was a cold, grey morning and the very last thing I wanted to do was to go climbing.

At 9:30 a.m. I finally made up my mind. "Let's go, Pasang" I said, pointing upwards.

The final stage of the climb was now at hand and as Pasang Phutar led on the rope I began to gear myself mentally for an hour or so of climbing. I swallowed a couple of caffeine tablets with the hope they might sharpen my wits.

The climbing was a little steeper but not very much different to what it had been before. After about half an hour, Pasang moved on to the rather exposed snow ridge which I had seen the previous day. He kicked his way up this and then stopped. I moved up to join him. Before us was a rocky ridge a few feet wide and about 25 feet long. I looked around for the next stage of the climb.

There didn't seem to be one. Slowly, I realised that the climb was over; we were on the summit. We had camped at about 21,200 feet—within half an hour's climb of the top.

We took photographs and Pasang held up the Nepalese flag. I took some movie shots of this and also of the last few feet of the route. There was very little snow about, which rather surprised me. It's quite a small summit and I expect the wind blows the snow off.

The clouds began to lift and we saw the north and centre summits. To the west I had a glimpse of the green Trisuli valley nearly 16,000 feet below. We did not see 23,770-foot Lirung Peak but saw its two satellite peaks to the south. I walked up and down the narrow summit feeling in quite good spirits once more. I talked of climbing other peaks within a few days, but it was all wishful thinking. We descended to the high camp and met Pasang Sherpa who had just come up from camp I. He too went to the summit, making the trip alone.

The three of us made our way down to Camp I. My enthusiasm and high spirits evaporated now that it was all over. Pasang Sherpa insisted on carrying most of my gear and went on ahead. Just above Camp I, Pasang Phutar took off the rope and started to coil it up. As I watched him I realised how well he had served me.

I looked upwards hoping for a last view of the mountain. There was nothing to be seen; a veil of heavy, slate-coloured cloud was drawn across.

The West Ridge Of Mt. Saskatchewan

By J.G. Kato

Mount Saskatchewan, 10,964 feet in altitude, lies southeast of the Columbia Icefields in the northwest angle between the Alexandra and North Saskatchewan rivers. The first ascent was made in 1923 by Ladd, Thorington, and Kain after going up the Alexandra River and establishing a camp on Castleguard meadows. The climb was up the south face by an ascending traverse to the east. The south face route has been repeated several times since but no other route has been made, although the approach has been varied by going up Terrace Creek from the Alexandra River.

Many years ago before the Saskatchewan Glacier Hut was built, I had wandered on the alplands and low peaks above and south of the present hut, and had been impressed by the glacier-clad north face and the long jagged west arête of Mount Saskatchewan. It was a most challenging picture to a mountaineer. Plans were made for July of 1963 to attempt a new approach to the mountain from the north, from the Saskatchewan Glacier Hut after climbing Mount Columbia, but bad weather intervened. However a second opportunity suddenly presented itself on the 1963 Labour Day weekend.

On Saturday at noon, Robi Fierz and I left the car on the old Banff-Jasper highway near mile 109 at the start of the fire-road that leads to the Saskatchewan Glacier Hut. The new highway by-passes this point now. Since the season was late and daylight short, we decided to walk in light and bivouac at the base of the west ridge.

A walk along the fire-road for 25 minutes brought us in sight of the hut at an elevation of 5,750 feet. At this point we turned left and leaving the road ascended southward through light bush. From the top, it is obvious that the grassy slope which can be seen from the bottom is a better route up. The top was reached in 55 minutes and from here we gained our first view of our objective. A slightly ascending traverse was made on slopes to our right in order to stay high, as we



Robi Fierz

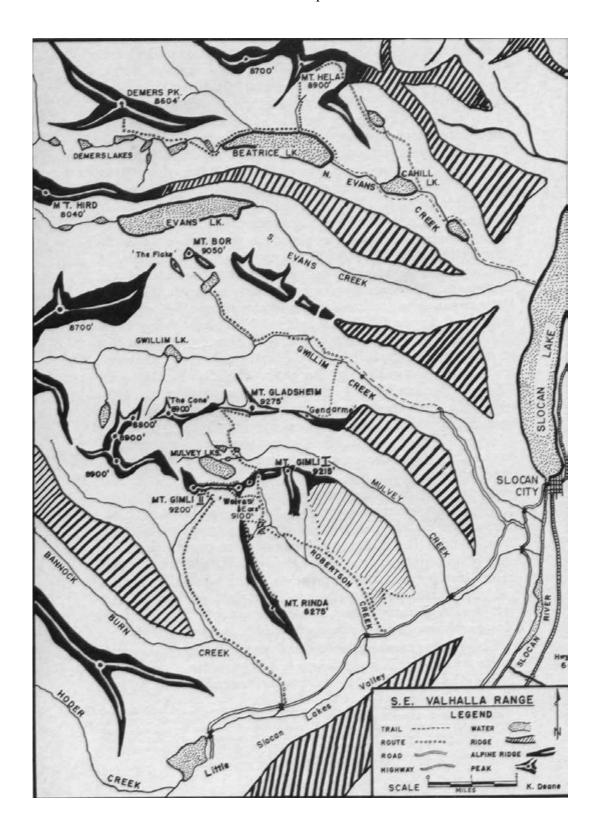
West Ridge of Mt. Saskatchewan from the North.

plodded nearly due south under a broiling sun. Four hours later a rather spartan bivouac site was selected at an altitude of 8,700 feet, about 5 minutes from the base of the west col where water was available at the edge of the glacier.

The next morning, September 1st, at 5:50 a.m. it was light enough to see and we left our bivouac site. Avoiding the steep frozen snow for lack of crampons we reached the crest of our col at 6:20 a.m. We followed the long west ridge which was easy here, until at 7:45 a.m., at the base of one of the towers, we put on the rope with Robi leading. The rock was quite good; the weather clear and cloudless. After climbing and turning numerous towers, at 10:45 a.m. we reached the base of a prominent gendarme with a horizontal ceiling pitch which overhung us by about 8 feet. This feature of the ridge can be seen in profile from both the north and south approaches. This difficulty was turned on the left but upon standing on that roof it was seen that the next pitch had an overhang. Robi surmounted this obstacle with the aid of one piton, climbing it on the sunny right side. The next pitch was the last difficulty, being a touchy climb on ice-glazed rock, turning the ridge on the left or cold north side and ending with a slight overhang.

At 1:30 p.m. the west summit was attained. No evidence of a cairn could be found and a new one was erected. At 1:50 p.m. the true summit at the eastern end of the ridge was reached, and another new cairn was built. It was a perfect day for basking in the sun. There was no wind and a full panorama was spread before our eyes. Many familiar peaks of this area of the Rockies stood out clear in the near and middle distance; peaks of the Selkirk Range reached above the distant haze

Neither of us wished to descend the west ridge, so the south face received our attention. At 2:40 p.m. a reluctant start was made in a descending traverse to the west over downward-tilting scree slopes. Steps were cut across two ice slopes and then bands of cliffs were encountered. We



S.E. Valhalla Range

gradually worked our way through these by going back and forth but working towards the west, until we suddenly spotted a cairn on top of a buttress below us.

Upon reaching this point by climbing down a chimney, we found just one more belt of cliffs, and this was negotiated by a chimney to the west. We were off the upper part of the mountain but our camp lay on the other side of this mountain and it was now 4:45 p.m. One hour was spent following the south-southwest ridge down to the meadows and as we walked wearily around two ridges the sun sank behind Terrace Mountain. A goat trail led up the long scree slope to our col, and just as it became really dark at 8:05 p.m. our bivouac site was reached.

Visit To The Valhalla Range, Southeastern B.C., 1963

By Kim Deane

Geographically, towering between the Slocan and Arrow Lakes, and geologically, a section of gneiss within the Nelson batholith, the Valhalla Range in southeastern British Columbia is little known and less explored. (Latest Map: B.C. No. 82F/NW, 1 inch=2 miles. Not accurate in detail.) The Kootenay mining boom of the twenties bypassed this area because of the barren granitic rock, so logging interests in Gwillim and Evans Creeks have been the only prolonged intrusions. Yet the very nearness of the peaks has stimulated continuing interest, usually thwarted by lack of trails and by dense undergrowth. Many efforts, though, have been noteworthy. Win Churchill of Rossland climbed Mt. Hela, Mt. Gimli I, and Demers Peak over the last 20 years, and Leon Blumer completed a winter ascent of Gimli I and an ascent of the Gendarme on Gladsheim's east ridge. Kelowna architect Gordon Hartley made several lengthy pack trips up different valleys, including one with a 3-day stay in the Mulvey Lakes basin and a climb along Gladsheim's west ridge. However, ordinary weekend trips allowed most visitors to reach only within striking distance.

For the 1963 Labour Day holiday weekend our group, because of its size and limited time, decided on a helicopter lift into the area. Ten climbers made the trip: Alpine Club of Canada members Helen Butling, Jack Oswald, and Mike Stewart from Nelson, Gill Broatch from Vancouver, and myself from Rossland, with Bud Stovel from Revelstoke, Gerry Brown from Castlegar, Dave Deane from Rossland, and Parker Williams and Jim Rees from Trail completing the party. The cars were left at the Mulvey Creek bridge in the Little Slocan Lakes Valley and base camp was set up at a small lake (7,400 feet) at the head of Robertson Creek. Five 15-minute trips were required to transport the party the 5,000 feet up into the valley.

After enjoying a cup of coffee and photographing the group, Phil Grady, our pilot, hopped aboard his machine and drifted down towards Nelson. The party then split into two groups, one for Mt. Gladsheim and one for the "Wolves' Ears" (local name). The latter group, composed of Gill, Mrs. B., Dave, Jim, and Gerry, followed rock-strewn meadows to a col south of the objective (8,200 feet) and on up an obvious gully to the west ridge. Here they roped and enjoyed a fine exposed scramble for the remaining 600 feet to the west peak (a first ascent). Time from camp was 2 hours. Returning early in the afternoon, Gerry decided to tackle the east peak, and in 2 hours was building a cairn after ascending the north ridge from a col (Robertson Col, 8,200 feet) at the head of Robertson Creek. Jim and Dave, not to be outdone, traversed roped along the serrated ridge of Mt. Rinda¹ to the summit. They returned to camp via the valley at 6 p.m.

I wish to draw attention to the position (between Robertson Creek and Bannock Burn Creek) given for "Mt. Rinda" in this account and on the accompanying map. On most maps I have seen, Mt. Rinda is shown west of Bannock

Meanwhile, the Gladsheim group went north from camp, over Robertson Col and down a snow and scree slope to the Mulvey basin (6,700 feet). This hanging valley at the head of Mulvey Creek appeared as an oasis amid the expanses of rock and snow. Dewy meadows, segmented by mountain lakes and foaming streams, sank softly underfoot. Above, on a bench, Mulvey Lake displayed deep glacial blues and greens below the slate-grey wall of Mt. Gimli II. Below, from the valley, rose the near-vertical wall of Mt. Gimli I, balanced to the north by vast slabs towering to the peak of Mt. Gladsheim. The Wolves' Ears and Cone Peak filled other gaps in the backdrop; the only breaks were a ramp of outcrops leading west toward three unnamed peaks, and Mulvey Creek valley dropping steeply to the east. Unfortunately the area is quite remote, protected by distance on the Robertson Creek side and very heavy growth in Mulvey Creek.

After a brief rest, the party continued up grass, rubble, and finally a very welcome snow gully, to gain the crest of Gladsheim's ridge about half a mile west of the summit. This point was reached at 12:30, some 3 hours from camp. Here they formed in two ropes and completed a fairly difficult, exposed climb to the peak, reaching the top at 3 p.m. Many varied problems confronted the climbers from short pitches out over the faces to chimney "squirms" deep in cracks. The day's third first ascent was happily noted with a cairn and message.

The party descended slowly and carefully along the same route, as the uphill pace began to tell, and dusky shades on Mulvey Lake found them plodding mechanically up to Robertson Col. Then over at last and the remaining doubtful steps, guided by candles set around the camp.

Sunday dawned clear as Jim and Gerry set off for Mt. Gladsheim. Later the others climbed Mt. Gimli II via the east ridge for the fourth first ascent. No rope was necessary. The route led over the col south of the Wolves' Ears and down to the head of Bannock Burn Creek, then up the east ridge on solid rock. Only 3 hours from camp, this peak proved to be a superb viewpoint and Jim and Gerry were visible arriving on Gladsheim's summit.

Sunday night the weather broke and mist shrouded the valley as packing was completed. A 12- by 32-foot plastic tarp and other odd supplies were left beneath a rock beside the lake, marked with red tape. Then down to the cars (in 6 hours) following the east side of Robertson Creek through acres of huckleberries—spirits high at their success in capturing a portion of the Valhallas. However, it was definitely only a beginning and the unexplored summits beckon more strongly. It is hoped to have a trail hacked up Mulvey Creek sometime in the near future, and with access the area will gain the friends it really deserves.

First Ascent Of Mt. Winstone, Taseko Lakes Area, B.C., 1963

By G. Suddaby

At the end of July 1963, a party consisting of Werner Himmelsbach, Ralph Hutchinson, Joseph Hutton and the writer visited the Falls River and its headwater glacier, that drain into Taseko Lake from the southeastern flank of the B.C. Coast Mountains at about Lat. 51°N.

Our objectives at the beginning of this expedition, in order of importance, were: first, the ascent of the main peak of Mount Winstone; second, the exploration and ascent of other likely-looking peaks in the neighbourhood, particularly two possible 10,000-footers, and third, the

Burn Creek, above the Little Slocan Lake Valley. There is no true peak at this point; just the end of the ridge. Where I have shown the peak, there is quite a striking summit with sheer walls The local citizens refer to this peak as Mt. Rinda.

enjoyment of the beautiful alpine flowers which abound in this region. As the week progressed the relative importance of these objectives became confused, and as it became apparent that they were based on a perverted sense of values, we reversed our scale of priorities.

Our approach to the region was the same as that used by the 1962 party.² The map published with their article shows this area well. We flew from Harrison Lake in a Cessna 185, which had to make a detour almost to Lillooet because of low cloud; and after landing at Fishem Lake we used Mr. Murdoch's jeep for the first 6 miles along the old mining road. The bumpy flight was undoubtedly the most unpleasant part of the whole expedition; and the fording of the Fishem river in the jeep was probably the most dangerous.

We tramped the 8 miles from Murdoch's upper cabin to the base camp site in the late afternoon of that first day, Saturday July 20. We were accompanied by cooling showers, and as there was no view to make us stop and gasp in admiration we had to invent other excuses for halts: that we were so inventive we put down to the invigorating effect of mountain air. Five hours after leaving Murdoch and his jeep we pitched camp, while Joe reminisced about the sunny days he had spent in the area in '62.

Two more days of bad weather then gave us an opportunity to philosophize on a great variety of topics.

On the third day (July 23) a cloudless sky brought thoughts of only mountaineering to our heads. The north face of Winstone, clad in fresh snow, looked magnificent; but we decided upon an easy exploratory day to reconnoitre the two 10,000-foot peaks which we hoped lay round the corner. Disturbing marmots as we went, we followed the lateral moraine on the west side of the glacier; and rounding a shoulder of hillside, found the first of these, a noble rock peak, in front of us. Following the same line of argument as that which had turned us away from Winsome earlier in the morning, we by-passed this monster on the south side and continued along an easy glacier to the other ten-thousander—"the snow peak", as we called it—which we climbed on mixed snow and rock, and which proved to have a graceful summit (ca. 10,100 feet) and to be a fine viewpoint.

That evening the weather changed again, and the following morning was not promising. Nevertheless, three of us set out to look at Mount Winstone—which had so filled us with desire the previous day—and ploughed our way through deep snow as far as the col (ca. 8,500 feet) at the head of the east branch of the Falls River glacier. Owing, perhaps, to a blizzard which had just sprung up, our discussion about the advisability of continuing up Winstone was relatively short; we unanimously decided to ascend instead the peak (ca. 9,300 feet) to the north, which we did, very enjoyably, and so justified our acceptance of the hot tea and rum which awaited us back at camp.

Snow fell down to about 6,500 feet that night, but it very quickly disappeared next morning in the hot sun which rose upon the four of us as we ascended the slopes immediately behind camp, making for the impressive rock tower (ca. 9,700 feet) which can be seen to the NNE from the camp site. We reached the hanging valley at breakfast time and relaxed in the meadows fed by the small glacial stream. Hedonism almost triumphed at this point: the party wavered, then hearkened to the call of duty and turned once more towards the peak. On reaching the base of our chosen tower, however, we found that the rock was not only very steep but also very unstable; moreover, the peak had a perfectly easy north ridge around the corner. In view of these two disappointments we abandoned this peak and traversed instead a few airy pinnacles to the southwest, on one of

^{2 &}quot;Falls River Climbs, 1062". By Tan Kay. C.A.J., Vol. XLVI, pp. 71-75, 1963.

which, at about 9,600 feet, we placed a suitably unobtrusive cairn. After a mid-day siesta here we ambled down to our meadows for an afternoon further siesta, and then, in the evening, down into the valley.

At four o'clock next morning, July 26, a porcupine, sleeping peacefully near our tent, was rudely disturbed by three stumbling figures. It is fortunate that the porcupine has not the parrot's powers of mimicry, or Mount Winstone would still be echoing with our remarks. The fact was that those whose values were still inverted had been able to rouse us at three; and, the weather providing no excuse, a summit party had set forth. We were passing through the ice-fall (such as it is) of the east fork of the glacier when the rising sun began to impart a pink glow to Winstone's ice-cap; and we ourselves felt its warm rays when we reached the col at the head of the glacier. Following the route taken by the 1962 party, we did not rush, but climbed with the slow rhythmic gait of experienced mountaineers, pausing at intervals for Tilsit cheese, scroggin, and other timehonoured delicacies, thereby reaching the east peak in the middle of the day. The 1962 party was right about the route between here and the main peak: it is a long way. However, the only technical difficulty experienced on the way was that of tracing the elusive rivulets which can be heard under the rocks everywhere on the col, but which never come to the surface. We did eventually reach the main peak, and spent long enough there to calculate the height at 10,120 feet, to take photographs, to build a cairn, to approach as near as we dared to the cornices over the north face, and to marvel again at the Coast Range panorama. On the way down we omitted the east peak, traversing instead its south face; but this route, though easy enough, has little to recommend it. Rejoining our route of ascent, we galloped gaily down the bristly southeast ridge, marched across the soggy snowfields, and retraced our steps down the glacier, until, on the hard ice lower down, as the evening shadows flowed up to engulf us, we stopped to unrope. Here we looked back again at Winstone's north face, its architecture clearly revealed by the light of the setting sun, before descending to camp in the quiet twilight.

The fine weather now continued, and on the next day we had a leisurely walk, punctuated by many backward glances at the mountain, out to Murdoch's cabin.

The region undoubtedly has its charms; charms accessible to any able-bodied party. The bush is sparse, flora and fauna are abundant, and easy 9,000-foot peaks can be reached without setting foot on snow or ice. For those who can resist the flesh-pots, the "rock peak" will provide much good climbing—the northwest ridge seemed to us to offer the easiest route, but there are many possibilities. The complete traverse of all three peaks of Winstone (from west to east) would be a very fine expedition; optimistic eyes in our party saw obvious routes up two inviting rock ribs which descend just to the east of the main peak.

Lillooet Icefield, Southeast Coast Mountains, B.C.

By Martin And Ester Kafer

The Lillooet Icefield area has seen, as far as is known, only two climbing expeditions^{3, 4} before our small group of climbers paid it a visit during the summer of 1963. A careful study of mountaineering records and maps indicated that the area north and east of the peaks explored by these two previous expeditions had a number of unnamed virgin peaks between 9,000 and 10,000

^{3 &}quot;The Source of the Toba River". By Alec H. Dalgleish. Canadian Alpine J., 1933, pp. 56-62.

^{4 &}quot;The Lillooet Icefield". By Ralph Hutchinson. Ibid., 1961, pp. 17-27.



Based on "92J" by MK.

Lillooett Icefield, 1963

feet especially around the fringes of the Stanley Smith Glacier (B.C. Map Sheet 92J).⁵ After we had picked out two or three likely camp sites on the map a closer scrutiny of the actual climbing area was decided upon and carried out with the help of Roy Mason and his ski-equipped Super Piper Cub plane. Never has the exploration of a new climbing area been made easier than with the help of an enthusiastic mountaineer-pilot and a high-performance ski-plane: after a 1 1/2 hour flight from Vancouver to the Lillooet Icefield and a series of exploratory circles around the promising looking peaks south of the Stanley Smith Glacier we actually landed right on the future base camp site at 8,300 feet.

Together with Dick Chambers Roy made another trip to the high saddle chosen for the camp site and landed under much more precarious conditions but managed to leave a food cache in the nearest rocks. After two hours of frantic digging to free the plane in the soft snow, they succeeded in taking off again, just missing the first crevasses below the saddle.

Unfortunately our party had to forego the pleasure of being flown in to our base camp directly, but decided to charter a floatplane and fly in to "Silt Lake" which had impressed us during the recce flight as still being quite practical for a landing. This is the lake formed within recent years at the snout of the Lillooet Glacier by the latter's recession, and which was landed on by the 1960 party. Therefore on August 10 our group of four B.C. Mountaineering Club members, Herbert and Shirley Eigenmann from Tacoma (who are also members of the Tacoma Mountaineers), and the two of us, started from the Vancouver Airport in a Cessna 185 and landed on Silt Lake without incident. After two days of back-packing up the main and the north arm of the Lillooet Glacier we arrived at the base camp site and were happy to find the food cache undisturbed.

During the next six days our holiday seemed like a climber's dream come true, as we managed to reach seven main peaks in the area (see accompanying map). All seven were first recorded ascents, made by all four members of our party. Heights mentioned are estimated from contours.

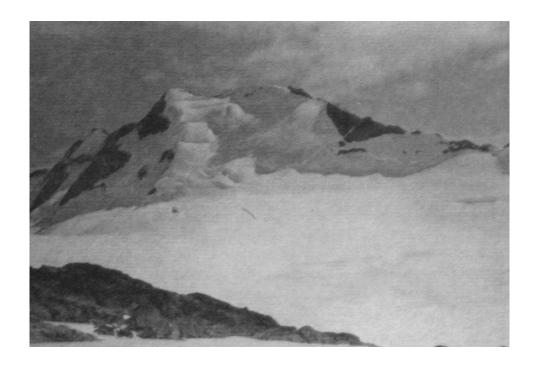
On the first day, August 13, we descended 1500 feet to the mile-wide Stanley Smith Glacier and crossed over to base rock of the highest peak in the area. This ascent turned out to be an easy 3-hour climb snow and rock scramble, and once on the summit (ca. 10,100 feet) we had an excellent view of the surrounding peaks. Remembering the violent and spectacular thunderstorm of the previous evening, we decided to call it "Lightning Peak"; the lower second peak towards the west, which we reached via the connecting blocky ridge, we called "Thunder Peak" (ca. 9,700 feet). The return trip was a rather hard slog through soft snow down to the Stanley Smith Glacier and back up to camp. It had been a 13-hour day.

Another stormy night persuaded us to move camp to a more sheltered spot just east of the saddle, and improving this well-chosen new site took up most of a dull, foggy and partly rainy rest day (August 14).

On the morning of August 15 we woke up to a snow drizzle, but the sun soon broke through while we were breaking trail up the west ridge of a peak south of camp. A series of wet-lichen-covered pinnacles turned us back, so we made our way towards a col in the southwest rib from where an interesting Grade 3 rock climb led back to the west ridge. Another half hour of ups and downs mainly on snow and we were cairning "Cardinal Peak" (ca. 9,750 feet). The return down

⁵ This glacier, the largest and longest in the area, was named by N. M. Carter in 1954 to commemorate Stanley Smith's remarkable journey from Squamish through the western edge of this area to Chilko Lake in 1893. See "Stanley Smith's Travels' in the Coast Mountains, 1893" by W. A. Don Munday, ibid., 1940, pp. 159-168.

^{6 &}quot;The Lillooet Icefield". By Ralph Hutchinson. Ibid., 1961, pp. 17-27.



H. Eigenmann

"Cardinal Peak" from Camp



H. Eigenmann

View East from Camp

the southwest face and over the lower west ridge was a matter of only 2 1/4 hours.

As the weather had completely cleared, we had a cold night. This made our August 16 approach over the hard frozen névé towards the massive peak directly west of our camp a pleasant stroll. The southeast ridge of this "Daphnis Peak" offered some fairly easy but enjoyable rock climbing, and from its 9,800-foot summit we were rewarded with a fine view of the many high mountains ranging from Monmouth, Good Hope, Queen Bess, Waddington, Gilbert and Raleigh, Dalgleish, right to the peaks of northern Garibaldi Park. After an hour's descent over the very rotten southwest ridge, we paid a short visit to the contrasting 9,600-foot snow summit just beside "Daphnis". This second summit we of course called "Mt. Chloe".

A second very cold night gave us the courage to tackle on August 17 some of the peaks further afield and for 4 1/2 hours and 7 miles we ran, walked and dragged ourselves across interminable snowfields towards the promise of another first ascent over 10,000 feet. The shadow cast by a jagged ridge in the morning sun was too much of a temptation and the many gendarmes, with the sharp snow arête thrown in for good measure, were enough to compensate us for the disappointment of finding the peak to be lower than expected. Although it is about a 10,000-footer, we referred to it as "Deception Peak". For its descent we followed the tracks of Herbert and Shirley on the short but steep west ridge and then slogged across the Bridge River Glacier névé towards yet another high peak. On the way we had only a brief glimpse of Roy's plane as he apparently circled the peaks in the area, looking for us, and any hopes we had entertained of being ferried home vanished. So there was nothing for it but to climb "Stanley Peak' (ca. 10,000 feet) which turned out to be an easy rock scramble. A long trek back through soft snow and breaking crust rounded out a 15-hour day of hard work.

During the next five days we had plenty of time to rest and read the weekend paper, which Roy had left us, as a blizzard and dense fog allowed only one short trip to a nearby snow dome. The weather cleared for our trip back to Silt Lake on August 23, and early the following morning we packed our gear, confident that we would soon be picked up. However, we spent the next two days sunbathing, reading, and hiking around the lake, but mostly listening for the hum of a plane. Wise through last year's experience on Ghost Lake, we had left some stores at the lake and were still in good spirits when the plane showed up, having been delayed by low-lying clouds in the valleys.

Early Climbs In The Tantalus Range, Southwest Coast Mountains, B.C.

By Neal M. Carter, F.R.G.S.

The Tantalus Range extends for some 15 miles northwest from Squamish at the head of Howe Sound and culminates in Mt. Tantalus (8,540 feet) only 38 miles from Vancouver.⁷ Although the range is hidden from the main part of Vancouver most of its summits and one of its several

Canada National Topographic System map sheet 92G (scale 1:250,000 or approximately J4 inch—I mile, 500-foot contours) shows the range in relation to Vancouver; sheet 92G/NW (scale 3/4 inch=I mile, 100- and 200-foot contours, not yet available in printed form) shows it in relation to the head of Howe Sound; the four sheets 92G/11 East, 92G/14 East and 92G/14 West together are required to show the range on a scale of 1:50,000 or approximately 11/4 inches=I mile with 100-foot contours. The above maps do not show spot heights for any of the mountains in the main part of the range; some special interim maps including parts of the range have various spot heights but no contours. Many oblique and vertical air photos of the range are available. Enquiries concerning all of the above should be made to the Surveys and Mapping Branch, Geographical Division (or Air Photo Division), Department of Lands and Forests, Victoria, B.C.

glaciers show almost due north from the University of British Columbia at the western extremity of the city, the tip of Mt. Tantalus barely peeping over its just slightly lower companion peak Mt. Dione. These are the two highest Canadian peaks that can be seen from Vancouver.

On the northeast side the range is definitely bounded by the Squamish River and its tributary Ashlu Creek. The author considers the Squamish River estuary and the head of Howe Sound form the southeast boundary, for climbing accounts written over 40 years ago refer to Mt. Murchison as within the range. Mountaineers do not generally include Mt. Sedgwick within it, so the southwest boundary can be considered as Mill Creek, Red Tusk Creek and the Clowhom River. Northwesterly, Pelion Mtn. and Ossa Mtn. are conceded as included, but it is a matter of mountaineering opinion whether Sigurd Creek (a tributary of Ashlu Creek) just northwest of these two mountains should limit the range, or whether it can be considered to include Sigurd Lake and adjoining other alpine lakes, or even Mt. Jimmy-Jimmy (7,231 feet) and its sizeable glaciers, still further to the northwest.

This article has been compiled from various sources ranging from publications to correspondence and interviews, plus a few personal memories. It does not attempt to present a complete history of mountaineering in the Tantalus Range, nor is it intended to be a climber's "route guide". It does, however, attempt to present an account of most of the early trips in terms of the present-day map nomenclature and to summarize descriptions of some of the later trips up to the time the last of the main summits had been climbed by mountaineers.

To avoid confusion between names applied to some of the mountains and other features in accounts of early climbs in this range and the final names officially adopted, the accompanying list of place-names within the area treated as the Tantalus Range for the purposes of this article uses the nomenclature on the 1957 and 1960 editions of the four 1:50,000 map sheets; opposite some of these official names are various earlier names mentioned. The author has not made any attempt to trace possibly still earlier names used by Indians or others. Mt. Murchison, however, was named over a century ago when Captain G. H. Richards was charting parts of the lower British Columbia coast, including Howe Sound, for the British Admiralty in 1859-60. He considered it as a useful navigational landmark, named it after Sir Roderick Impey Murchison (1792-1871), Director-General of the British Geological Survey, and calculated its height as 6,126 feet. On the resulting British Admiralty chart it was the only mountain indicated in what is now the Tantalus Range. Among nearby mountains not in the range Capt. Richards also named Mt. Roderick (after the same geologist), Mt. Garibaldi (after the Italian patriot Giuseppe Garibaldi, 1807-82), and "Mt. Wood" (recently referred to as "Mt. Storey") in the angle between the Squamish River and Ashlu Creek. 10 He did not assign altitudes to these.

⁸ See footnote #27 concerning a forthcoming climbing guide book to British Columbia coastal ranges. This will include a sub-section on the Tantalus Range.

⁹ The author wishes to point out that as in many other mountain regions there is always the possibility that some Indian, hunter, trapper, prospector, surveyor or other pioneer may have, without leaving any record of his feat, clambered up a mountain which a mountaineer later claims as a first ascent; hence mentions of first ascents in this article refer to first recorded mountaineering ascents.

¹⁰ It is interesting to note on the chart the spelling "Tsee-ark-amisht" for the Cheakamus River, "Squawmisht" for the Squamish River, and "Ashloo" for Ashlu, as approximations to the sound of Indian names. The chart also marks a small Indian habitation "Taw ka mee" on both sides of the Squamish River about where the cable crossing below Omega Mtn, now is, and "Ka ayahunik" between there and the mouth of the stream flowing from Lake Lovely Water. This lake, not indicated on the chart, was probably known to the Indians; an aged Indian who ferried the author and party across the Squamish in 1923 in a very leaky dugout canoe spoke practically no English but laughingly made

Many new visitors to the Tantalus Range are puzzled by this name and the Greek terminology used for many of its mountains. As mentioned later in this article, the view of the excitingappearing peaks in this unnamed and unclimbed range tantalized early climbers of Mt. Garibaldi and suggested the legend of King Tantalus. In Greek mythology, Tantalus was king of Lydia, a part of the region of Asia Minor then as now known as Ionia. His name signifies "lurching" or "most wretched" and gave rise to our word "tantalize" because of his fate. He and his wife Dione had a son Pelops and a daughter Niobe, and a grandson Thyestes through Pelops. Among the cruel and ungentlemanly acts of Tantalus, he disclaimed all recollection of having been entrusted by Pandareus with the safekeeping of a golden mastiff dog, and kept it for himself. In retribution for his misdeeds Tantalus was condemned by the gods to various fates, one of which was that in the after-world he is suspended from a bough of a tree overhanging a marshy lake whose waters come to his neck. Here he hangs, tantalized by a thirst he cannot quench because when he tries to drink the waters recede, and by a hunger he cannot satisfy because when he tries to grasp the luscious fruits that dangle against his shoulders the wind switches them out of reach. Legendary Mt. Ossa in Thessaly is the one upon whose summit the giants piled Mt. Pelion in an effort to attain the summit of Mt. Olympus, home of the Greek gods. Alpha and Omega are respectively the first and last letters in the Greek alphabet; the reason for assigning these names in mentioned later. Iota is the smallest letter in the Greek alphabet and hence denotes something relatively small, in this case the rocky eminence on the skyline southeast of Mt. Pelops. Lambda Lake received its name from a fancied resemblance (when partly thawed) to the Greek letter lambda corresponding to our letter L. The name of Serratus Mtn. was presumably thought up as a variant of serrated, a word of Latin origin. Though the last six italicized names above do not relate to the legend of King Tantalus, the legends associated with him and his family provide many other names that might suitably be applied to as yet unnamed features in the range, and the Canadian Permanent Committee on Geographical Names is usually amenable to accepting thus associated names within a range. The committee did however reject a name proposed in 1924 for Ionia Mtn.; the name of one of Niobe's sons, Sipylus, sounded too much like a disease.

PEAKS AND LAKES OF THE TANTALUS RANGE (in order of decreasing altitude)				
Official name	Altitude	First recorded	Earlier (unofficial) names	
	(feet)	mountaineering ascent	mentioned in article	
Mt. Tantalus	8540*	1911	"Zenith Pk."	
Mt. Dione	8500	1916		
Serratus Mtn.	7632*	1911		
Alpha Mtn.	7562*	1914		
Pelion Mtn.	7550	1944		
Ossa Mtn.	7450	1960		
The Red Tusk	6950	1914		
Ionia Mtn.	6850	1949	"Mt. Sipylus"	
Mt. Pandareus	6850	1949		
Lydia Mtn.	6750	1914		
Mt. Niobe	6650	1910	"Mt. Mystery"; "Sawtooth	
Mt. Pelops	6650	1916	Mtn."; "The Twins"	

gesticulations as though he thought we were crazy to take ice-axes for spearing fish in a lake where there are no fish!

Zenith Mtn.	6509*	1944	"Omega"		
Omega Mtn.	6150	1916	"South Pk."		
Iota Mtn.	6050	1910	"Misty Pk."; "View Rock"		
Mt. Conybeare	6050	recently			
Mt. Murchison	5650	1909			
Mt. Thyestes	5550	1942			
Mt. Lapworth	4950	1946			
Zenith Lake	4250	(Site of climbing camp 1944)			
Lambda Lake	4050	(Visited 1914; site of camp 1945)			
Lake Lovely Water	3850	(Site of climbing camp 1914)			
Alec Lake	3750	_			
Clytie Lake	3350				
Echo Lake	3050	_			
And the following, if considered included in the range:					
Mt. Jimmy-Jimmy	7231*	1952			
Station "ROSE"	6350*	1952			
Sigurd Lake	4950				

*Altitudes calculated during official B.C. Government surveys, as given in a letter to the author, Nov. 14, 1963, by the Supervising Surveyor, Topographic Division, Surveys and Mapping Branch, Department of Lands and Forests, Victoria, B.C. Other altitudes are taken as 50 feet higher than the highest 100-foot contour line shown for the mountain., or just below the lake, on the four 1:50,000 map sheets described in the first footnote of this article. The Topographic Division states elevations interpolated from contours are generally reliable to within 50 feet, but has agreed that the contouring of Mt. Alpha on the map sheet is in error (400 feet too high); their re-calculated height (stated in their letter) is given above. Where two mountains in the above table are shown as having the same height, the second is the slightly lower one, the difference between the two being possibly as much as almost 100 feet.

Recorded climbing history in the Tantalus Range began when Hobart A. Dowler, who later became a member of the Alpine Club of Canada and was active in the planning or building of Club huts until his recent death, made the first ascent of Mt. Murchison. Since no account of his trip appears to have been published, the following combination of appropriate passages from his letters of November 10 and December 1, 1945, to the author are of interest:

"My trip was not later than 1909 and it may have been $1908 \dots$ " The spring (late May) was the time of my visit . . .

[Basil S.] Darling and [Albert F.] Armistead were of the party ... to go with me on this trip and I went in a few days ahead to get some idea as to a good route that would offer no delays. Bad weather prevented Darling and Armistead from coming ... I went in alone from the mouth of

¹¹ Some other sources of information state this trip was made in 1910, one source giving the dates May 14-15, 1910. The late Athelstan G. Harvey of Vancouver, in an unpublished undated typescript "British Columbia Place Names—Mountain Naming and First Ascents in the Region Northwest and West of Scluamish", mentions that Dowler gave him the date as 1908; but in 1947 Harvey added a handwritten footnote to his typescript, to the effect that after checking with Dowler and with Basil S. Darling (who was to have accompanied Dowler) he concluded the year should be 1910. However, there is some reason to believe the trip was made at least as early as 1909, for it took place in "late May"; Dowling describes a trip he made later with Darling and Alan B. Morkill during which they made the first ascent of Sky Pilot Mtn. when Halley's comet was very bright (i.e. about May 7, 1910).



Phyl Munday

Tantalus (left) and Dione (right) from the Air

Mill Creek . . . along the west side . . . high on the Ridge to the source of the west branch ... to [the summit of] a mountain I called the 'Chair Peak', 'Mt. Sedgwick' on your map. Heavy clouds obscured the Mountains to the North and only occasionally would the tops appear. Mts. Niobe and Pelops were likely the ones I called 'Mt. Mystery' but I do not remember them from the snap you sent. I spent one night on the slopes of the ridge near Mt. Sedgwick and the next day met a big Bear on the hard snow high on the ridge. After looking me over for a few minutes the Bear turned back . . . During the rest of my stay clouds obscured the distant Mountains. The next two days I worked my way around on the slopes of what must have been Mt. Conybeare ... I do not remember much about that spot because of clouds and bad weather. However I was well up on the slopes, perhaps according to the snow and vegetation about 5,000 feet ... I followed the ridges to Mt. Murchison, and from the summit of Mt. Murchison down to the mouth of Mill Creek."

The second ascent of Mt. Murchison took place on June 5, 1910, when, according to the record they left in their cairn, Darling, Armistead and John H. Huggard left Howe Sound at the mouth of "Glacier Creek" (Mill Creek) at 4:10 a.m., reaching the summit at 11 a.m. amid a gale



G.B. Warren
First Known Photo of Lake Lovely Water, August
1910. From Summit of Iota



B.S. Darling
First Ascent of Tantalus, 1911. On the Final Ridge
above the "Witch's Tooth"

SPECIAL NOTE FOR THE CAJ DIGITAL EDITION

An oversized fold-out map of the Tantalus Range was included in the hardcopy version of the 1964 Canadian Alpine Journal.

It is not included in this digital version due to size restrictions.

and mist which, however, cleared by noon and allowed splendid views. Two aneroids agreed for a summit altitude of 5,500 feet. There was no mention of finding a record of Dowler's ascent. They left the top at 1 p.m. and presumably returned by their ascent route.

The third mountaineering trip into the range was further to the northwest and is well documented. Gordon B. Warren was one of the party of six who made the 1907 first complete ascent of Mt. Garibaldi; the Warren Glacier below it was named after him, and in later years he became well known as captain of one of the West Vancouver ferries. From the summit of Garibaldi he:

"was attracted by a very beautiful mountain lake in a hanging valley far up the western wall of Squamish Valley. A crescent of glacier-clad peaks poured their streams of ice into its turquoise waters, their crags and snowfields rising high among the clouds. A direct climb from the valley appeared very difficult, the outlet of the lake cascading down sheer rocky precipices whose timbered ledges but slightly veiled the succession of cliffs.

"Later I heard from a prospector of a passable route up Stoney Creek into a pass leading over to Salmon Arm. Though some miles to the south this appeared the only available route."

In 1910 Warren tried to organize a party to penetrate this alluring area but the eventual participants were only two, himself and Eric Kingsford-Smith, brother of the famed Australian aviator. The foregoing quotation is from Warren's newspaper article" describing that trip, of which the following is a synopsis.

Leaving Vancouver for Squamish by boat on July 29, 1910, they went by stage 3 miles up the Squamish Valley and crossed to a logging camp on the west side of the river. From here they back-packed up the bushy hillside to a camp near a little lake at 900 feet. On July 30 they followed an Indian hunting trail along the south side of "Stoney" (now Fries) Creek valley, descended to cross the creek at noon, then picked up a timber-cruiser's trail along the north side until after some bushwacking they surmounted the last succession of waterfalls and came to a level wooded stretch where they camped beside the creek at "about 3,800 feet" amid patches of snow. Sunday July 31 was spent in reconnaissance during which they saw "a hanging valley a few miles up the north side of the pass, that seemed to give an opening to the mountains above." With an early start on August 1 they climbed out of "Stoney" Creek valley through rain and bush and by noon reached the head of the hanging valley. Ascent of a snow couloir brought them to a snow skyline between "a buttress of rock" (Iota) and "sharp ragged peaks close at hand on the north" (Pelops and Niobe); "one outpost mass of granite with a head like the Western Lion, stood on the brink of the Squamish Valley." That would be Omega Mtn. From this snow skyline they looked down onto "a lake dark and forbidding" (either Clytie Lake or the one above it, south of Omega), but were entranced by an exquisitely coloured lake far below in the valley to the north. Warren likened it to Lake Agnes above Lake Louise, and they called it "Snow Lake" (Lake Lovely Water). The glaciers "which join hands" in half circling that lake they called "Crescent Glacier". (Glaciers in the Tantalus Range were much larger in 1910 than they are now, and presumably Warren considered those from below Serratus to below Niobe to be almost continuous.) They climbed the "buttress of rock" (Iota), naming it "Misty Peak" and left a record on a chip of wood (which the author found in 1924). Their estimate of its altitude was 7,000 feet. Then they retraced their route to camp in "Stoney" Creek.

On August 2 they climbed Mt. Murchison from their camp, placing cairns on two intermediate

^{12 &}quot;Seeking Sport Up Among the Clouds". By (I. B. Warren. The Daily Province, Vancouver, B.C., Saturday August 13, 1910, p. 24.

summits they called "Martin Mt." (after the animal) and "Glissade Mt." (in expectation of a long glissade down it on their way back); these names have not been perpetuated and no later names are in use, unless one of the summits was Mt. Lapworth, which would not have been on the obvious direct way to Mt. Murchison from their camp. On Mt. Murchison they found the record of the ascent earlier in the year by Darling's party, and estimated its height as 6,800 feet. Retracing their route after leaving the summit at 3:35 p.m., they enjoyed their anticipated 1,500-foot glissade.

August 3 saw them follow their August 1 route to the base of "Misty Peak" whence they traversed below rocky cliffs (of Pelops) to ascend the snow to the gap between Pelops and Niobe, which peaks they referred to as "Sawtooth Mountain". Just below the gap a 12-foot vertical face of icy snow gave some trouble, but the top of the higher peak (Niobe) was gained at 4 p.m., where they estimated their altitude to be 7,500 feet. Lifting mists revealed a better view than obtained two days earlier from "Misty Peak"; the hour-glass shape of "Snow Lake" was noted, and "Among the high crags to the northwest rose one towering summit, apparently the highest of the range between Squamish and Salmon Arm. It appeared over 8,000 feet high and 'Zenith Peak' seemed a fitting name." (Darling called it Mt. Tantalus.) Leaving the summit at 4:30 p.m. they reached camp at 7 p.m. Kingsford-Smith's boots were by this time "real sick and minus most of the soles" so they returned down "Stoney" Creek on August 4 to arrive in Vancouver the next day.

Following this party's closer-to-view description of the highest peak in the range and the beautiful lake, a more direct approach to these was sought. Access to the central part of the range from further up the southwest side of the Squamish River than the Fries Creek valley seemed the solution, and the prospects of such access, involving the crossing of the Squamish and route-finding up the steep ridges or valleys above it, merely served to heighten the tantalizing aspects of the problem. Access from one or other of the tributaries of the Clowhom River, via the Clowhom Lakes, was considered. It has been tried by some subsequent parties, who do not speak enthusiastically of it.

Darling was one of the early tantalized climbers who had seen the highest peak from as close up as Mt. Murchison in 1910, and from Mts. Garibaldi and Mamquam during a trip late in July 1911. On their return from the latter trip, Darling, Alan B. Morkill and J. Stanley Davies (and a cook, according to one account) proceeded towards the Tantalus Range. The following account is condensed from letters and several other sources of information, including an interview with the author.

This party crossed the Squamish River at "Tetzlaffs Clearing" in an abandoned boat and

^{13 &}quot;The Mamquam and Tantalus Groups1'. Canadian Alpine J., IV, pp. 140-141, 1912. Morkill wrote for the Journal an article about the trip to Mts. Garibaldi, Mamquam and Tantalus, but it was received too late for inclusion in full in the issue of the Journal then in preparation. The Assistant Editor condensed the article to this "Note", implying the full article might appear later, which did not occur. This "Note" includes a view of Mt. Alpha and Serratus Mtn. from the camp below Mt. Tantalus.

[&]quot;The Tantalus Range". By Neal M. Carter. Museum and Art Notes, IV(4), pp. 142-146, Bee. 1930, published by the Art, Historical and Scientific Association of Vancouver, B.C.

[&]quot;The Exploration of the Tantalus Range". By W. Mathews. Prepared for the Alpine Club of Canada (Vancouver Section) Records Committee and issued as a supplement (in two parts of 1 mimeographed foolscap page each) to the April 1942 and May 1942 issues of the Section's Avalanche Echoes.

[&]quot;The Tantalus Range" in The B.C. Mountaineer, 1(10), pp. 3-4, Dec. 1923. (Abstract of a letter from Darling to J. H. Speer, then secretary of the British Columbia Mountaineering Club.)



B.S. Darling

First Known Photo From Within The Tantalus Range, June 10, 1910.

From Murchison, Looking North Towards Tantalus.



N. M. Carter

The Tantalus Range from Paul Ridge Below Mt. Garibaldi, 1921.

proceeded up a burnt-timber ridge (the first one southeast of Tantalus Creek) on August 9, 1911, making camp at about 5,200 feet, just below a hump near timberline on the ridge. On August 10 they crossed upward over the badly crevassed glacier below the southeast face of Tantalus until they were under the gap between Tantalus and Dione. Here they made a short rock climb to gain the notch between the "Witch's Tooth" and the south arête of Tantalus. (The rock climb is now longer because of shrinkage of the glacier.) A direct climb of the arête rewarded them at about 6 p.m. with the coveted first ascent of Tantalus, which they named and considered to have an altitude of 8,125 feet. Making a traverse of the peak, they descended the north face, experiencing considerable difficulty with cliffs and bergschrunds. At one place they had to rope down a 30-foot sheer drop, sacrificing an ice-axe as a belay. This descent route necessitated a longer trip back over the glacier, partly by lantern light. The ice-axe was retrieved on the following day. From this same camp they also made the first ascent of, and named, Serratus Mtn.; their route is not definitely described, but it is possible they either ascended or descended it via the Serratus-Ionia col, for Darling has referred to that col as "Pinnacle Pass". During this trip they named Alpha Mtn. and "Omega", but did not climb them. These names signified the first and last of the Alpha-Serratus-Tantalus-Zenith semicircle of peaks, but through some later misinterpretation their term "Omega" became applied to the present Omega Mtn. signifying the last, or end, of the semicircle of peaks, commencing with Alpha, which rise above Lake Lovely Water. Their "Omega" is the present Zenith Mtn. The term "Rumbling Glacier" for the one lying below the NE slopes of the two ridges culminating in Mt. Tantalus also appears to have been applied during this trip.

On August 24, 1913,¹⁴ Darling, a Major White and a Mr. Shanley made the second ascent of Serratus, followed on August 26 by the second ascent of Tantalus, both from the site of the camp used by Darling's 1911 party. The crossings of the Squamish River were effected over a huge fallen tree.

Darling and Morkill returned again to the range in 1914, this time crossing the Squamish River with an Indian in his dugout canoe to the outlet of the valley leading up to the "Snow Lake" (Lake Lovely Water) so picturesquely described by Warren in 1910 and which had attracted Darling as seen from Serratus. Ascending the valley to a camp by the lake, to which they gave its present name, on July 28 they went around its southern side by a route of which details are uncertain, made the first ascent and probable traverse of the now Lydia Mtn. (for which they did not mention any name) and proceeded to achieve the first ascent of the Red Tusk, which they named because of its reddish rock in contrast to the black basalt of the Black Tusk they could see across the Cheakamus Valley. Return to camp was around the north side of the lake. On July 29 they made the first ascent of Alpha, up the south face and down the east ridge.

In May 1916 Tom Fyles and his brother John from a camp at Lake Lovely Water, which they called "Tantalus Lake", made a number of ascents including the first of Pelops, Omega and Dione, though these were not the names by which they knew them. They spoke of Pelops and Niobe as "The Twins", Omega as "South Peak", and did not mention any name for Dione. The following account of their trip, which has not been recorded elsewhere, is quoted from a recent letter from Tom Fyles to the author:

"May 13, 1916. We reached the lake at 1 p.m., camping about 100 yards north of the present Tantalus Hut, and made all our climbs from there. In the afternoon we walked over the lake

According to a September 30, 1961, letter from Darling to Mrs. J. J. Fairley for the occasion of the opening of the Tantalus Hut, 1913 is the correct year of this trip, not 1.912 as stated elsewhere.

and climbed to the pass between Lydia and Niobe.

"May 14. Leaving at 9 a.m., crossed outlet of the lake and went up the wooded ridge to the east end of Omega; summit at 2:15 p.m. Descended by the southwest ridge and crossed over to Pelops, reaching its top at 4:45. Back at camp 6:15 p.m. "May 15. Brother John's birthday. Started for Serratus 8 a.m. Reached ridge between Alpha and Serratus 11 a.m. Continued up east ridge of Serratus, reaching top at 3:30. Dropped down the gully at west end. Camp at 7 p.m.

"May 16. Started for Tantalus 7 a.m. Reached divide below Serratus at 11:10 a.m., and the gully below Tantalus at 1:15 p.m. Top of Dione 4:30. Camp 9 p.m." [From the Serratus—Ionia col they went along the glacier on the southeast side of the ridge leading towards Dione, climbed the prominent snow couloir just south of Dione and went down the other side almost to the base of the "Witch's Tooth". They had hoped to be able to connect with Tantalus from here, but apart from the difficulty of getting onto the arête of Tantalus, lack of time led them to back up to the top of the snow couloir, whence on soft snow they climbed the steep face of Dione to the summit.] "May 17. Left for Alpha 9 a.m. Top at 2:30 p.m. Kicked steps down frozen south face, reaching camp at 6:00.

"May 18. Broke camp at 9 a.m. Ferried across Squamish by 'Squamish Jim' at 5 p.m. and camped near Cheakamus House at 6 p.m."

Thus by 1917 all of peaks over 7,000 feet from Mt. Tantalus to the southeast extremity of the range had been climbed, some two or more times. Subsequent trips received more and more documentation in mountaineering literature, and for a while in the local newspapers. Hence from here on in this article mention will be made only of certain trips later than 1917 that resulted in some new approach, first ascents of remaining main peaks, or some unusual episode, particularly if not described in a published account.

Apparently 7 years elapsed after the Fyles' 1916 trip before mountaineers again entered the range.

At Easter 1923 the author with Charles T. Townsend and Alec Zoond crossed the Squamish by Indian canoe for a 2-day reconnoitre up the valley that drains the glaciers on the north side of Alpha and Serratus.¹⁵ Poor weather and avalanching snow conditions prevented any mountain ascent, but the foot of the glacier was visited on April 2. At that time the two glacial tongues were still joined, and the sizeable lake now well below the two tongues was just being born. The glacier was mistakenly referred to as the "Rumbling Glacier".

In 1924 the author and four fellow members of the British Columbia Mountaineering Club, A. J. O. Cooper, E. H. Nunn, Adam "Ted" Taylor and Fred Smith, crossed the Squamish by cable car which they left tied to the pylon on the Tantalus side of the river. Proceeding first up the south side of the valley leading to Lake Lovely Water, they crossed over at 1,800 feet to the north side to take advantage of the string of open rockslides (which advantage was later offset by heavy slide alder before reaching the lake). May 12-14 was spent around the lake. Alpha was climbed on May 12; Iota, Pelops (second ascent), Niobe, and Omega (second ascent) on May 13. Because published maps showed only Mt. Murchison and a few creeks in the area covered by the Tantalus Range, the author spent considerable time on each summit reading angles and taking special photos, and used May 14 for

¹⁵ A Trip to the Tantalus Range". By Neal M. Carter. The B.C. Mountaineer, 1(2), p. 3, April 1923; "Trail Quickly Wiped Out by Avalanche". By Neal M. Carter. The Vancouver Daily Province, April 7, 1923.

^{16 &}quot;Climbing in the Tantalus Range". By II. Nunn. The B.C. Mountaineer, 2(4), pp. 1-3, June 1924. (Also described in ref. 14 and 8.)



N. M. Carter
Alpha (left) and end of Serratus (right) from Next Ridge to the North, Easter, 1923.

triangulating the lake, to commence mapping the range from a mountaineering standpoint. Highlights of the trip were two sloshy crossings of the thawing lake on foot, and the finding that someone had returned the cable car to the wrong side of the Squamish for the party to cross. The author hitched along the cable in two rope slings to retrieve the car. Pelops, Niobe, Pandareus, Lydia and Dione were named on this trip; Iota was referred to as "View Rock"; "Sipylus" was recommended for Ionia, but as mentioned earlier this name was not accepted.

May 1925 again saw the author, Townsend and Nunn in the region.¹⁷ On the second day after leaving Vancouver, camp was established near the site of Darling's 1911 and 1913 camps, and on the following morning the party broke a trail across the deep snow of the badly crevassed glacier below the northeast ridge of Tantalus as far as the prominent rock "horn" that sticks out of the glacier. Next day, in fine weather, this trail expedited the trip across the glacier. From the "horn" they climbed the steep arm of the glacier to the saddle north of the peak of Tantalus, then the snowy northeast face was ascended under potential avalanche conditions until the near end of the short arête leading to the summit was reached. This was probably the reverse of the descent route used by Darling's 1911 party. Seeing that the far end of this arête ended in an overhang above a notch, it was considered inadvisable to attempt the corniced arête and overhang, so the party reluctantly retreated when only about 100 feet below the peak a couple of hundred feet away. Time

¹⁷ Fighting Way to Mt. Tantalus' Unconquered Peak Within Sight of Vancouver'. By Neal Carter. The Vancouver Daily Province, May 25, 1925, pp. 1 and 5 of Magazine Section. (This title supplied by the newspaper editor is misleading, for the article makes it clear the peak had been climbed before, but not quite to the top on this trip.) "Ascent of Mt. Tantalus". By E. H. Nunn. B.C. Mountaineer, 3(4), June 1925.

did not permit other climbs during this short trip.

The third successful ascent of Tantalus¹⁸ was by Cooper, F. "Brick" Spouse and Harry Sommerville in mid-August 1928. They used Darling's 1911 campsite and more or less followed that party's route to the base of the "Witch's Tooth" and thence up the south arête to the top of Tantalus. The weather was very foggy. They traversed the peak as did the 1911 party, but after reaching the col north of it they were uncertain of their whereabouts in the fog and continued northward along the rocky ridge that leads towards Zenith. They had to bivouac for the night in a rocky gully on the east face of this ridge. On the following morning, still in fog, they found their way southward along the smooth rock slopes, crossing just under the spectacular steep narrow tongue of the "Rumbling Glacier" that drains into Tantalus Creek, and after traversing further around the headwall of the basin of that creek, climbed up the ridge to their camp.

The first full articles in this Journal to deal with a trip to the Tantalus Range describe a 5-day stay at Lake Lovely Water in spring of 1940 by C. H. Ney, W. H. Mathews and Harold O'Connor.¹⁹ Poor weather precluded climbing any peaks except Niobe, but Mathews secured readings and photos for a detailed 200-foot-contour map of Lake Lovely Water and its surroundings to the skyline, which is reproduced with his article. One of the numerous sketches by O'Connor is also reproduced. This party named Ionia, Iota, Lapworth (after Charles Lapworth, 1842-1920, English geologist and physiographer), and Conybeare (after William Daniel Conybeare, 1787-1857, English geologist).

Part of the history of a mountain range lies in its geology. Ney, in the course of the 1940 trip just described, did some geologizing and the generally granitic nature of the range is emphasized in the footnotes of his article.²⁰

In September 1942 Robert N. McLellan, E. Frederick Roots and Harvey Parliament made from the Squamish River the first mountaineering ascent of, and named, Mt. Thyestes. It is quite likely that this relatively low, easily climbed mountain had already been visited by goat hunters or others.

Two trips in 1944 opened up a new area in the more northwesterly part of the range, beyond Mt. Tantalus.

In May 1944 Roots, Parliament and V. C. Brink crossed the Squamish by boat from a logging camp some 8 miles up the logging road from Cheekye and went up the steep ridge opposite until they came to a lake (Zenith Lake) that had been seen from peaks in Garibaldi Park, but which had apparently not yet been visited by mountaineers and did not show on published maps. From a camp near the lake this party made the first ascent of Zenith Mtn., which name was suggested by the author because Warren's 1910 use of it for Mt. Tantalus was superseded by Darling's nomenclature. An attempt on Mt. Tantalus was made via the long ridge leading south to it and the glacier on the west side of this ridge, but soft snow conditions prevented getting to the far end of the ridge, which is the one Cooper's party spent the night on in 1928. This party apparently did not suggest a name for the glacier on the west side.

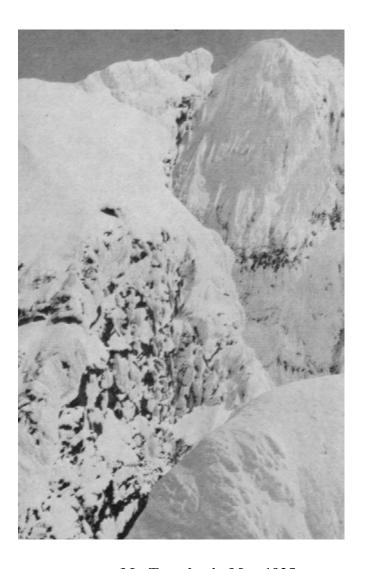
This same region was again visited in the summer of 1944, which marked the occasion of a lady climber entering the Tantalus Range when Miss Phyllis Boyce, McLellan, Cooper, Brink, R.

¹⁸ An account of this trip, by Cooper, appeared in the Vancouver Daily Province sometime during August 1928.

^{19 &}quot;A Trip to the Tantalus Range". By C. S. Ney. Canadian Alpine J., XXVII (2), pp. 141-147, 1940.

[&]quot;Mapping in the Tantalus Range". By W. H. Mathews. Ibid., pp. 147-148.

²⁰ Some further information on the geology of the range is given in "Geology of the Mt. Garibaldi Map Area, Southwest British Columbia, Canada". By W. H. Mathews. Bull. Geol. Soc. America, 69, pp 167-178, 1958.



N. M. Carter

Mt. Tantalus in May 1925.

L. Von Zuben, William Rolick and the author followed the same access route as the spring party and camped at Zenith Lake. The whole party made the second ascent of Zenith, from where the author did some more mapping, and on the following day Tantalus was climbed (fourth ascent) for the first time via the long north ridge, by all the party except Miss Boyce who waited on the crest of the ridge near the goal. It was foggy on the summit and during the return, fog, slight damage to one of the party, and darkness, encouraged a bivouac under the first timberline tree clump that would provide some shelter for a fire and from rain. Further damage to the same member of the party was limited to the melting of the rubber in his suspenders while asleep huddled too close to the tiny fire. Camp was regained early next morning. On the following day Brink and McLellan traversed south around Zenith, crossed the ridge to the west of it, then over the 5,300-foot divide at the head of Mawley Creek, and made the first ascent of Pelion Mtn., naming it as well as Ossa Mtn. Meanwhile the author mapped Zenith Lake and other features. Return to the Squamish River followed the route used on the way in. This trip does not appear to have been written up for publication.

Another trip apparently not written up was one in July 1945 during which the first serious

accident in the range occurred, leading to the first recorded landing of a plane on Lake Lovely Water, thus opening up a new means of access to that part of the range. The author, his 15-year-old son Bruce, Miss Boyce, Cooper, McLellan, Rolick, J. H. Atkinson and Bruce Bewell crossed the Squamish by Indian dugout at a point just above the mouth of the stream from Lake Lovely Water, and after vainly wading up to their knees through dismally bushy flooded flats in the growing darkness to reach the base of the ridge, retreated to a small gravelly mound which came within about a foot of being covered by the flood maximum during the night. Next morning, July 22, the Alpha slope of the valley with its open rockslides was climbed to camp at the outlet of the lake, and on July 23 they traversed around above the lake to establish camp at Lambda Lake. On the 24th the author and some of the party followed the Fyles' 1916 route toward Dione, hoping to make its second ascent, but fog led them to turn back at the base of the prominent snow couloir below the south cliff of the peak, confident of trying again in better weather later in the trip. Meanwhile McLellan, Atkinson and Bewell successfully climbed Serratus from the Ionia-Serratus col. On their descent Atkinson broke an ankle, and the other two were bruised, while glissading down the last bit before reaching the col. The party returning from the attempt on Dione found the injured group awaiting them just above the col and by a tedious "pendulum" technique with a rope got Atkinson across the steep snow and scree faces below Serratus to the first trees, where he and another of the party staved the night while the rest went down to camp to return early next morning with food, sedatives, and a ground-sheet for an improvised stretcher. Atkinson was carried down to camp that day, and on the 26th to a makeshift camp where the stream from Lambda Lake enters Lake Lovely Water. Here he was left in charge of Bewell while the rest hiked out on the 27th to arrive in Vancouver on the 28th. That evening the author found that pilot Tom Laurie of the Canadian Pacific Airlines was willing to try a landing on Lake Lovely Water, with which he was not familiar, and it was agreed to leave early next morning (July 29). The flight took 30 minutes from Sea Island. After a good deal of circling above the lake to get the "feel" of the air and to look for shallows, the plane landed easily and taxied to the stream where Atkinson and Bewell were amazed at this mode of rescue. However, the pilot had misgivings about take-off at this altitude with extra load, so made several trial take-offs with the author as "guinea pig" in the tail section. He decided he could take off with three passengers and even include the tent and a few other essentials. He was successful!

In September 1945 the author, his elder son David, Miss Boyce, Rolick, E. G. Baker and James T. Fyles (son of the Tom Fyles of the 1916 trip) decided to again test seaplane access. The pilot ran his pontoons right up on the beach at the top end of Lake Lovely Water, which allowed the party to effect a bushless climb up the stream and past the waterfalls to the "gravel flats", above which they established a 4,700-foot camp at an attractive site on a knoll beside two lakelets on the southern slope of Alpha, a site that has since become quite popular as a "high camp" for parties based at the Tantalus Hut. On the 17th the author mapped from the Lydia-Niobe col while the rest climbed Niobe. Another fog-thwarted attempt at the second ascent of Dione was made on the 18th; on reaching the final rock face at the top of the big snow couloir there was no prospect whatsoever of any view from the summit. The party flew out the next day.

As a result of the two trips just described, seaplane access to Lake Lovely Water in some 25 minutes from the Vancouver airport became an established pleasant alternative to bush-whacking up and down the steep 3,800-feet valley-side and the business of finding an Indian willing to ferry you over the Squamish (and what was even more important, to call for you later). Use of the cable car was discouraged by the authorities.

The first mountaineering ascent of Mt. Lapworth (see previous remarks about probable earlier goat-hunting) appears to have been made in 1946 by Mathews and James Fyles via its east ridge from the Squamish River, in the course of an extension of a geological study of Garibaldi Park volcanic remnants. Their report²¹ mentions the structure of Thyestes, Lapworth, Murchison and Omega.

First ascents of Ionia and Pandareus, the second ascent of Dione, and the second serious accident, took place during a Labour Day weekend trip in 1949 by the author, Miss Renate Kay, Ian B. Kay and Herman Genschorek.²² The party flew in on the evening of Sept. 2 and established themselves by dark at the "high camp" site above Lambda Lake. In perfect weather on Sept. 3 the three men reached the summit of Dione directly from the top of the snow couloir on the south side; Miss Kay waited on some sunny granite rocks at the fringe of the glacier below. On Sept. 4 Ian Kay and Genschorek traversed around above the "gravel flats" to the glacier below Ionia and proceeded up that glacier to the notch between Pandareus and Ionia, from where they climbed both these virgin peaks. Next day (Sept. 5, not the 4th as stated in the Journal article²²) they descended from camp to the "gravel flats" and climbed the bushy cliffs to the basin below the Red Tusk with the intention of making its second ascent, but after inspection decided to leave it alone. On their return down the glacier Kay slipped out of a step in an icy spot and slid and bounced onto a rock outcrop below, breaking a leg. Making him as comfortable as possible, Genschorek descended via the glacier below Lydia to the "gravel flats" where he met Miss Kay and the author, who by prearrangement, after visiting the Alpha-Serratus col, had just completed breaking camp and bringing all the packs down to the flats preparatory to meeting the plane that evening. Genschorek climbed back to Kay with a sleeping bag and food while the other two flew out to Vancouver to arrange a rescue party. (The flight out was in a 20-passenger Stranraer on its way to Garibaldi Lake to pick up a fishing party; it was the largest plane so far to land on Lake Lovely Water.) The difficulties of the rescue operations on Sept. 6-7 are vividly described in Munday's narrative.²²

As mentioned earlier, it is optional whether Mt. Jimmy-Jimmy be considered as included in the Tantalus Range. In any event, it was ascended (or should one say descended upon?) by helicopter in September 1952 to the snowfield on the north side, from where C. R. Irving of the Provincial Surveys Branch occupied the summit as a triangulation point. A month earlier, E. R. McMinn for the same purpose climbed from Ashlu Creek the highest point (Station "ROSE", 6,350 feet) on the ridge about a mile east of Sigurd Lake. The first ascent of the south peak of Mt. Jimmy-Jimmy was in 1961 by L. Harrison and F. Arundel from north of Phantom Lake.²³

The second ascent of the Red Tusk took place in early August 1958 when it was climbed by R. R. Culbert and Murray Miller²⁴ who with Wayne King entered the range by the old Fries Creek route, rounded Pelops to the Niobe-Lydia col, and traversing along the glacier below the east cliffs of Lydia went up the arm of glacier névé leading to the base of the Tusk.

Ossa Mtn. was the last of the main peaks in the Tantalus Range to succumb, 50 years almost

²¹ Some further information on the geology of the range is given in "Geology of the Mt. Garibaldi Map Area, Southwest British Columbia, Canada". By W. H. Mathews. Bull. Geol. Soc. America, 69, pp 167-178, 1958.

^{22 &}quot;Tantalus Range Trip, September 3-5, 1949". By H. Genschorek. Alpine Avalanche, Oct. 1949, pp. 2—3 (in the Avalanche Echoes series).

[&]quot;First Ascents in the Tantalus Range". By Herman Genschorek Jr. (with part of narrative by W. A. D. Munday). Canadian Alpine Journal., XXXIII, pp. 107-119, 1950.

²³ See footnote #27 concerning a forthcoming climbing guide book to British Columbia coastal ranges. This will include a sub-section on the Tantalus Range.

^{24 &}quot;Second Ascent of the Red Tusk". By R. R. Culbert. The B.C. Mountaineer, 34(2), Feb. 1959, pp. 2-4

to the day after Warren and Kingsford-Smith did the first real climbing in the range in 1910. Jack Bryan, R. H. Chambers and Howard Rode went into the Zenith Lake area in July 1960 and from a camp on the Zenith side of the pass at the head of Mawley Creek, on July 25 traversed the south slopes of Pelion to accomplish the first ascent of Ossa. They made the second ascent of Pelion on the way back.²⁵

The origin of Mt. Conybeare's name has been mentioned; the author has been informed that it was recently climbed on skis from the Mt. Sedgwick direction. Since like Mts. Murchison, Thyestes and Lapworth it presents no technical climbing difficulty and there are trails in the valleys below, it is quite likely that it had been climbed by hunters; perhaps even before Hobart Dowler first mountaineered high on its slopes on his way to Mt. Murchison over 50 years ago.

That 50 years marks the end of the first era of mountaineering in the Tantalus Range. During 1960-61 Alpine Club of Canada Vancouver Section members cut a trail from the Squamish River to Lake Lovely Water and 1961 saw the completion of the Club's "Tantalus Hut" at the outlet of the lake, and its official opening on October 7 (C.A.J., XLV, pp. 184-186, 1962). There is even a helicopter landing area nearby. Trails now lead from the hut to Lambda Lake and some distance above, as well as part way around the south side of the lake; these are being extended. During the past couple of years new routes up the peaks have been worked out, skiing is developing, and climbing has entered the "hardware" phase—tackling of new "hard ways" up and steeplejacking outrageous pinnacles to the ring of hammer on piton. Shades of the pioneers of 1910-1920 who battled bush and bears to make this possible!

Unclimbed Peaks Of The Southern B.C. Coastal Ranges

By Dick Culbert

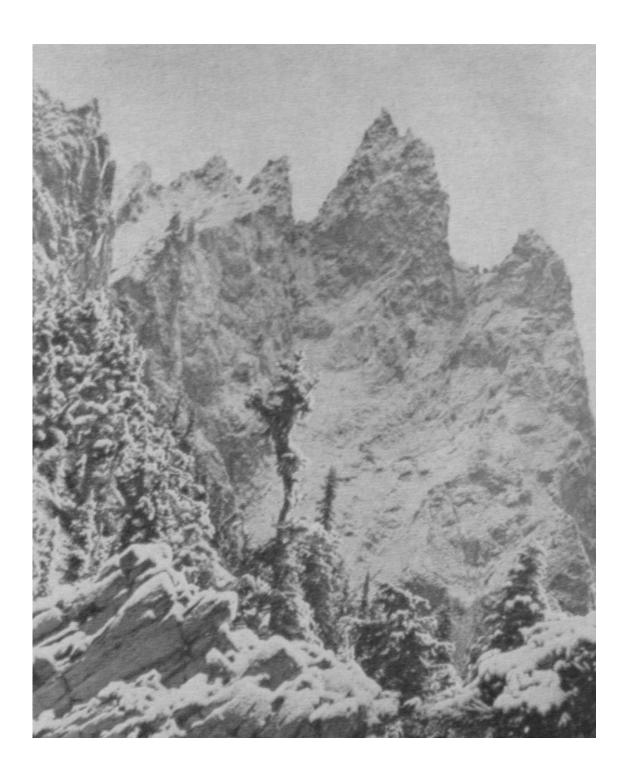
One byproduct of the compilation of a climbing guidebook²⁶ is a general outline of the boundaries of exploration, together with rudimentary knowledge of peaks still virgin. To many climbers, this represents the cream of the information. The present article discusses briefly the presumably still-unclimbed principal features in the British Columbia coastal ranges that lie between the Canada-United States border and the Nass River. Canadian Alpine Journal (CAJ) references are selective rather than exhaustive, and in most quarters nothing has been attempted beyond an overall impression of mountain groups from available reports. Peaks mentioned are precisely located only when this information is not available from maps or the forthcoming guidebook, and approach data are left entirely to that guide.

The vast majority of people living in British Columbia near our coastal ranges, and all but a few of the climbers, reside within a half-degree latitude of the 49th parallel, but even here logging roads are opening up country faster than climbers are exploring adjacent peaks.

Not so long ago, a large number of summits (within the southern coastal ranges at least) were named after World War casualties. One result was the sudden appearance of many named peaks about which nothing was known to climbers. Another was the application of names to many summits so minor that they would normally attract no such attention. For this reason, a named peak

^{25 &}quot;Tantalus Area". By Howard Rode. Avalanche Echoes, Feb. 1961, pp. 3-4; "Zenith Lake". By R. H. Chambers. The B.C. Mountaineer, 36(5), May 1961, pp. 2-4.

^{26 &}quot;Climbing Guide to the Coastal Ranges of British Columbia (International Border to Nass River)". By R.R. Culbert. In course of publication.



Dick Culbert

"Volcan's Thumb" near Mt. Cayley

rising some distance from travelled routes is no longer likely to be outstanding, as was once the general case for those summits which were not survey points.

More often than not, access to our coastal mountain areas depends on logging roads, and nowhere are these so complex or widespread as on Vancouver Island. This, combined with the effect of extensive survey work and active local climbers, has led to ascent of most of the island's peaks of alpine interest. Along its west coast, however, things are a bit different. Here altitudes seldom reach even 5,000 feet, weather is bad, and bush is worse; but several steep rock peaks have been reported.

For instance, one of the towers of the Mackenzie Range is still unclimbed, and there are at least two attractive rock peaks to the southeast. Granite spires in the Mt. Abco area have been rumoured from more than one source. Conversations about the country farther north on the island often center around such summits as El Piveto, Schoen, or Warden, and are spiced up with mentions of untested towers on Mt. Phillips, Mt. Con Reid, and several other locations. More than one party has plans for the steep rock peak just east of the head of Elk River.

Standing in the vicinity of Chilliwack Lake and looking east along the International Boundary, it would almost seem that the 49th parallel was a geographical divide separating jagged peaks to the south from a bumpy plateau on the Canadian side. Many of the American peaks, however, are best approached from the north, although Canadians have taken but little advantage of their opportunity. Several unnamed peaks on the ridge west of Redoubt Peak are not known to have been climbed, and may prove interesting. An 8,200-foot summit between "Devil's Tongue" and "International Peak" seems to have escaped parties in the Glacier Peak area, as has another summit east of Glacier Peak itself. A pinnacle ("Untouchable Tower") rising from the face of Mt. Hozomeen (north peak) has been the subject of some speculation but no action.

Moving north of the border there is less chance of unrecorded ascents by parties from the States, but there is also not much of an interesting nature left untrod. Mt. Forddred region seems the best bet for parties who won't settle for just new routes.

Between the Fraser River and the Lillooet-Harrison river systems there is an expanding network of roads and a favorable proportion of virgin peaks. To begin with, however, Nahatlatch Needle does not exist, and neither does Gott Peak really, although the name of this once-proud 9,700-foot mountain was dropped on a lucky 8,000-foot peak which happened to be in the right place. This little peak should indeed feel honoured since it is flanked by higher nameless summits, and Gott Peak was once thought to be the highest mountain in the Vancouver-Lillooet area; it is still featured on some atlas maps. In general terms, the peaks adjacent to the Fraser River are sort of lumpish, while those on the Lillooet-Harrison side are more challenging. Summits north of Kwoiek Creek have been pretty well overrun by prospectors and climbers. The head of Kwoiek Creek (CAJ 1959, pp. 36-38) and the Anniversary Peak region southwest of Duffey Lake (CAJ 1958, pp. 30-34) are documented locations. Mounts Breakenridge, Nipple, Urguhart, and Old Settler complete the list of known ascents, and this leaves many interesting peaks untouched or uncertain. Almost without exception these are nameless, and only a few are likely to be technically difficult. The Cairn Needle at the head of Stokke Creek certainly sounds interesting, but both its contours and virginity are in dispute. "Tiara (Tierra) Tower" pictured opposite page 38 in CAJ 1959 still stands unclimbed near the head of Mehatl Creek. Pinnacle hunters will enjoy the view from the head of Harrison Lake looking southeast across the face of Mt. Douglas.

Summits west of the Fraser Canyon are a little too close to the Interior Plateau; climbers demanding something with both a challenge and a peak in this area may have to be content with

pinnacles. The name 'Needle Peak' is attractive although likely misleading. Very firm granite in the Anderson River region produces a few remarkable faces, and it is not unlikely that a peak of difficulty will turn up as this area is explored by climbers.

The "Canopener" ("Sharksfin") and two of the "Five Fingers" (CAJ 1940, pp. 154-158) likely represent Vancouver's closest virgin peaks which may be classed as alpine. Farther east, in the country between Harrison Lake and the Stave River system, lies one of the least-climbed sections of the Vancouver mountain region. Access is complicated but good, and there are several small spires scattered about. Climbing history is pretty well limited to the region drained by Winslow Creek, and hasn't touched much of this.

It may come as a surprise that there are still a goodly number of unclimbed peaks in Garibaldi Park. These lurk in several places. For the Garibaldi Lake region, guidebook workers were unable to find anyone claiming honours on the granite spires of "Phyllis' Engine" south of Castle Towers Mtn., or for the crumbly spikes below the Black Tusk. Ascents for both are rumoured, however. Several summits over 8500 feet in the most northerly part of the park do not seem to have had visitors, but are not of difficult appearance. Other unclimbed peaks along the eastern flank, but north of the Snowcap Lake region, are more shapely. The complex between Snowcap Lake (CAJ 1960, pp. 58-59) and Remote Peak is sometimes referred to as the "Xenolith Group". It is heavily glaciated, with most, although by no mean's all, of the peaks appearing to have a 'no-sweat' route. Only two or three have been climbed. Just one of the "Fire Spires" (Fire Lake peaks) is still virgin ("Eastern Flame Peak") but it is an indictment of Vancouver mountaineering spirit that these went unapproached for 13 years after the challenging article of CAJ 1951 (pp. 81-89) although within a day's pack of two lakes or three different roads.

The Tantalus Range has been pretty well cleansed of unclimbed peaks although there are a few pinnacles left—notably the "Witch's Tooth" between Mts. Tantalus and Dione. Nothing to the west has been described as both interesting and unclimbed. Less than half of the summits north of Ashlu Creek have survived inroads of the last two years, and most mountains around Princess Louisa Inlet have succumbed to climbers (CAJ 1941, pp. 14-20) or to surveyors. Northward toward Clendenning Creek, however, there are no records of activity and no peak descriptions.

Now that the main tower of Mt. Fee has been climbed (CAJ 1964, pp. 118-120), the stellar attraction of the Cheakamus Squamish divide is a remarkably steep and rotten tusk known as "Volcan's Thumb" located south of Mt. Cayley. A large and heavily glaciated section of country between the heads of the Soo, Elaho and Lillooet Rivers is not well known. Mountaineers have just nibbled at the edges, but geological parties who have been through describe the peaks as only averagely steep.

The country between the Lillooet and Bridge Rivers is heavily prospected. Most of the major summits east of Hurley River have likely been reached, but country to the west is more rugged and just about totally unknown to climbers.

A small cluster of peak names south of the Lillooet River between Meager and Manatee Creeks marks the work of a 1931 expedition (CAJ 1932, pp. 8-18). This party did not attempt Perkins' Pillar and no climbers have been in since, though high helicopter landings have been made by government parties. Peaks (unclimbed) to the south and west of Manatee Glacier have been described as interesting in appearance.

The vast glacial complex which gives birth to such river systems as the Toba, Bishop, Lord, Bridge and Lillooet is known as the "Lillooet Icecap" and has seen three expeditions to date (CAJ 1933, pp. 56-62; 1961, pp. 17-27; 1964, pp. 68-72). Peaks on the icecap are often high

but are widely scattered and seldom very difficult to climb. There is, nevertheless, a lot of good exploratory mountaineering left.

Travelling west from the Lillooet Icecap across Compton Névé, the next knot of high peaks is crowned by Mts. Gilbert and Raleigh. Mounts Falcon, Tavistock, Blackwall, Filer, Argyll and Montrose are all mapped names in the virgin category and will, of course, represent only a fraction of the peaks present. Several appear difficult. Rock climbers would enjoy some of the pictures which have come out of the Orford Bay and Brem River areas. These are government air photo obliques and others from the air, however, and the exact positions of the tower groups seen are not known.

To the south of Toba River and Toba Inlet, local climbers of Powell River have taken care of most summits around Powell Lake (one exception being the outer peak of "Slide Mtn.") and seem to be keeping exploration abreast of their expanding logging road system. There are no reports of singularly impressive peaks yet unclimbed.

Summits bordering Bute and Knight Inlets often look impressive from the water (and some likely are), but many have easy back-sides. The inter-inlet area is a 700-square-mile question mark which will doubtlessly yield many challenges.

The expeditions reported in CAJ 1930 (pp. 92-98) and 1941 (pp. 21-32) cover the half-dozen or so peaks known to have been climbed in the region between the Homathko Snowfield and the Southgate River. There hence remain a great many summits, some of which may be a bit tricky, judging by photos. Very little is known, however.

Only one expedition has been into the Homathko Snowfield (CAJ 1958, pp. 1-10) and while this did a lot of travelling and naming, its ascents were limited to Mts. Nunatak, Cambridge and Dartmouth. Most pictures of the Homathko Snowfield conflict with the expedition's reports of difficult peaks bordering the main icecap, but from time to time photos have turned up indicating that many of the lower peaks might be interesting rock climbs. These are most pronounced in the Klattasine region and on the snowfield's southern rim.

Accounts in CAJ 1943 (pp. 159-169), 1947 (pp. 1-14) and 1956 (pp. 25-35) pretty well cover ascents in the Mts. Queen Bess-Reliance region. In general the main summits and named summits are climbed, which accounts for maybe 15% of the peaks.

It often seems that the more climbing is done in an area, the more unclimbed peaks there are. This is because the virgin summits remaining are defined, talked about, and sometimes even named. Such has been the case on both sides of Chilko Lake's south end. On the west (CAJ 1913, pp. 20-33; 1954, pp. 16-26; 1958, pp. 11-16) such names as Otranto, "Pluvius", "Glasgow", "Marsden" and "Canopus" have appeared without the help of an ascent party. Some are likely to present at least moderate climbing difficulty. There is also the matter of four of the "Five Brothers" (pinnacles) which are still unclimbed.

Theregion southeast of Chilko Lake is more often thought of as Taseko Lake country (CAJ 1952, pp. 102-109; 1962, pp. 64-68; 1963, pp. 71-75; 1964, pp. 64-67). There have been several expeditions up the Falls and Tchaikazan Rivers, but even in these watersheds about half the mountains, including most of the difficult rock peaks, have not been tackled. Mount Altruist (10,300 feet), incidentally, has been tried from both sides, but the highest point has not been reached. Territory south toward the "Lillooet Icecap" and to the southeast is unexplored by climbers. Country to the east and northwest of Taseko Lakes contains some high peaks, but these tend to be of a gentle rolling nature typical of heights bordering the Interior Plateau.

Recent detailed maps of the country between the Homathko River and Mosley Creek have



Herman Genschorek

Mt. Altruist form the Southeast; Mt. Waddington is Below the Puff of Cloud.

lowered several summits to less than 10,000 feet. Besides a few survey points and one of the northwestern summits of the Nuit Range, only the following are known to have been attained: Razorback, Blackhorn, White-saddle, Ottarasko, and the western peak of Pagoda.

There is likely no group which has contracted so much space in the Canadian Alpine Journal as the Waddington Range, and not all expeditions have been so recorded. Nevertheless, some things are left to be done. South of Franklin and White-mantle Glaciers, most peaks are small, but some are sharp. Unclimbed summits with names are "Sharksfin Peak", "Marvel Peak", "Obelisk Peak", "Whipped Cream Peak", "Barb Mtn.", "Mt. Whitemantle", "Pointer Peak" and "Comrade Peaks". Swinging northeast toward the Tiedemann Glacier, "Mt. Martello" is the only name without an ascent party. Farther north still there are yet a couple of peaks left on "Claw Ridge", and beyond rises the spectacular "Serra V" tower (ca. 11,500 feet). Serra V has stood untouched in an area repeatedly worked over by very strong American parties, and appears the most outstanding challenge of our coastal ranges today.

An attractive number of unclimbed peaks border Frontier Creek. Those on the south side (and hence in the Waddington Range) include "Thumb Peak", Mt. Cornelia, "Mt. Umbra" and "Mt. Unicorn" in the east, and "Roovers Needle", Harkness Tower", "Mt. Weissner", "House Peak", "Broad Mtn." and "Dorothy Mtn." in the northwest. There are also many unnamed virgin peaks in this region, and a few things unascended in the less rugged country south toward the Franklin Glacier (e.g. "Lancer Mtn.", "Breccia Peak"). Frontier Creek is even more of a climbing frontier today than when it was named; for while parties have pushed to peaks on its southern rim, the expanse of mountains (interesting ones, incidentally) beyond has not been challenged.

West of the Klinaklini River lies one of the most extensive mountain regions to remain in the almost unvisited category. In the interior parts of this, the great glaciers are more noteworthy than the peaks. Silverthrone Mtn., Fang and Triplex are the only names found on maps, and the first two are the only peaks known to have been climbed (CAJ 1936, pp. 26-42). Ranges have that bleak, tired and worn-down look which comes from too much scrubbing with an overriding icecap. As usual, however, there are a few spiky summits scattered about, and these include the tower

(unclimbed) for which Fang Peak was named. Some ranges just south of the Sheemahant River and the Monarch Mtn. massif presage well-above-average interest. In fact, a lower-but-more-rugged trend is the rule to the west of the main glacial plateau, or when approaching the inlets. A very few summits around the heads of inlets have been ascended by local residents, but the vast majority are unknown to mountaineers. Approaches at present are so lengthy and singularly uninviting that until logging roads are pushed much farther back up the rivers, the peaks are likely to have very few visitors.

And then there is the Monarch Icecap, not to mention country south of the Bella Coola River. To put it bluntly, these areas are better than half climbed out as far as first ascents are concerned. Credit for this feat goes mainly to a succession of American parties, few of which reported their doings in the Canadian Alpine Journal. In fact, the Canadians and Americans don't even talk the same language in the icecap area, because the expedition of 1953 (CAJ 1954, pp. 7-15) went on a naming spree which has been perpetuated by a map in both the Canadian and American Alpine Journals. The two versions of this map have several differences in nomenclature and confusion has reigned ever since, especially as the Americans are doing the climbing while the government committee which recognizes and officiates names is Canadian.²⁷ From the American map the following are still unclimbed: Mts. Loreta (Loretto), Elfrida, Fyles, Belial; Aurora Peaks and three of the four Ape Peaks. Of these, the first three are not on the CAJ map, and the Aurora Peaks are termed the Borealis Peaks. Other summits to have received unofficial names and no cairns are: "Iroquois Ridge", "Purgatory Peak", "Edwards Ridge", "Concubine Peaks" and "The Queen" (10,700 feet) which is adjacent to Monarch Mtn. itself. At least half of these, together with several unnamed peaks, are likely to prove difficult. There is reason to believe that summits in this icecap area, as in the Waddington Range, stand higher than contours indicate. A few such as Big Snow Mtn., Mt. Thorsen and Mt. Nyland are named on government maps but are not sufficiently attractive to draw parties. The pinnacle contoured on top of Mt. Nyland (1:50,000 maps) incidentally belongs on "The Horn" farther northwest.

Only one climber is known to have penetrated the central region between the Bella Coola and Dean Rivers, and this foray was plagued by bad weather. Even within the visual confines of the resident raincloud, however, there was enough observed to indicate sharp peaks and challenging rock climbs. In several places here, as well as south of the Bella Coola River, the summits chosen for occupation as triangulation points could not be climbed by the survey parties. Photographs by these parties indicate interesting peaks in the region of Talcheazoone Lake, in the Nooskulla area, and at the head of Nieumiamus Creek. Northern Saloomt Peak and a summit south of Kalone Peak are the only two half-major peaks known to have been reached by surveyors on foot; others were occupied later via helicopter.

There is a sort of trench paralleling the coast from Gardner Canal to the Owikeno Lakes, and which gives rise to the Kitlope River, Dean Channel, South Bentinck Arm and the Tzeo River. Mountains lying west of this line are not high, but a few sections are very rugged. On the other hand, all approaches are very bushy, and access is next to nil. In the region south of Burke Channel there dwells another of those intriguing map names—Bentinck Spire. What evidence is available indicates that the spire has likely been visited by a helicopter party and is probably not a really genuine all-around spire, but rather a prominent steep cone or pyramid. There is room here for considerable uncertainty. Central and northern parts of the coastal rim just outlined have been

²⁷ See "What Shall We Call It?" in this volume.

described as a network of high barren ridges with steep sides and bushy valleys. One pocket of more interesting structures has been described, however, as standing west of Kitlope Reach and Kitlope Lake. There will likely be others turning up with time.

Between Eutsuk Lake and the Dean River there are enough floatplane-size lakes to make accessibility less of a headache. Mount Bernhardt and the highest summit (Tsaydaychuz Peak) have been occupied by survey parties, but the almost delicious name of Sakumtha Crag still poses a problem. Several people are wondering just what this beast looks like; and the writer, unfortunately, is one of them. The other interesting name of Sharks Teeth Peaks refers to a group which has been described as downright hair-raising when seen from the north. Little else has been learned.

Around the western edge of the Whitesail-Eutsuk Lakes country there is a rim of mountains wherein almost every bump is adorned with a recognized name, which is in direct contrast to the region of nameless contours farther west. Oddly enough, in the western part there are records of ascent (mainly by geologists) for most of the summits, while on the well-labelled eastern fringe climbing history is just about nil. In general, however, most of the difficulties among peaks of the western part are in approach, and fringe peaks don't look any more inspiring. The majority were likely occupied by surveyors.

The region east of Kemano has more reasonable access, but the peaks are not difficult as a rule; most have been climbed by surveyors and as in CAJ 1959, pp. 21-27. Summits rising amid the lakes farther east feature typical barren and lumpy interior styles. The area northwest of Kemano, on the other hand, is extremely rugged and likely to present good rock climbing. Only Powell Peak and a couple of unnamed summits are known to have been ascended. (Glacial truncation is so pronounced along the north coast that the major difficulties often lie in getting to the 4000 or 5000-foot level.)

The recent ascent of Atna Peak (CAJ 1964, pp. 120-122) puts cairns on all recognized 9000-foot summits between the Bella Coola and Nass Rivers. (It is often difficult for those not familiar with the area to imagine just how alpine a peak of even 6,000-7,000 feet can be on the north coast.) The region between the Kildala and Zymoetz (Copper) Rivers is crowned by Atna Peak and the Howson Range, which stand along the eastern border of mountaineering interest. Only two peaks that appear worth while are unclimbed in the Howson Range, namely "Mt. Othello" and a double tower between "Felber Peak" and the "Barrelsides Group". There may be a few others lurking at the extreme south end of the range. South once again in the crook of Clore River is a double summit with the attractive name of Pillar Peak. Its appearance from some angles doesn't live up to its name, however, and the greatest problem will likely be in approach. The region west toward the "Kitimat-Lakelse Trench" supports several recognized names, most of them being those of occupied survey stations. There have also been some ascents by prospectors, but most summits are still unclimbed. While these are not sufficiently spectacular to draw expeditions (being comparable to the mountains around Vancouver and the lower Fraser Valley), they provide good sport for the local Kitimat climbers, who have already begun exploration.

Immediately north of the Howson Range stands the "Serb River Group", which is not known to have been visited by mountaineers, mainly because it is overshadowed by the more violent Howson Range. There have been a few high-wandering prospectors, and at least one survey party in here.

Several distinct mountain groups stand within the 'nervous parabola' formed by the Skeena and Bulkley Rivers. Prospectors and a few climbers have pretty well taken care of the major summits in the Hudson Bay and Rocher Deboule Ranges. Although not so well known, many of

the peaks east of the Bulkley River and south of the Babine River have likely met with the same fate. Most do not appear difficult. Moving west, only one of the Seven Sisters (Sister No. 7) is still virgin. From here south to the Chimdemash area there are several summits of average interest standing a short (but bushy) distance back from the Skeena River. Only Mt. Sir Robert is known to have been climbed, and this is not the same peak called Mt. Sir Robert on maps, but rather the higher summit (8,094 feet) to the south.

Coastal country between Douglas Channel and the Skeena River presents an outstanding display of cliffs, but not many spectacular peaks are reported. The cliffs line major valleys, and their smooth granite outlines often make mountains appear challenging, but the summits can generally be reached by some route in which bush is the main difficulty. Very few cairns have been placed, however, except along the eastern side where Kitimat climbers have been active, and where a helicopter survey party used a string of summits near the 129th meridian, on both sides of the Skeena River.

From the town of Terrace, the valleys of the Kitsumkalum, Cedar and Tseax Rivers form a trench north to the Nass River. West of this lies a country notable mainly for unpronounceable river names. These rivers radiate from a central region untouched by climbers and easy to travel about in, but rather difficult to reach. Distant views indicate that most peaks will prove fairly easy to climb from one side or another, although this may be deceiving. All available information suggests that the so-called "Reisenstein Peaks" reported in this area are a total hoax. Summits adjacent to the Skeena River or the aforementioned 'trench' are known to have been climbed by prospectors, surveyors or mountaineers, and almost none back from these have been touched.

Summits lining the eastern edge of the 'trench' have also been climbed pretty well without exception. Farther east toward the Skeena River, the typical landform is high, barren ridges with very few peaks breaking the skyline. Prospecting has been extensive.

Contrary to the usual character of mountains adjacent to the Interior Plateau, the ranges north of the Babine River are rugged and heavily glaciated. Air photos tend to classify the region as interesting, although not generally spectacular. There is no mountaineering history.

The analysis just given covers only the southern three fifths of British Columbia's coastal mountains. To the north lies an area in which mountaineering records are scarce indeed, and in which alpine character may descend almost to sea level. Most ascents have been by geological and survey parties. Although the writer has not been recording or investigating activities in this region the reports and photos which workers have brought back from various sections of the northern coastal ranges paint a picture intriguing to mountaineers—whether explorers or 'crag-rats'!

ALPINE NOTES

Wapta-Waputik Icefield Traverse, 1963

By Peter Spear

With university exams out of the way for another year, our group decided that a ski trip would be an appropriate holiday. Bill MacGougan and I had been on the Columbia Icefields for 10 days in 1962 and we decided we should explore a new snow-camping area. Neil Brown had mentioned that there was some good skiing along the divide and so we decided to traverse the



Don Gowans

Lake Louise Group from Summit of Balfour



Don Gowans

Mt. Balfour

divide from Peyto Lake to Lake Wapta. Our route followed part of Hans Gmoser's 1960 high level ski route, ²⁸ only we did it in the reverse direction.

Our trip started on Sunday May 5, after a grand party in Calgary the night before. Dr. K. MacGougan drove Don Gowans, Jim Hutton, Dennis Naismith, Bill MacGougan and myself to the parking lot at Bow Summit. After checking out with the Warden, we shouldered our 50 to 60-pound packs and alternately skied and crashed our way through the trees to Peyto Lake. Travelling was bad in the wet snow and the open slopes were ripe for avalanches but the lake was reached without accident.

At the head of the delta we met three skiers who shook their heads in amazement as we slowly skied into the bleak white glacier world. The canyon at the snout of the Peyto Glacier specialized in dropping morainal rock at frequent intervals. After we got on the glacier proper, a large boulder came bounding off a lateral moraine, sped between two packs, hit a pair of skis and then went on its merry way. We travelled one mile up the glacier before pitching camp out of the way of wind and rocks.

The next day was a complete whiteout but we packed up our camp and continued up the glacier in a howling gale. Finally at a point above the top icefall we stopped and built a snow wall for our two tents. We tried touring but blowing snow made skiing impossible. On Tuesday we climbed up to Baker Col but the wind was so bad we had a poor view and difficult skiing.

Wednesday dawned bright and clear so we made a trip up the west peak of Rhonda. With blue skies and 6 inches of powder snow we left our troubles behind as we etched out patterns on the sparkling snowfields. To the south we had a magnificent view of the Wapta Icefield and our future route to Mount Balfour. After an early supper, three of us played "hearts" in the confines of our sleeping bags.

Again the weather dawned bright so we decided to try Baker Col. It was only a 90-minute trip so Don and I climbed a lower peak on Trapper and admired a fantastic panorama of snow-and-ice-clad peaks. The Freshfields, the Mummery Glacier and Mt. Forbes seemed to be only a stone-throw away. We soaked up the sun for a couple of hours and then had a glorious run down the Baker Glacier to Wildcat Creek. After we climbed back up to the col, we rejoined our three companions and with a series of yodels headed back for camp. The setting sun that evening turned the slopes a vivid yellow and outlined our day of fun.

Friday was moving day. Two of our party left us and skied down the Peyto for home. Dennis felt he should return to work and Jim found that every day it was harder to keep warm because his sleeping bag was shedding great volumes of feathers. At 6:30 a.m., three of us set off for Mount Olive and after crossing the Wapta Icefield, we stopped in the Olive-St. Nicholas Col for breakfast. The weather cleared up completely so we climbed a small mound and then glided down to Balfour Pass. Again the weather closed in but we had an ideal campsite behind a 20-foot-high moraine boulder.

The next morning we awoke to a bright blue sky and a landscape of sparkling ice crystals. It took 2l/2 hours to climb the Balfour Glacier under forbidding ice cliffs until we again established a camp on a col at 9,800 feet. We scouted for a route up Balfour and then spent a lazy afternoon carving up all the available slopes.

May 12 dawned bright and cloudless. By 9:00 a.m. we were on the top of Mount Balfour (10,741 feet) after a tricky ridge climb over ice-crystal cliffs and along numerous cornices. The

²⁸ C.A.J., Vol. XLIV, pp. 1-16, 1961.

view was breathtaking. There were no high mountains for about 10 miles in any direction so our view was unrestricted. The Lake Louise group appeared dark and forbidding to the southeast; the Selkirks quite hazy and orange to the west; the Freshfields snowy-white to the northwest; and a myriad of peaks north of the Jasper highway looked very inviting. After using up our entire film supply we returned to camp for breakfast.

At noon we started the 5-mile glide across the Waputik Icefield and down to the head of the Niles Glacier. Here we were met by flat light, blowing snow and steep rock cliffs that made travelling difficult until we got into the forests. After skiing across Sherbrooke Lake we made camp and for the first time in 8 days we didn't have to melt snow to obtain water.

Snow conditions were very poor and it took 2 hours to get to Lake Wapta the next day. Here we were met by Jim Gardner who had come to drive us back to Calgary. We stuffed ourselves with sandwiches kindly provided by Mrs. Gardner and learned that Dennis and Jim had arrived out safely.

Our trip had taken 9 days during which we had traversed two major icefields and enjoyed some of the finest scenery and powder snow that the Rockies had to offer. The unfortunate and sad thing about this trip was that it was the last trip Bill would enjoy as he met his untimely death only a fortnight later.

Climbing Around Moraine Lake

By Timothy Mason

Having read Brian Greenwood's account of his climb over Neptuak to Deltaform,²⁹ Gunti Prinz and I decided to take this route a little further and do a traverse from Wenkchemna Pass to Moraine Lake via Neptuak, Deltaform, Tuzo and the No. 3—No. 4 couloir, also doing Allen 5 and 4 if time and weather permitted.

We left Moraine Lake at 2:30 a.m. carrying enough food for two days and bivouac equipment that brought our loads to about 30 pounds each. We breakfasted just under Wenkchemna Pass and then started on Neptuak. As Brian Greenwood said, the so-called impossible "nose" made excellent climbing and we reached the summit at 9 a.m.—slow time but understandable considering our loads.

Our main impression of Deltaform was that the whole mountain appears ready to fall apart at any time. The climbing was easy enough, but dangerous owing to loose rock right to the summit. We roped the packs across the large crack just before the summit, and then, with the weather looking threatening, set off for the Delta-form—Tuzo col. This required two 150-foot rappels and after a succession of rotten gullies and ridges we reached the snow at 6 p.m., having left the summit at 2:30.

We bivouacked just under the lower cliffs of Tuzo and spent a most unpleasant night in one of the fiercest lightning storms I have ever seen. The rain poured down and the wind howled while lightning struck Tuzo and Deltaform repeatedly—not a pleasant experience. The morning was cold but fairly clear with a strong wind and owing to our damp state we didn't feel inclined to start too early. We eventually left at 9:30 a.m. after deciding that the weather looked reasonably settled.

We were on top of Tuzo by 10:15, having cramponed all the way to the summit ridge up fairly steep snow and ice. Here again the rock was extremely poor and we moved on down

²⁹ Canadian Alpine J., XLV, p. 121, 1962.

carefully to the Tuzo—Allen col. The first two pitches were up a steep rotten gully, then over a small col, traversing across another steep gully onto a very steep ice-face which was threatened continually with falling rock. Having read Hans Gmoser's article "How Steep is Steep?" we still consider that ice was at an angle of about 50°. Gunti led up it using two ice-screws for running belays and I finished it off, very nearly finishing off Gunti with falling rock. It was unbelievably rotten near the crest of the ridge above the ice.

We decided here that as time was short and we didn't know how easy or difficult the descent would be, we would not bother with the summit of Allen although we were only 200 feet short of it. As it turned out the descent was easy enough, so we then went up No. 5, traversing the mountain and reaching the snow at the base of No. 4 without any trouble. By this stage we were feeling pretty tired, so we walked around No. 4 on the snow and got into the No. 3—No. 4 couloir down which we had a glorious glissade, interrupted by the occasional cliff band, to the moraine, arriving at Moraine Lake Lodge at 7 p.m.

It was an interesting trip with some quite good climbing, but one I would not be tempted to do again owing to the extremely poor quality of the rock.

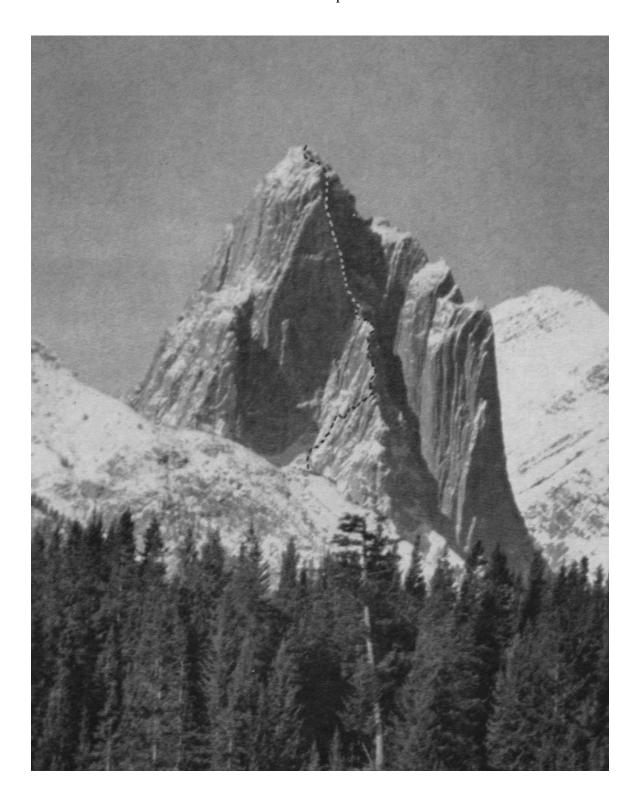
New East Route On Mt. Louis

By Klaus Hahn

Several members of the Calgary Mountain Club had joined for a weekend camp at that popular camp site on the southeast side of Mt. Louis in June 1962. On the first day Gunti Prinz and myself decided to try a new route on Mt. Louis' east side. Although the standard route begins on the southern edge of the east side, it later changes on to the south face. Our plan was to ascend the east side as far as possible.

We gained height rather quickly by climbing the partly snow-filled (east) main couloir to the point where it narrows into a gully. To our right a system of short chimneys and gullies led us to a steep ridge. We followed it for two-and-a-half rope lengths to its end. To the left we continued on for 200 feet with several short traverses until the high, smooth east face rose right in front of us. We were aiming for the well-defined gully straight ahead. A short wall was climbed and we were surprised to find that a chimney halfway down behind that big, vertical face separates the rock from the mountain in the form of a flake. Another short pitch and we realized that the gully in which we were in swung to our left and led straight up. Extremely loose rock made us move very carefully over three rope lengths to the end of the gully. Here we considered we were not too far from the end of our climb and hoped to finish within the next half an hour. A short pitch, and we hardly could believe our eyes. We were standing in the notch which separates both summits of the peak. By now an electrical storm had moved in that made our hair stand up. Quickly we stopped and registered before rushing down in rain the standard route on the southeast side. The ascent of this interesting new route took us 5 hours. We considered it as one grade more difficult than the normal route.

³⁰ Ibid., XLIV, pp. 51-54, 1961.



Dieter Raubach

East Face of Mt. Louis

Second Ascent Of Mt. Outram, Canadian Rockies, 1963

By Else Augdahl And Bill Sharp

Mt. Outram (10,670 feet) was the objective of an Alpine Club of Canada Edmonton Section expedition under the leadership of Eric Hopkins over the long weekend in August. This peak occupies the angle between Glacier River and Howse River; although it is prominent from the Banff-Jasper Highway at Saskatchewan Crossing there seemed to be no record that it had been visited since the first ascent in 1924. Camp was set up on the west bank of the Howse near the mouth of the creek that drains the Sir James Glacier, horses being used to carry in our gear from Mistaya Canyon and to ferry us over the Howse.

A large party left camp (4,700 feet) at 5:30 a.m. on August 4 and ascended the creek. To avoid a canyon and prominent cliff band it is necessary to climb a steep wooded bank on the north side of the creek and then traverse to the west along indistinct game trails through thick brush. Weary of bushwacking we reached the open upper valley and ascended to the foot of the glacier by grass slopes on the right. It was then well after noon so it was decided that only we two would continue to the summit.

By following the north lateral moraine of the glacier (which has receded greatly but looked badly crevassed) and gentle rock slopes with patches of wet snow to the southwest ridge, we reached the summit at 3:15 p.m. after a pleasant walk. The rope was not used. A small cairn but no record was found on the summit. The view was splendid with the Rockies from the Lake Louise peaks to Mt. Alberta spread out before us, the great massif of Mt. Forbes prominent in the foreground, Glacier Lake below us, and the interior ranges of British Columbia on the western skyline. The southeast ridge looked like a more interesting route to the summit. We descended much as we had come up but making maximum use of the snow. Camp was reached from the summit in 4 1/2 hours.

Across The Great Divide On A Cow-Catcher

Anon

The Editor has received a letter from Dr. J. Monroe Thorington stating that the following account of early travel on the C.P.R. was sent to him by an old friend, and suggesting that although it has nothing much to do with climbing, it might be of interest to readers of our Journal.

This was long ago in 1901. I was ten years old and went with my father and mother to Lake Louise and on to Glacier. Edward Whymper was at the old Glacier House with two Swiss guides, and while we stayed there he struck up quite an acquaintance with my father. The Battle Range of the Selkirks had been seen, but was otherwise terra incognita.

The three of us rode back over the Great Divide on the cowcatcher of a Canadian Pacific freight locomotive. There was then no spiral tunnel underneath the ground to get over the hump.

We missed the only daily passenger train at Field, British Columbia, and the agent said: "There's a freight coming through. Do you think you people could stand a box-car?" My mother said: "Certainly, I can stand a box-car."

The engineer of the freight train was one of those worldwide gentlemen you sometimes meet up with. He said to my father: "Do you think the missus would mind riding on the cowcatcher of the engine? It's a slow pull up to the Great Divide, but you'll really see the mountains."

My mother said: "I'm not afraid." So, with suitcases as a barricade around us on the broad platform of the big old-fashioned cow-catcher, wind in our faces, we reached the top of the Great Divide. I have a snapshot of my father (overcoated) and my mother (caped) standing below the big crude sign marking the place.

The conductor came up to us and said: "Before going down to Banff we have to go back to Field and pick up another consignment of freight cars. We'll leave you off here and pick you up when we come back." The train switched on the siding and went down backward to Field.

Then the three of us were on top of the Great Divide. I wandered off into the underbrush. An eagle didn't like it. I came too near the nest. He shot down at me. My father took his cane and beat the eagle off. Now it's almost unbelievable to check these memories, but they are facts.

Ever since then I have loved chipmunks. As we slid down toward Banff, a little one was right in front of the cow-catcher, running ahead in the middle of the tracks. I yelled to pop: "Why doesn't he get out of the way?" When the point of contact came too close, the little chipmunk jumped the rails to the right and scampered off. My father said: "You see, the little thing knew how at last to take care of himself. That's a natural and a wise way of doing things." I don't remember the exact words, but what he meant I knew, and have known ever since.

Mt. Yamnuska: Chockstone Corner

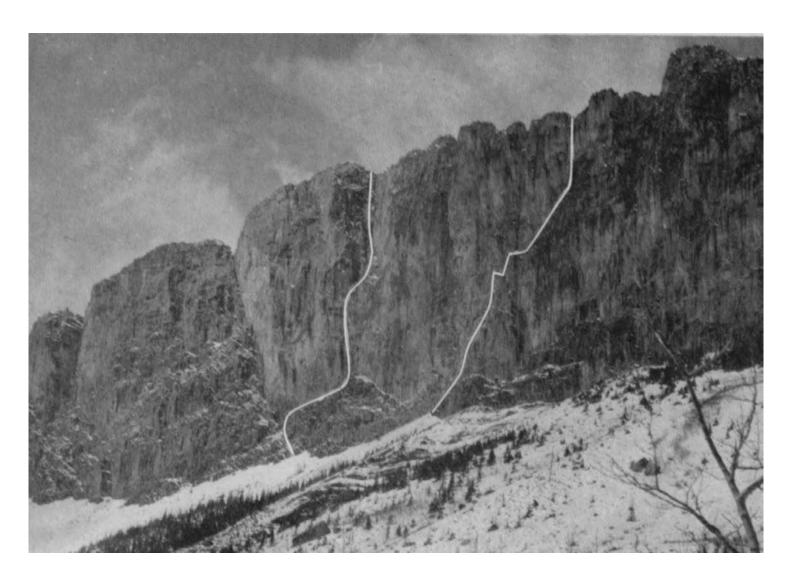
By Dick Lofthouse

This excellent and difficult new route was first climbed by Heinz Kahl and me, after several previous attempts had been made on it. The second ascent was done a few days later by Brian Greenwood and Keith Ingold.

Heinz and I walked up to the wall on August 21st 1963, and were ready to climb by 10 a.m. We carried a down jacket each and a bivouac sack—we didn't know how long the climb might take. It was my job, as second man, to carry the bulky rucksack. The climb starts where an easy slab leads out to the right, midway between the Grillmair and Direttissima routes. We followed the slab round a corner, then went straight up on the only rotten rock of the climb (100-foot piton anchor). Heinz then led up the difficult 60-foot crack above and crossed over at the top to a good ledge on the right. He hauled the pack up; when I started to climb I soon found out why.

We traversed further right without trouble for about 25 feet and again climbed straight up with difficulty for 40 feet (piton) to a ledge with block-belay. A good ledge leads from here to the right for almost 40 feet. From the end of it we descended a chimney, moving together, traversed a little further, and climbed a 20-foot pinnacle. The next pitch was a vertical 40-foot crack, and muttering imprecations about "anyone who would climb it free", Heinz reached over and clipped a stirrup into the first piton. A couple more pitons and the angle eased off a bit, so that he could climb free to the stance. Again he hauled up the pack and I followed, leaving the pegs in place.

The next 120 feet followed an obvious line slightly to the right, the main difficulty being a small overhang. We climbed this directly, with a piton for protection. An easy slab followed, taking us about 40 feet to the base of a steep wall (piton belay). The route then led up past two more pitons followed by a very delicate traverse right, highly exposed, to a good ledge (40 feet, ring piton). Again we went steeply up, with two pitons, to a good ledge (40 feet, block-belay). Moving out to a piton on the right, we climbed a steep and exposed crack for 40 feet and then stopped for lunch—apple juice and chocolate.



Glen Boles

South Face of Yamnuska

We were now at the bottom of a chimney which leads up to the summit ridge and can be seen plainly from below the face. I belayed from a ledge out to the left (to avoid falling rocks) while Heinz moved up 50 feet to the crux of the climb. This was the high point of three previous attempts, where the chimney narrows to an overhanging crack. There is a bolt in the right-hand wall; using a stirrup on this, Heinz reached up into the crack and rearranged a chockstone so that he could hang a sling on it. Climbing up on the sling he repeated the process—chockstones thus providing the key to the pitch. It was then possible to use chimney technique, and there was even an occasional handhold. After somewhat more than 100 feet and another piton Heinz belayed and brought me up. I had great trouble; among other things, with dust blowing out of the crack into my eyes while I was in too awkward a position to do anything about it.

To get to the summit ridge we now had two quite difficult pitches, totaling about 130 feet. The final pitch offered us a choice, and we chose the very narrow chimney on the right after a false start at the one straight above. At 5 o'clock we were on top and my friend was overjoyed—to put it mildly—he had been more anxious to do this climb than anything else. I had been very reluctant to go with him, thinking it would be too hard, but now I was really glad I had come. I had to climb near my limit most of the way, but not beyond it. In my opinion the climb is at least Grade 5 alpine, and the length about 900 feet. Some 20 pitons were left in place.

I feel that the Red Shirt route on Mt. Yamnuska, reported in the 1963 Journal, is somewhat harder than the Grade 4 allotted to it. The lengths of the pitches, on the other hand, were mostly overestimated in last year's account.

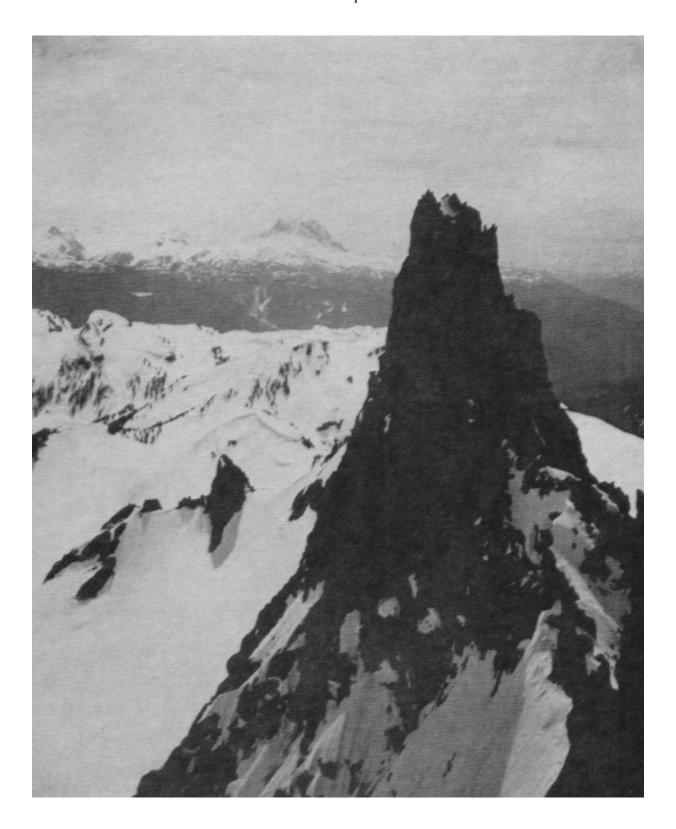
First Ascent Of Mt. Fee, B.C., Coast Mountains, 1963

By Mike Wisnicki

The south (highest) peak of Mt. Fee (7,100 feet), situated on the Squamish-Cheakamus divide at the head of Brandywine Creek, was unclimbed but by no means untried. On Saturday May 18, 1963, Pete Thompson, Bob Woodsworth and I left Vancouver for an attempt. On the same day we packed into a camp at 5,000 feet on a ridge south of Turbid Creek, which runs into the Squamish. From our campsite, Fee lay southeast across a valley of undetermined depth and proportions. We were determined it should succumb on the following day.

At 4:15 a.m. we left camp on snowshoes, dropped 500 feet into the valley, crossed its creek, and climbed up its far side to a plateau 800 feet above. Once on the plateau we set a fast pace south underneath the north peak of Fee and adjacent minor bumps. When we arrived below the south peak we contoured around to a 500-foot snow gully which led to within 120 feet of the south ridge. On reaching the top of this gully we were taken aback by a 120-foot vertical and overhanging wall with but few weaknesses in it. However, it yielded to two aid pitons and four projection pitons and we found ourselves on the spectacular knife-edge comb of the south ridge.

Straddling the knife edge, things looked bad. To our right lay the east face, 2,000 feet of rock, every inch vertical or overhanging. Ahead lay the south ridge, serrated and knife-edged beyond belief. To our left rose more faces of vertical rock and steep snow. However, progress along the ridge was not as difficult as we had expected from its appearance; Grade 4 mostly, with the occasional piton. Three o'clock saw us on the summit, glad to have found the rock less rotten than legend had it. By 3:10 the descent had started and upwards of an hour later we rappelled off the ridge to the snow slope. Snowballs had to be thrown at the snow gully to avalanche the soft



R. H. Chambers

South Peak of Mt. Fee

snow and 6 p.m. found us legging our way across the plateau towards camp.

It is advisable to have at least 240 feet of rope for this route, owing to the length of the rappels.

Mount Fee was named after Mr. Charles Fee, who did many climbs in the southern Coast Range with the B.C. Mountaineering Club in the early 1920's.

First Ascent Of Atna Peak, Central B.C. Coast Mountains, 1963

By Neal M. Carter

Atna Peak (9,040 feet) is situated at 53° 57' N, 128° 03' W, on the Coast—Fraser River system watershed, about 25 miles almost east of Kitimat, B.C. It has appeared on maps for a long time, probably because it is the highest feature within a radius of 30 miles, but there is no record of any ascent prior to 1963. Mr. Pat O'Connor of Kitimat has supplied the following information about his party's 1963 presumable first ascent.

In June 1962 O'Connor and Walter Heberle attempted to reach the mountain from the coast side of the watershed by ascending Hirsch Creek from the Kitimat-Terrace highway, but time available only allowed them to reach from a 5,000-foot camp some nearby peaks that provided good views of Atna Peak still a considerable distance away.³¹

On the evening of August 30, 1963, O'Connor, Heberle, Joe Wipfle and Robert Hessie flew by chartered plane from Kitimat, over Atna Peak, and landed on Atna Lake, some 13 miles northeast of the peak, for an attempt on it from this interior side of the watershed. That evening they backpacked up the somewhat swampy Atna River valley for about 2 1/2 miles, then camped. Continuing next day up the left side of the valley for 4 hours through heavy bush, they forded the river about noon at a place where it has two channels. Two more hours through open country and swamp, with the peak in full view ahead, brought them to the main river again and after another 2 hours through bush alongside it they reached the foot of the Atna Glacier. An hour up the glacier they commenced ascending a ridge above it to the left, and established camp at roughly 6,000 feet.

After an early start on Sunday September 1, O'Connor, Heberle and Wipfle reached the peak at 10:30 a.m. without difficulty. Unfortunately, rain that commenced during the climb spoiled their view and discouraged lingering, so after erecting a wooden cross on the summit they retreated, regaining camp by noon. The party continued down to the Atna River valley to camp for the night where they had crossed the river, and reached Atna Lake next morning. O'Connor states: "For anyone interested in doing the same trip, we left a good trail, especially through the swamp, guaranteed to keep your head above water."

^{31 &}quot;Kitimat Climbers Try For Mt. Atna's Summit". The Norther Sentinel (Kitimat, B.C), July 5, 1962, p.2.

^{32 &}quot;Climbers Conquer 9,000-Foot Atna". By Pat O'Connor. Ibid., September 12, 1963, p. 7.



Pat O'Connor

Atna Peak in left distance, from where Atna River was crossed.



B.C. Government Air Photo, by permission
Atna Peak. Route Was From Lower Glacier Up Ridge In Centre Of Picture

Further Note To Place Names In The Premier Range Area, Cariboo Mountains, B.C.

There have been many discrepancies concerning place names used by mountaineers in referring to geographical features in the Premier Range and nearby mountains.³³ Attention was drawn to this in an editorial Note: "Place Names in the Premier Range, Cariboo Mountains, B.C." that appeared in the 1963 Canadian Alpine Journal on pages 13-14, immediately following the article "Success in S-4" describing a party's 1963 climbs in the area just to the southeast, across the headwaters of the Canoe River.

Some of this confusion in names has arisen from authors' lack of definiteness in their contributions or on their sketch maps, in distinguishing between which names were already official or which were applied by their or a previous party for provisional use, and in indicating whether any of those provisional names were submitted for official adoption.

In the interests of encouraging correct use of official names and consistent use of unofficial names until official ones are adopted, our correspondence with the Chief of the Toponymy Division, Geographical Branch, Canada Department of Mines and Technical Surveys, Ottawa, has led us to reproduce herewith the map and panorama³⁴ that illustrated the "Success in S-4" article in the 1963 Journal. We submitted the map and panorama, as they appeared in the Journal, to the abovementioned Toponymy Division which indicated thereon the revisions in nomenclature as shown on them here. The Division drew the following points to our attention:

The names "Apex" and "No. 1 unnamed peak" have been interchanged, because according to the last paragraph on page 49 and the first paragraph of page 50 of the article commencing on page 43 of the 1961 Journal the now official name Trigon was applied by the party to the peak they climbed half a mile or so southeast of the peak they termed "Apex".

The corrected spellings Ella Frye Creek and Lebher Creek are shown.

The peaks erroneously labelled "Withers" and "Chamberlin" at the right-hand end of the original panorama fall outside the map area, but are presumably the two peaks so named on the sketch map on page 51 of the 1950 journal. These two peaks are unnamed officially and are left unnamed on the revised panorama since these two names are now officially given to two peaks shown on the revised map.

Official names added on the revised map are: "Chamberlin Peak (for "No. 5" on the original map); Chamberlin Glacier; Mt. Zillmer (for "No. 9"); Zillmer Glacier; Mt. Withers (for "No. 10"); Mt. Carpe (for "No. 11"); Zillmer Creek (for "S-4 Creek"); South Canoe Glacier (for "West Canoe Glacier"). The names David Glacier (outside the map area) and Chilkst Peaks (shown on the map) are official.

The following names retained on the map are not official:

"Little Matterhorn"; "S-3 (Long) Creek"; "Crescent"; "Apex";

"Pyramid"; "David". "South Canoe Glacier" has been deleted where it originally showed, since it is now the official name for what was shown as "West Canoe Glacier".

We highly recommend that authors of articles dealing with Canadian mountain areas for

³³ For examples, see Canadian Alpine J., 1925, p. 12,9 and map; 1926-27, p. 244; 1940, pp. 194-204; 1960, pp. 54-57; 1961, pp. 43-50; also compare the various names shown for identical features on sketch maps in ibid, 1939, pp. 48—61; 1947, pp. 91-105; 1948, pp. 21-37; 1950, pp. 19-27, 48-61; 1963, pp. 1-12.

³⁴ We regret that in the binding of the 1963 Journal this panorama became inserted between pages 50 and 51 of another article, and that a map which should have been inserted there became inserted where the panorama was meant to appear between pages 8 and 9. It is suggested that these be detached and interchanged.

SPECIAL NOTE FOR THE CAJ DIGITAL EDITION

An oversized fold-out panoramic photograph from the summit of Mt. Withers was included in the hardcopy version of the 1964 Canadian Alpine Journal.

It is not included in this digital version due to size restrictions.

SPECIAL NOTE FOR THE CAJ DIGITAL EDITION

An oversized fold-out sketch map showing the sources of the Canoe, Raush & Thompson Rivers was included in the hardcopy version of the 1964 Canadian Alpine Journal.

It is not included in this digital version due to size restrictions.

submission to the Canadian Alpine Journal should take every reasonable care to ensure that when features have official names these are used and spelled correctly in their article and on their sketch map; also that names not yet official be placed within quotation marks as above. The latest Canadian federal and provincial maps, also the Gazetteer for the appropriate province, should be consulted. As indicated in Mr. J. Keith Fraser's article reproduced in the following Alpine Note "What Shall We Call It?", the Canadian Permanent Committee on Geographical Names can supply information on existing and proposed official names, and would probably appreciate the opportunity of seeing an author's manuscript and sketch map before it is submitted to the Journal, so that official names can be checked, and advice given on the suitability or otherwise of names proposed by a party for as yet unnamed features.

—Editor

What Shall We Call It?

The Editor has received permission from Mr. J. Keith Fraser, Chief, Toponymy Division, Geographical Branch, Department of Mines and Technical Surveys, Ottawa, and Acting Chairman of the Canadian Permanent Committee on Geographical Names, to reproduce his very pertinent article on Canadian geographical names, an article he has submitted to the American Name Society's quarterly publication Names. The article has not yet appeared in Names, but the Editor of that publication has kindly consented to its reproduction in our Journal.

Mr. Fraser's article follows, and we consider that attention cannot be drawn too often to this important subject of geographical nomenclature, particularly here in its relation to the naming of geographical features in our mountain areas. The reader is also referred to our late President's Note: "What's In a Name?" (C.A.J. 1955, pp. 82-84), J. Monroe Thorington's Note: "The Climber's Guide" (ibid., p. 85), Neal M. Carter's Note: "Where and When Did Who Climb What?" (C.A.J. 1963, pp. 108-109), and our preceding Note in this issue.

Canadian Permanent Committee On Geographical Names

By J. Keith Fraser 35

In 1897, following recommendations from surveyors, cartographers and others who were concerned with the lack of standardization of geographical names in Canada, the Canadian government established the Geographic Board of Canada. The Board was intended not only to supervise and standardize geographical nomenclature, but also to carry out research in the geography of Canada. Over the next 30 years, the annual reports of the Board contained occasional geographic studies, mainly toponymic, but gradually its function was reduced to the verification of nomenclature for the increasing program of map production as well as the recording of names. Formed initially of senior federal civil servants, the composition of the Board was soon altered to include provincial representatives who were aware of particular regional problems and acted as advisors on contentious matters.

Due mainly to this change in emphasis from geographic research to more strictly nomenclature work, the Geographic Board of Canada was reorganized in 1948 as the Canadian Board on Geographical Names. Over the next decade, the publication of the Gazetteer of Canada

³⁵ Chief, Toponymy Division, Geographical Branch, Department of Mines and Technical Surveys, Ottawa.

series was carried out, beginning with the volume for British Columbia in 1953. By 1961, gazetteers of all the provinces except Ontario, Quebec and Newfoundland³⁶ were published and a provisional gazetteer was issued for the Yukon and Northwest Territories.

To provide for geographical research in Canadian toponymy and to acknowledge the authority of the provinces in the matter of place names, the Canadian Board on Geographical Names was replaced in 1961 by the Canadian Permanent Committee on Geographical Names. The present composition of the Permanent Committee consists of the Director, Geographical Branch, Department of Mines and Technical Surveys; the Director, Surveys and Mapping Branch, Department of Mines and Technical Surveys; the Director of Military Survey, Department of National Defence; the Superintendent, Bureau for Translations, Department of Secretary of State; the Dominion Archivist; a representative for the Territories appointed by the Minister of Northern Affairs and National Resources; and a representative appointed by each of the respective provincial governments. Quebec, Alberta and Newfoundland have established provincial name boards, the secretaries of which act as representatives on the Permanent Committee. The recording unit, formerly with the Topographical Survey, was transferred to the Toponymy Division of the Geographical Branch, which also includes provision for professional geographers to undertake research in Canadian toponymy.

It is the responsibility of the Permanent Committee to deal with all questions of geographical nomenclature affecting Canada, and to undertake research and investigation into the origin and usage of geographical names. All decisions taken by the Permanent Committee become official when approved by the Minister of Mines and Technical Surveys or the appropriate provincial Minister, according to their respective jurisdictions. The Permanent Committee meets in plenary session annually. The investigation and recording of names is carried out by the Toponymy Division. The processing of new names and name changes is facilitated by means of the Executive Committee of the Permanent Committee which acts on the advice of the Toponymy Division and the recommendations of the provincial representatives.

A number of principles of nomenclature have been evolved since 1897 to guide the decisions of the names authority. Certain tenets were formulated through experience and in 1963 they were adopted in a form acceptable to all the provinces and agencies represented on the Permanent Committee. It should be emphasized that these are not mandatory regulations, but carefully considered guiding principles by which the standardization of Canadian geographical name is controlled.

Inquiries concerning name, or proposals concerning new names, name changes or changes in application of existing names should be submitted in writing to the Chairman, Canadian Permanent Committee on Geographical Names, Geographical Branch, Department of Mines and Technical Surveys, Ottawa. It is recommended that the guiding principles³⁷ be studied to ascertain the suitability of the proposed names, each of which must be accompanied by adequate information on its origin or usage, and identified on a map, sketch or air photograph. Reliable, preferably documented information concerning corrections to nomenclature appearing on Canadian maps and charts is welcomed by the Permanent Committee.

³⁶ A gazetteer for Southwestern Ontario was issued in 1952, and the complete volume for Ontario in 1962. The gazetteer for Newfoundland is in preparation.

³⁷ A booklet outlining the organization and functions of the Canadian Permanent Committee on Geographical Names and listing the guiding principles is obtainable on request from the Director, Geographical Branch, Department of Mines and Technical Surveys, 601 Booth Street, Ottawa.

Guiding Principles

- 1. Names Governed by Statutory Authority The names of Cities, Towns, Villages, Post Offices, Counties, Townships, Districts, Reserves, Parks and other Legal Divisions as created by, or as a result of, legislation by the appropriate government shall be accepted by the Committee.
- 2. Names given by Railway Companies or Resource Development Companies Railway Companies, major Utilities and Resource Development Companies should seek the advice of the Committee concerning the use of geographical names connected with their operations.
- 3. Names in Public Use

First consideration should be given to names with well-established public use.

Unless there are good reasons to the contrary, this principle should prevail when it conflicts with any of the following principles. Local usage should be the prime consideration in settled areas, whereas historical significance should be emphasized in unpopulated areas.

4. Uniformity of Names

Names applying to features in a given locality should be in conformity.

Examples of undesirable practices are:

- (a) Different names applied to the post office, town or railway station for the same settlement.
- (b) Difference in spelling of names of the same origin as applied to related features.
- (c) Different names applied to different sections of the same feature, as with a river where the different sections are separated by natural or artificial lakes.
- 5. Duplication of Names

Duplication of names to the extent that it may cause confusion should be avoided. In the case of major features this should preclude any duplication within at least a province, whereas for a very minor feature in a settled area the limit need not be beyond

the area of a smaller administrative unit such as a township or parish.

6. Personal Names

Personal names should not be used unless it is in the public interest to honour a person by applying his name to a geographical feature.

The application of a personal name during the lifetime of the person concerned should only be made in exceptional circumstances. Ownership of land should never in itself be grounds for the application of the owner's or donor's name to a geographical feature included therein.

7. English and French Names

The adoption of both an English and a French form of a name for the same feature should be avoided, except where both forms have the sanction of well-established usage.

This applies generally to major features; minor features should be given names in one language only.

- 8. Indian and Eskimo Names
- (a) Indian names for which there are no accepted forms will be recorded according to a recognized local orthography or according to the considered opinion of a recognized linguistic or ethnographic authority.

- (b) Eskimo names for which there are no accepted forms will be recorded according to a recognized national orthography.
- 9. Form and Character of Names

Names should be concise, euphonious and in good taste.

Forms that should usually be avoided are:

- (a) Unnatural or incongruous combinations of words, including combinations of words of different languages.
- (b) In the case of a personal name, the use of both Christian and surname, or a combination of the two.
- (c) Inclusion of the apostrophe in the English, possessive form.
- (d) Qualifying terms such as "Upper", "South", "West Branch", etc.
- (e) Double naming, e.g. Red (Green) Creek.
- (f) Long and difficult Indian or Eskimo names.
- (g) Corrupted or modified names.
- (h) A name with a connotation of obscenity or blasphemy.
- (i) A name that would appear to be discriminatory or derogatory from the point of view of race, colour or creed.
- (j) A name that could be construed as advertising a particular commercial or industrial enterprise.
- 10. Generics

The generic must be appropriate to the nature of the feature, and its position shall be as dictated by euphony and usage.

The choice of the language used in any given publication is at the discretion of the publisher. However, the generic shall be recorded only in the language having priority of local usage or origin.

11. Names Outside Canada

For the European area, the form used shall conform to the rules prescribed by NATO Military Agency for Standardization, which include the nomenclature regulations of the International Hydrographic Bureau. For other countries, usage should be based on that of the national names authority or that of the United Nations.

Conventional names in English or French may be used on very small-scale maps and in textual material at the discretion of the publisher.

12. Origin of Names

No name shall be accepted unless adequate information on its origin or usage is provided to the Committee.

"Skiing Is Not A Sport, It Is A Way Of Life"

By E. F. Roots (with A. M. Stolfa³⁸)

Skiing is basically a technique of transportation—a method of moving over snow on elongated wooden shoes—and it means different things to different people.

It is both a means to an end, and an end in itself.

For the Lapp reindeer herder, and for a few foresters and patrolmen, it is simply a practical

³⁸ Presented under the above title by A. M. Stolfa to the Ski Association of the Canadian Army.

means of going about one's work. But for almost all the rest of the world skiing is a means of expression, a medium by means of which one can follow the urge to escape from the daily round and the artificialities of conventional behaviour to experience the simple and basic enjoyments of participation in outdoor activity, of closeness to Nature, of the development of individual skill with a dash of adventure and the thrill of speed with a modest spice of danger. In short, skiing is a true recreation; an activity that satisfies physically, mentally, and philosophically a very wide range of persons with a wide range of personal needs, almost regardless of their physical ability and competence.

It is the diversity of the rewards of skiing that make it such a satisfactory recreation. It is trite to say that in every human activity one gets out of it what one puts into it; the advantage that skiing enjoys over nearly every other physical activity is that it can serve as a focal point about which almost a complete gamut of physical activities and personal urges or desires may revolve. Think of the various types of recreational activity, and the types of personalities that engage in these activities, which have as their common denominator the simple process of sliding on skis:

- —the athletes who ski primarily as an exercise of their physical prowess;
- —the family skiers who make skiing the excuse for a picnic;
- —the restless explorer who skis across Greenland or the Alps to satisfy a compelling urge to see the unknown by his own efforts;
- —the gregarious youths who ski to be one of a group, or to find friends or mates;
- —the "lone wolves" who ski to get away from it all;
- —the fiercely competitive skiers (and ski-nations) to whom dominance on the racing circuit becomes an obsession, amounting at times almost to a consuming madness;
- —the lazy tourists who never ski far from the bar of the lounge;
- —the self-conscious and socially aspiring to whom skiing is primarily an excuse to wear fashionable ski clothes and be seen at the right resorts;
- —the jumpers who like their thrills hard and tough, and who find in skiing a challenge and outlet beside which nearly every other activity is dull and tame;
- —the timid types who get a delirious thrill out of negotiating the bottom half of the beginner's slope all by themselves;
- —the cross-country racers to whom skiing is a means by which men can test themselves, physically and mentally, against themselves and against that old enemy, the clock;
- —the ski-mountaineers who use skis as a means of pitting themselves against some of Nature's most formidable obstacles during a season when, without skis, they know that they would be helpless;
- —the Nature lovers, to whom skis are the means of coming into close contact with the winter wilds, with the woods and its inhabitants at a severe yet peaceful time of year;
- —the self-centered men who don't give a thought to Nature but who find in the mastery of skiing techniques something they can dominate, to relieve the frustrations they collect in this uncontrollable world;
- —the restless men, who ski in the woods to find peace and quiet;
- —the men in a rut, who ski to find excitement, activity, and challenge;
- —the gadgeteers to whom skiing is an excuse for indulging in an infinite collection of equipment and accessories;
- —the puritans to whom skiing is an attractive sport because they do not need a lot of fancy equipment;

- —the theoretically minded to whom skiing is an endless succession of dynamic analysis, chemistry of waxes, and crystallography of snow;
- —the men of action to whom skiing appeals because it is just a matter of sliding on snow without any complicated analyses or theories;
- —the perfectionists who find their recreation in continuous practice and refinement of a specialized technique;
- —the impatient "bashers" to whom skiing appeals because it allows direct and impulsive action, unfettered by complicated rules;
- —the introverts, who ski because skiing is an individual sport and they can engage in it without being bothered by what others might think or do;
- —the extroverts, who ski to an audience, to draw attention to themselves;
- —the elderly people who are still young at heart;
- —the elderly people who make a pathetic farce of trying to fool themselves that they are still young;
- —the elderly people who have accepted the fact that they are not as young as once they were, and who find in skiing an enjoyable activity suited to their abilities and interests;
- —and the very young, in years or in spirit, who just ski because it is fun.

It has been wisely said that some men like to think while skiing, while others like to ski to get away from thinking. Can we find another activity so versatile, so effective in meeting the full range of individual recreational needs? This is what Hannes Schneider, one of the greatest of the early ski instructors, meant nearly two generations ago when he made the often quoted statement, "Skiing is not a sport, it is a way of life."

With this range of satisfactions and pleasures to be gained from skiing, it is misfortune that the promotional emphasis in the tremendous recent expansion of popular skiing has been concentrated almost exclusively around sliding up and down tailored hills in conveyor-belt assembly. This is understandable, and if kept within reasonable limits is a good thing. In the first place, skiing today is big business, with tremendous investments in resorts, transportation facilities, equipment and accessories factories and dealer outlets, with even a whole clothing and fashion industry and book and magazine trade. To get the maximum revenue from this investment it is necessary to get customers in dense concentrations; and to keep the industry going it is necessary to keep those customers dependent on the goods and services of the industry. Therefore it is only good business to advertise highly developed resorts as the only places to ski, and to sell boots and bindings suitable for a racer to come down hills but so awkward that the skier cannot climb up the hills and so has to ride on the chair lift. In the second place, most of us today are so conditioned to heroworship and the cult of the superiority of the latest model equipment or the newest easy way to learn that we accept without question the notion that the way an Olympic champion skis is the way that we want to ski, whether we aspire to Olympic racing or not; or that the equipment used by Toni Sailer must be the best for us, even if we are not quite as skillful as he.

This situation has many good aspects. It introduces to the joys of skiing thousands of people who would never otherwise bestir themselves, and it supports a healthy and competitive industry dedicated to giving pleasure to the public at large. But it is a great shame that in many cases the process stops there; that the impression has grown and been accepted that this is the ultimate development of skiing, that emulating a downhill or slalom racer is all there is to it, unless you are an old-fashioned eccentric like a jumper of a langlaufer. For although sliding down prepared slopes

is an important, a vitally important, and enjoyable part of the art of skiing, it is only a part; and a whole world of new experiences is opened, through their skis, to the man, woman, or family that leaves the pistes and the slalom courses and heads through the woods and across the hills.

Away from the packed slope, with its lodge and its lifts and its jostling crowds of schussboomers and fashion plates, the artificial trappings of skiing drop into insignificance and one comes close to Nature in one of her most beautiful moods. The man who shovels out his garage driveway in the morning may not have much love for snow; but the same man, breaking a trail between snow-laden pine trees, pausing on the top of a rise to look at the smooth diamond-sparkled whiteness before him and turning to glance at the neat winding track behind him, is almost sure to feel a peace and a sense of oneness with the world that he would not previously have thought that labouring in the snow would give him. When travelling on skis through the countryside, one's thoughts and impressions match one's relaxed mood, an opportunity that happens all too seldom in our jet-propelled, electronic world. It is one of the greatest benefits that ski-touring can give. There is time to observe the country, and the forest and its inhabitants, if one so wishes; to notice the little trail of squirrel's feet-marks from one tree trunk to the next, and how the massing clouds in the west herald a rising wind. On skis in the woods a grown man does not feel self-conscious about stopping to muse over something as inconsequential as how the snow came to be draped in such a curious fashion over that dead branch, or, on the other hand, in letting his mind wander, detached, far away to the complexities of the international situation on what might be, for all the signs of it in the winter woods, another planet.

This is the mentally relaxing side of ski-touring; but there is also a stimulating and challenging side that brings one back into immediate reality. There is the long pull up a steep hill in deep snow, where one knows the exhilaration—yes the real exhilaration—of having to stop for a moment to gasp for air. There is the pride of arriving at the top, all breathless and glowing, and the immediate interest in how one is going to get down again. There are the changes of pace when an easy gentle downslope run quickens unexpectedly, calling upon all one's strength and skill and sometimes more—to remain in control; or when smooth powder snow changes into deep fluff or slams into hard ice. There are moments of alarm, and then of panic as a tree ahead spells impending disaster; the momentary fatalistic relief, just before you hit, when you have lost control and your destiny is in the lap of the gods and the softness of tree or snow. There is the very real relief of struggling upright again, finding no damage done, and brushing off the snow. Sometimes there is the ecstatic thrill of having safely averted disaster by your own efforts and skill. There are also times of mortification when, through poor judgement or carelessness you have made a mistake; or concern tinged with shame when you realize that perhaps you have underestimated the terrain or overestimated your own skill or the endurance of your party. There are times calling for decisions to be made in a split second, and times when you must continue doggedly, persistently, and uncomplainingly when, because you or someone has misjudged the weather, the type of wax, or the lateness of the hour, your way home is not as easy as it might have been. In short, there is life, real life, to be experienced on a ski tour. There are many subsidiary joys to ski-touring, for this type of skiing is truly both a means to an end and an end in itself. A lunch rarely tastes as good as when eaten in a snowy dell, sitting on a fallen log and looking at the valley ahead. The pleasure of companionship is rarely as deep as when friends or loved ones pause together and look back at the tracks they have made. Every man and woman harbours something of the instincts of an explorer and adventurer, and the pleasure of discovering what is behind the next clump of trees or over the next ridge is a very real one. There is something of the pride of the woodsman and the sailor in

us too, no matter how urban we may be; and rare indeed is the man or woman who doesn't take pleasure in being able to read a map and find the way, or who goes on a ski trip away from the beaten path without taking an interest in, and learning something about, the weather, the woods and their creatures, and the character of the land and the snow. There is much to observe and to learn, in the passing of a winter day and the progress of a winter season, that one never stops to notice in ordinary life. Most of all, of course, one learns about one's self—how far one can go, and how fast; what are the things that irritate or tire, and what are the things that give pleasure, for here in the woods the veneer of conventional behaviour is easily shed. One finds that one's own judgement is faulty, and the proof is all too well borne home by aching muscles or a rapidly descending sun. One learns how little equipment it takes to be comfortable, and yet how vitally important are certain items, and from this one gets a pride of self-reliance. There is the joy and satisfaction of progressively becoming physically fitter and more expert at the game. At the end of the trip, there is the immense satisfaction of coming home pleasantly tired, and with a host of impressions and experiences that will last through many days of hectic, clock-bound living. Truly, ski-touring leads to a fuller life.

To make the change from the beginner's slope or the slalom hill to the wide spaces of the winter countryside, one does not need special equipment or techniques, unless one has already specialized heavily in another direction. General purpose skis, provided they are not too stiff and that they will hold a wax, are adequate. Boots and bindings must be flexible enough to allow moderate freedom to raise the heel (of course, safety bindings of the type that release the ski or the skier whenever the foot moves relative to the ski are not suitable). The poles should be long enough to enable the skier to take a good stride and give a good push, and should have baskets large enough to give support on fluffy snow. Trousers and jacket should provide for freedom of movement, at the expense if necessary of shapeliness of profile. But in general, middle-of-the-road equipment is quite suitable to enable one to take full measure of the joys of ski-touring.

The skills that one learns on the packed slopes, too, will stand in good stead as one heads across the country. The basic principles of balance, rhythm, weighting and unweighting, and keeping forward and away from the slope still apply. Every technique used on the slalom hill, except some of the super-fast racing refinements, will be called upon sooner or later during a ski-tour if the skier has them to call upon; and, other things being equal, the better a person is at downhill or slalom the better ski-tourer he will be. But the beginning ski-tourer will soon find that his downhill and slalom tricks do not go far enough, and he will soon be learning a whole series of new skills. How to select and apply wax, and then use it for both grip and slide at will to travel efficiently on the level, uphill and downhill; how to keep balance in deep powder snow; to kickturn in a small space among trees; how to cross a stream with overhanging corniced banks without getting water on one's skis; how to sideslip under control on any slope and in any kind of snow or ice; and how to adjust one's energy output to avoid alternate overheating and chilling without continual adjustment of clothing. Nothing is more erroneous than the common impression that the really difficult skills in skiing are connected with turning at high speeds on steep slopes, and that any duffer can go off and do crosscountry skiing if he has not the patience or the ability to ski down hills. The skilled downhill skier usually gets a few surprises about his own downhill technique when he goes touring. If he is schooled in parallel techniques he finds that his counter-rotation does not have much effect in deep snow, and that the reverse shoulder has a totally new effect if he has a pack on his back. Those who have learned by the Arlberg method find that a simple absten before a christie may cause capsizing, and that the "fall line" is somewhere not at all where it is

drawn in the textbooks. But with increasing practice all of these problems iron themselves out, and the accomplished ski-tourer can apply wedeln or telemarks as the occasion demands, with a far larger repertory at his disposal than the pure downhill or slalom skier, who is limited by a narrower range of snow conditions, frictional resistance, edging control, and freedom of boot movement.

The enthusiastic ski-tourer, of course, like any other enthusiast, develops specialized equipment. On the one hand, this may lead to cross-country racing, with its thin, light, narrow skis, bindings without heel fastenings, low flexible boots, shoulder-long poles, and plus fours trousers. On the other hand, the ski-mountaineer will use a fairly broad, stiff, shovel-nosed ski, with built-in attachments for skins and spikes on the running surface, a split toe-iron safety harness with a variety of heel downpull tensions, huge cleated boots and a quick-release snap-ring belt that enables him to ski while roped. Between these two extremes there is a whole world of winter wonderland awaiting the skier who leaves the beaten slope and strikes across the untrodden snows.

New Ascents And Various Expeditions

Compiled by R.C. Hind

Baffin Island Expedition

14 first ascents and a number of other climbs were made. See the three articles in this issue.

Coast Mountains

Falls River Area

Mt. Winstone (en. 10,100 feet). First ascent. July 26, 1963; G. Suddaby and party.

Kitimat Area

Atna Peak (9,040 feet) . First ascent. September 1, 1963; P. O'Connor, W. Heberle, J. Wipfle.

Squamish-Cheakamus Divide Area

Mt. Fee (7,100 feet) . First ascent. May 19, 1963; P. Thompson, R. Woodsworth, M. Wisnicki.

Lillooet Area

- "Lightning Peak" (ca. 10,100 feet).
- "Thunder Peak" (ca. 9,700 feet). August 13, 1963.
- "Cardinal Peak" (ca. 9,750 feet) . August 15, 1963.
- "Daphnis Peak" (ca. 9,800 feet).
- "Mt. Chloe" (ca. 9,600 feet). August 16, 1963.
- "Deception Peak" (ca. 10,000 feet),
- "Stanley Peak" (ca. 10,000 feet). August 17, 1963.

All first ascents by S. Eigenmann, H. Eigenmann, M. Kafer, Esther Kafer.

Alaska

Mt. McKinley. First ascent of Wickersham Wall. Hans Gmoser and party. See article in this issue.

Rockies

Mt. Saskatchewan (10,964 feet) . Ascent via west ridge. September 1, 1963; R. Fierz, J. Kato.

Ten Peaks. Traverse, Wenkchemna Pass to No. 3-No. 4 couloir bypassing 6 and 4; in two days by T. Mason and G. Prim; 1963.

Mt. Louis, East face. K. Hahn, G. Prinz, June 1962.

Yamnuska, Chockstone corner. H. Kahl, R. Lofthouse, August 21 1963.

Diadem Peak, from Wooley-Diadem col, which was reached by traversing Mt. Wooley. G. Evans, D. Kerr, E. Lazarus; August 3, 1963.

Chevron Mt. First ascent of northeast peak. By Bill Angus, Phil Dowling, on way in to Summer Camp, 1963.

Un-named peak (ca. 10,350 feet) at northeast corner of Drummond Icefield. Presumable first ascent by Jim and Don Gardner during Upper Red Deer River Valley glaciological studies.

Slocan Mountains

Valhalla Range

"Wolves' Ears". First ascent west peak, August 31, 1963; G. Broach, G. Brown, D. Deane, J. Rees, Helen Butlin. First ascent east peak, G. Brown same day.

"Mt. Gladsheim". First ascent, August 31, 1963; K. Deane, J. Oswald, M. Stewart, Bud Stovel, P. Williams. Second ascent, September 1; G. Brown, J. Rees.

Andes And Himalaya

For accounts of first ascents in Peru and the Himalaya by our members see articles in this issue.

Note: It would be of assistance in preparing this record if writers of articles would be sure to give the date of the climb and the members of the party.

SCIENTIFIC SECTION

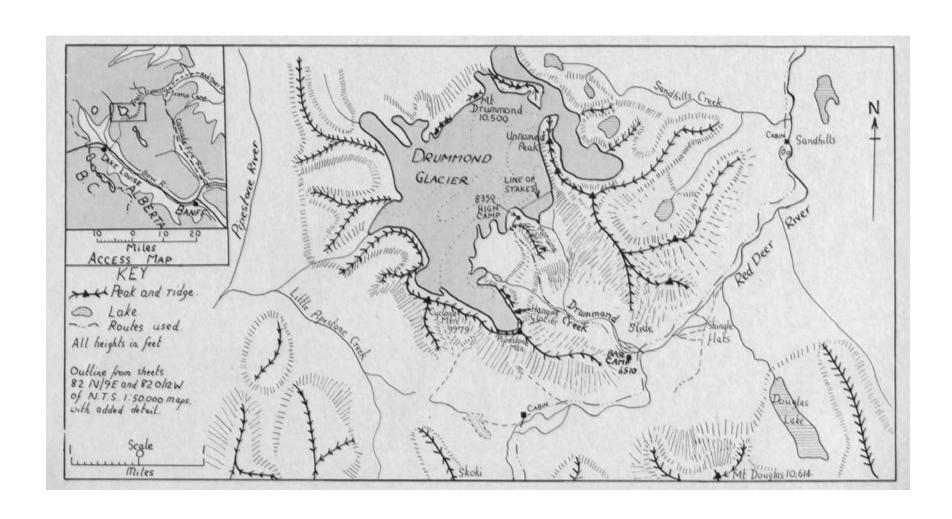
Alpine Studies In The Upper Red Deer River Valley

By J. Gardner, J.G. Nelson, And I.Y. Ashwell³⁹

During the months of July and August, 1963, a party from the Geography Department at the University of Alberta, Calgary, visited the upper reaches of the Red Deer River with the intent of initiating glaciological, meteorological, and geomorphological studies on and in the vicinity of the Drummond Glacier. These studies were a follow-up to the mapping of the surficial deposits in the Red Deer River valley between the Drummond Glacier and the town of Sundre. This mapping was carried out in the summer of 1962 by Mr. H. J. McPherson, a graduate student at the University of Alberta, Calgary, assisted by Mr. J. Gardner. Both the studies were financed by National Research Council grants to Dr. J. G. Nelson in 1962 and to Dr. Nelson and Professor I. Y. Ashwell in 1963.

A major purpose of this report is to describe what work has been done in the Red Deer

³⁹ J. Gardner is now a research assistant at the McGill Sub-Arctic Research Laboratory, Schefferville, P.Q. J. G. Nelson and I. Y. Ashwell are staff members in the geography department, U. of Alberta, Calgary.



Sketch of the Drummond Glacier Area



Colin Wyatt

Drummond Glacier, 1939.

River valley to date and what is planned for the future. Some remarks will be made on the findings of the expedition, although much of the data remains unprocessed at this time. Another basic aim is to make Alpine Club members, as well as others, aware that research is being attempted in the mountain area and that their assistance in obtaining old descriptions and photographs of the Red Deer River valley and particularly of the Drummond and nearby glaciers would be greatly appreciated.

Description Of The Study Area.

The Drummond Glacier is situated at the headwaters of the Red Deer River in the front ranges of the Canadian Rockies. The icefield covers approximately 10 square miles and lies at an altitude of between 8,000 and 10,000 feet above sea level. The area is most easily reached from Lake Louise via the Temple Ski Chalet but may also be reached from Scotch Camp on the Cascade Fire Road (see accompanying map).

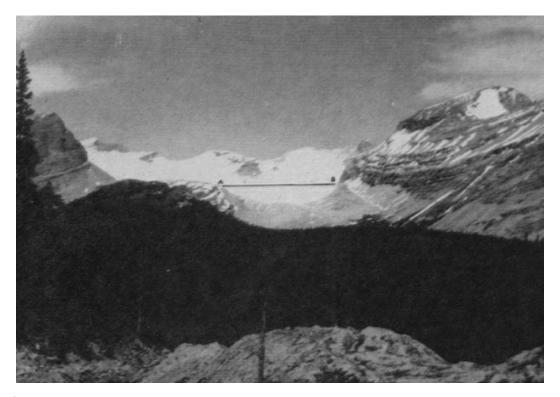
The icefield is dome-shaped, fairly uniform at the surface, and is remarkably free of crevasses. It is enclosed in an amphitheater of peaks which includes Pipestone and Cyclone Mountains as well as Mt. Drummond. Of the peaks making up this amphitheater there are at least six which exceed 10,000 feet in altitude. At present only one major tongue of ice issues from the main mass of the névé. Most of the icefield lies within the drainage basin of the Red Deer River. The ice drains chiefly into Drummond Creek which flows approximately three miles, after leaving the ice-front, before joining the Red Deer. However, several small subsidiary glaciers on the north and west sides of the névé drain into the Pipestone River system which joins the Bow River at the Lake Louise townsite. The steep, high-walled valley of Drummond Creek is reminiscent, on a smaller scale, of such glacial valleys as Yosemite and Yoho. In the first mile after leaving the ice front at an altitude of about 8,100 feet, the creek drops about 1,200 feet in a fairly restricted channel cut through an area of largely unvegetated recessional moraines. In the next two miles before joining the Red Deer River the creek drops only 300 feet, for the most part over extensive alluvial flats. However, at two locations the channel is restricted to small gorges which cut through bedrock and rolling irregular ridges that are believed to be old recessional moraines.

The vegetation of the area is largely a spruce-fir association, with scattered lodgepole pine adjacent to the clearings and a notable absence of larch. In the Banff National Park Forest Inventory this vegetation falls under the classification of 4S3, i.e. the trees are 45 to 60 feet in height, they are mainly softwoods (up to 25 % hardwood) and the canopy density is from 40 to 60 percent. Timberline lies at about 7,500 feet. The forest in some areas appears to be approaching maturity while in others it might be called over-mature. Remnants of burns are not widespread.

The 1963 Field Season.

The field party, which consisted of Dr. J. G. Nelson, Mr. I. Y. Ashwell, Mr. J. Gardner, Mr. B. Sullivan, and Mr. D. Gardner, moved into the study area during the last week in June. Most of the equipment was moved in by pack train from Lake Louise but the heavier glaciological equipment was flown directly from Lake Louise to the glacier by a helicopter from Spartan Air Services of Calgary.

A base camp was established near the junction of Drummond Creek and the Red Deer River at an altitude of about 6,700 feet above sea-level. The base camp was some three miles from the ice front. A water stage recorder, on loan courtesy of the Water Resources Branch, was set into operation on Drummond Creek about one-half mile upstream from the Red Deer River junction.



J. Gardner

Drummond Glacier, 1963.

To accompany the stage records the discharge was measured adjacent to the stage recorder using a Gurley meter also loaned from the Water Resources Branch. At the base camp a meteorological station was set up using equipment loaned from the Department of Transport, Meteorological Branch. The station was under the supervision of Mr. Ashwell and during the period of July 1 to August 9 observations were taken five times daily at 0800, 1100, 1500, 1800, and 2300 hours. The observations included: wet and dry bulb temperatures, maximum and minimum temperatures, 2", 4" and 8" earth temperatures, atmospheric pressure, precipitation, cloud cover and type as well as a continuous record taken on the thermograph and hygrograph.

Under the supervision of Dr. Nelson, river channel studies were carried out in Drummond Creek as well as downstream on the Red Deer River. Measurements of channel and bank erosion and of bed load movement were carried out. These measurements will be correlated with the discharge and weather data collected nearby.

The glaciological work commenced during the second week of July with the establishment of a high camp adjacent to the ice at about 8,400 feet above sea level. The work here during the remainder of July was severely hampered by bad weather which included several exceedingly heavy snowstorms. In essence the aim was to establish a line of ablation stakes across the ice tongue; and to drill a deep hole, using the hot point drill apparatus, about halfway across the ice tongue at approximately the same level as the ablation stakes.

Each of the ablation stakes consisted of two 10-foot lengths of aluminum tubing which were placed in the ice to depths varying from 5 to 10 feet. Ten such stakes were placed in a straight line between two fixed points on each side of the ice tongue. The stakes were then incorporated in a transit survey which included cairns placed in front of the ice as well as the fixed points along the sides of the ice.

After much trial and error a deep hole was drilled to a depth of 70 feet. Lack of time was the main reason for not going any deeper. The hole was lined with aluminum tubing and an inclinometer on loan from the University of British Columbia was used to measure and record the angle of inclination of the tube. Readings were taken every 10 feet and it was found that the inclination never exceeded 4 degrees. After the inclinometer readings had been completed the tube was filled with antifreeze in hopes that similar observations might be taken in subsequent years and data on ice movement obtained.

In addition to this work, meteorological observations were taken at high camp whenever it was occupied, cairns were placed by plane table at the front of the ice, and several tree-ring cores were taken along on ill-defined trim line.

From a cairn placed in front of the ice during the 1962 season it was found that the ice had receded about 68 feet in the period between July 6, 1962, and August 3, 1963. The retreat was approximately 45 feet between July 6 and Sept. 6, 1962, although several feet of this are thought to have been snow. These retreat measurements refer to an area of maximum retreat where the rate of recession is being increased by the activities of a sub-glacial stream. The five additional cairns set up at intervals along the ice front during 1963 should provide more reliable data on recession.

Photos seem to be one of the better methods of recording and observing the recent history of glaciers so that any photos taken in the past would be of great value to this study. One old photo has been located in The Call of the Mountains by Colin Wyatt⁴⁰. According to the author, this photo was taken in late July, 1939. A comparison of the 1939 and a 1963 photo taken from approximately the same position suggests recession in the order of one-quarter of a mile or about 1,500 feet. This would indicate an average yearly recession of about 63 feet which would correlate rather well with the figure of 68 feet obtained during 1962-63. The estimate was made by comparing the difference between the 1939 and 1963 ice tongue positions against the width of the tongue at section A-B (see illustrations). Several new photo observation stations were located about the ice during the summer of 1963 to serve as a base for future, more accurate retreat measurements.

Tree-ring counts were made with a Swedish increment borer near the unvegetated recessional moraine closest to the Drummond. None of the trees examined were on the moraine proper; nor did any show evidence of ice pushing. Another difficulty to accurate dating was the relatively recent burning of the pro-morainic area, so that few old trees remained. Nevertheless a number of old spruce and alpine fir were dated and found to vary in age from 150 to 250 years. Generally the first 90 years or so of the older trees showed narrower growth rings which might be an indication of cooler climatic conditions.

Several climbs were carried out in the course of the summer, one of which is believed to be a first ascent by Jim and Don Gardner of an unnamed peak of about 10,350 feet situated at the northeast corner of the Drummond icefield. Mounts Douglas and Drummond were also climbed as well as several smaller outlying peaks in the area. Climbs in the area are generally not of the highest standard which undoubtedly is part of the reason for the area not being more frequently visited by climbers. However, several peaks, notably Mt. St. Bride, offer a standard of difficulty which will certainly not be questioned. Most of the peaks have been climbed only once or twice and some not at all. Ascents were usually made by the line of least resistance so there is great possibility for new and more interesting routes.

To most mountain travellers the logistics problems associated with work in the Drummond

⁴⁰ Colin Wyatt, The Call of the Mountains, Thames and Hudson, London, 1952.

area are fairly obvious. These problems are met often, although on a much smaller scale, in weekend expeditions. Since the Drummond Glacier area is some 15 miles from the nearest vehicular transport, the problems of transporting food and equipment as well as personnel into the area become paramount. Undoubtedly the best method of transport lies in the helicopter. But obviously for an expedition of this size the expense all but puts it out of the question.

In our work, packtrain proved to be the only way to move much of the equipment into the study area but this presented problems of breakage or damage to the equipment. The problem of moving personnel into the area was easily solved: they walked! The fresh food supply at the base camp was maintained entirely by backpacking. Usually the two routes of approach, that is from Temple and Scotch Camp, were used alternately to add a little variety to the hiking in and out.

There is also the ever-present problem of mountain weather. During the 1963 season we saw both the worst and the best. On two occasions the glacier party was forced out of high camp by exceptionally severe storms, while during August the glacier work was greatly aided by exceptionally fine weather.

Future Work In The Area.

Obviously for this season's work to be of further value it must be followed by observations in subsequent years. With financial assistance forthcoming the plan is to continue as well as expand this study. Indeed, this area offers a fine opportunity for expansion of research beyond the realms of glaciology, geomorphology, and meteorology into the fields of botany, zoology, and geology. With the growth and development of the new university at Calgary to act as a base for research it would seem this expansion is quite feasible.

Glaciology In Canada, 1963

The following summary, as in past years, is abstracted from the annual report of the Sub-Committee on Glaciology, now the Sub-Committee on Glaciers, of the National Research Council. The report is edited by G. Hattersley-Smith.

Glacier studies in Canada in 1963 were so extensive that only the most comprehensive investigations are mentioned below. In each instance the locality of the study is followed in brackets by the sponsoring agencies.

1. ST. ELIAS MOUNTAINS, YUKON TERRITORY (American Geographical Society and Arctic Institute of North America). A party of 18 men of the Icefield Ranges Research Project, under the direction of Walter A. Wood, was in the field from early June until early September. Glaciological work included accumulation and ablation studies across the ice divide between Hubbard and Kaskawulsh Glaciers by R. H. Ragle (field leader of the project) and stratigraphic studies (studies of successive layers) of snow and firn by W. P. Wagner. Results indicate that the glacier is in a healthy state. Snow and ice samples were taken for oxygen isotope analysis by D. S. Macpherson of the University of Alberta. A geophysical team led by G. Clarke of the University of Alberta undertook seismic and gravity studies to ascertain the 'depth to bedrock below the icefields and outlet glaciers. A meteorological program was carried out under J. M. Havens and surveys under D. Sharni obtained fixes on markers placed in 1961, 1962, and 1963 in order to determine the movement pattern. R. P. Goldthwait and H. W. Boms studied the glacial geology around the terminus of Kaskawulsh Glacier and in Slims River valley.

- 2. SASKATCHEWAN AND ATHABASCA GLACIERS, ALBERTA (University of New Brunswick, Water Resources Branch, Dept. of Northern affairs and National Resources). A terrestrial photogrammetric survey of Saskatchewan Glacier was performed by a party under G. Konecny (U.N.B.). A triangulation net linked the survey with one of the Athabasca Glacier by I. A. Reid of Water Resources Branch.
 - 3. DRUMMOND GLACIER, ALBERTA. See pages 137-144 of this Volume.
- 4. BAFFIN ISLAND (Geographical Branch, Dept. of Mines and Technical Surveys). A total of 18 men under J. D. Ives were in the field for varying periods from mid-April until late August. R. B. Sagar was responsible for accumulation, ablation, snow profile, and meteorological studies on Barnes Ice Cap. Results indicate that the accumulation for 1962-63 was about 40 per cent greater than in 1961-62 and the summer climate was appreciably cooler and melt period shorter in 1963 than in 1962. Ice samples were collected, melted, and brought out for radiocarbon dating.

Lewis Glacier at the northwest corner of Barnes Ice Cap was studied by G. Ostrem, J. T. Andrews, and M. Church. A level survey was made up the glacier and ablation and movement markers established. No measurable movement was noted over a 5-week period. A permanent base line was surveyed and a plane table map of the glacier made. Volumetric fluctuations and silt content of Lewis River were measured.

Lichens were studied by Ives, Andrews, and P. Webber of Queen's University along the perimeter of Barnes Ice Cap in order to investigate the recent history of the Ice Cap. Results suggest that the northwest margin of the Ice Cap and Lewis Glacier started a steady recession about 2,000 years ago then re-advanced in about 1700 A.D. to form a series of valley end-moraines. An ice-cored moraine was formed during the "little ice age" but since 1700 A.D. ice has merely thinned without losing contact with the moraine. Ice gathered from within this moraine has been collected by Ostrem for radiocarbon dating, crystallographic analyses, and tritium dating.

A reconnaissance was made of the glaciers of the Bruce Mountains and photographic surveys made of glaciers elsewhere in Baffin Island and on Bylot Island.

- 5. DEVON ISLAND (Arctic Institute of North America). R. M. Koerner and U. Gaustad made six glaciological traverses across the summit of the ice cap. Accumulation, ablation, temperature, density, stratigraphy and grain-size studies were undertaken. The pattern found in 1962 of markedly higher accumulation on the southeast side of the ice cap than on the northwest was again noted in 1963. Two glacial meteorological stations on the ice cap were occupied by parties under B. Holmgren and L. Weinhardt. In April J. R. Weber of the Dominion Observatory made gravity and seismic depth measurements on the ice cap and on the large outlet glacier entering Brae Bay. C. M. Keeler and P. Cress carried out ablation, accumulation, englacial temperature, melt-water run-off, and meteorological observations on the outlet glacier above Brae Bay. Markers were set and surveys made to determine short-term movements and for the 5-year international glaciological survey.
- 6. WESTERN QUEEN ELIZABETH ISLANDS (Polar Continental Shelf Project, Department of Mines and Technical Surveys). The general program is under the direction of E. F. Roots with W. S. B. Paterson responsible for glaciology in the field.

Stakes were set in four small ice caps on Melville Island. These were surveyed by F. P. Hunt and the network will in the future provide information on movement, accumulation, and ablation. A. Spector of the Dominion Observatory made a gravity survey to determine ice thicknesses.

Accumulation and ablation studies were continued by K. C. Arnold on the ice cap of Meighen Island. Plans are being made to core through the ice cap, starting in 1964. The principal purpose of coring the hole is to study the temperature and strain rate within the ice cap.

7. AXEL HEIBERG ISLAND (McGill University). A party of four under F. Muller carried out glaciological, glacial-meteorological, and geo-morphological work in the Thompson Glacier region from mid-June to late August. Preliminary calculations show that the main budget for 1962-63 was positive. Winter accumulation was several times larger than the mean value of previous years, and net ablation relatively small. Seventy-two sites in the accumulation area were chosen for long-term accumulation measurement and equipped with aluminum masts, tall enough to record the accumulation for the next 5-8 years. In addition, 14 polyethylene "percolation trays", one meter square, were placed on the 1963 surface to catch percolating melt water of future summers. Markers were set into 15-meter-deep drill holes to record net ablation and surface movement of the next 5 years or so. An ice shaft was sampled from layers back to 1920 for micrometeoroids of lunar origin. Two weather stations were operated. H. Maag continued the survey of glacier dammed lakes in 1961. Driftwood washed from under the Thompson Glacier has been assigned a radiocarbon age of 7,000 years. Two fine 1:5,000 maps of White Glacier and the terminus of Thompson Glacier were prepared under the direction of T. J. Blachut, Photogrammetric Research Section, National Research Council.

8. NORTHERN ELLESMERE ISLAND (Defence Research Board). Glaciological work from mid-May to late August was under the direction of G. Hattersley-Smith. Surveys were made of the termini of four valley glaciers near Tanquary Fiord. Movement studies were initiated at stakes drilled into the ice and stereo-photographs taken from stations off the glaciers. Detailed movement and ablation studies over the ablation area of one of the glaciers were started. The greatest movement measured was 85 meters per year at the steepest part of one of the glaciers. R. L. Christie of the Geological Survey of Canada observed ice thrust features and a small glacial lake with apparently perennial coarsely crystalline ice cover in which were embedded musk ox bones and ancient moss-covered boulders.

The DRB party made measurements of snow cover and sea ice thickness at several stations during an oceanographic traverse along the length of the fiord. Shells were collected up to 75 meters above sea level.

A large outlet glacier at the head of Otto Fiord appears to have recently made a catastrophic advance of about 3 kilometers as a floating tongue with extensive calving of icebergs.

A traverse of the ice cap during which ablation and accumulation measurements were made indicates that the budget of Gilman Glacier was strongly positive in 1962-63. Exceptionally low accumulation and high ablation for the 1961-62 budget were evident.

A four-man party visited the Ward Hunt Ice Shelf. The 1960 markers across the shelf were resurveyed. It appears that the strain rate on the ice shelf is so low that more accurate methods than chaining and triangulation are necessary for measuring it.

Prepared by

J. O. Wheeler

IN MEMORIAM

Dorothea Sophie, Lady Wheeler

It is with great regret that we have to chronicle the death of Lady Wheeler, an Associate Member of the Club for thirty years, and the devoted wife of our one-time President, Sir Edward Oliver Wheeler.

The passing of any member of the Club always produces a void in our hearts and minds, but particularly so in the loss of Lady Wheeler who had been regarded with respect and affection by so many of our membership over the years.

There was a note akin to that of tragedy in the circumstances of her death, which followed a serious illness after her arrival in England where she had gone in the spring of 1963 to revive former intimate ties with the remaining members of her family, whom she had not seen for a number of years. Following Sir Oliver's death in 1962 she had moved from Vernon, B.C., to West Vancouver where she might have the companionship of her son, Dr. John, and his family and connections. However Sir Oliver's illness, which had been protracted and attended with repeated anxieties, imposed a long physical strain, which she had borne with exemplary restraint and fortitude, but had sadly impaired her own health. She was subject to a severe stroke in England and passed peacefully away on September 7th 1963 at Cranleigh in Sussex attended by her sisters.

Lady Wheeler was the youngest of a family of six and spent her childhood in a delightful English countryside. Later there was a period of schooling in Switzerland where the Alps became an early inspiration for her. She afterwards formed an intimate acquaintance with a family of whom two members, Mrs. A. F. Wedgewood, and the letter's distinguished mountaineering brother, Dr. Tom Longstaff, are still members of the Club. With the former she established a close and enduring friendship; through these associations she first met her future husband who, after directing the Club's Welcome Home Camp for its returned War members at Mount Assiniboine in 1920, returned to India, and married her at Bombay. Subsequently they led a very happy and attached life in a variety of circumstances connected with a soldier's duties at different stations in India. During periods of furlough they visited Canada, and attended our Camps at Paradise Valley in 1933 and Little Yoho in 1937. Following Sir Oliver's retirement and their return to British Columbia in 1947 they attended camps from 1948 to 1952 inclusive; in these years there were also attendances at the excursions into the Rockies as organized by the Skyline Hikers. In 1956 it was a gratifying surprise to see them coming into the Club's Fiftieth Anniversary Camp at Glacier, B.C., for a brief visit, but this was the last occasion on which they were capable of such an effort.

While Lady Wheeler did not actively engage in the mountaineering exploits of her husband, the mainspring of her life was a constant support of him in these activities and interests, as well as in the affairs of his noteworthy career in the Survey of India. In all her occupations and pursuits she displayed a cultured and enquiring mind and in her friendships a warm and cheerful personality. By nature she was charmingly unaffected and sincere and it is significant that all her qualities combined to make her deservedly greatly esteemed by the many members who now deplore her passing and will cherish her memory.

The Club extends its profound sympathy to Dr. John Wheeler, her only son, to his immediate family and connections, as well as to three sisters in England.

F. C. B.

Donald Neil McTavish

In 1907, at the end of its first year of operation, the membership of the Alpine Club of Canada was 252 in all classifications, whereas the recent issue of the Red Book shows the names of only six surviving original members. It must now be an amendment to the record that one of these, Mr. D. N. McTavish, passed away on April 11, 1963, in his 86th year.

Although there can be few who recall him in person, he gave memorable support to the Club in its formative days, and was one of those original members, without knowledge of the techniques of climbing, who responded enthusiastically to the tutelage of the C.P.R.'s Swiss guides of the day. He showed aptitude for escorting parties and then in leading climbs and many young aspirants to active membership considered themselves very fortunate to be allocated to his care. He was most co-operative in the affairs of Camp life under the direction of Mr. A. O. Wheeler, the President, and a very popular man at the evening Camp fire gatherings. In all this he was associated with his "identical" twin brother, "P. D.", and the similarity of the two in appearance, expression, habits and mannerisms led to many ludicrous misunderstandings which they both turned to good account in adding to the amenities of Camp life and proceedings.

"D. N." came to British Columbia from Ontario in 1889, taught school at Rossland for a couple of years, moved to Calgary, where he was married, and then to Vancouver which became his permanent home. He was essentially a man of the out-of-doors in his early life and it was natural for him to acquire a great love of the mountains and interest in the craft of climbing them. He was notably proficient in what he undertook and of a fine spirit, and it used to be said that in his person he signally illustrated the previously untested fact that whereas Canada had a vast mountain heritage to explore, she also had the type of Canadian who could successfully climb and name our peaks.

After a half dozen years of mountaineering activities he dropped out of Camp scenes but appeared at meetings of the Vancouver Section and his last attendance was at its 50th Anniversary dinner when it was a great pleasure to receive his greetings. But such are the changes of the years that there were few to recognize in the quietly-spoken reminiscent man the exuberant and enthusiastic mountaineer of yester-years. If his contemporaries are few his loyalty to the Club became almost a matter of legend to those who followed him. His passing now leads to sincere regrets but with these we may couple the satisfaction that his name will continue to recall what were the comradeships and enthusiasms which characterized the Club's early years of high endeayour.

Our deep sympathy is extended to his widow, one son, a brother and two sisters who survive him.

F. C. B.

William K. MacGougan

A tragic car collision which occurred on the Calgary-Banff Highway June 1, 1963, took the lives of four young men, one of whom was William K. (Bill) MacGougan, 20-year-old son of Dr. and Mrs. M. K. MacGougan. Bill's early interest in the mountains centered around the family summer home at Windermere Lake in the Columbia valley. In company with his father and friends he made several back-packing and canoe trips into the Rockies and Selkirks which border the valley. It was naturally not long before he developed a strong liking for climbing. In 1960 he joined The Alpine Club of Canada and under the watchful eye of Calgary Section leaders was fast becoming an excellent all-round climber. He attended the Club's Summer Camp at Fryatt Creek

the same year, graduating to active membership and enjoying a strenuous schedule of climbing activities. He later climbed Mt. Hungabee in the Lake O'Hara region and Mt. Tupper above Rogers Pass.

Bill had also become a first-class skier, proving equally at home on the steep slopes at Banff or the open terrain above timberline. In the early Spring of 1963, with a group of University friends, Bill spent ten days making a traverse of the Waputik Icefield by ascending the Peyto Glacier and returning down the Niles Glacier. They made several ski climbs, including Mt. Baker and Mr. Balfour, the highest peak in the region.

In school life Bill was always well up in his classes and at the time of his death had just graduated with a B.Sc. degree in Chemistry from the University of Alberta in Edmonton.

Quiet, capable and unassuming, Bill's company always meant a great deal to those who accompanied him to the mountains. He will be greatly missed by all of us. Several of his youthful friends hope to materially assist in erecting a climbing hut in his memory in the near future.

In Calgary his memory will be perpetuated by the William K. MacGougan Bursary Fund set up by his parents to assist in the education of young men at the pre-university level.

To Dr. MacGougan, who is a former Chairman of the Calgary Section, and Mrs. MacGougan we extend our sincerest sympathy in the loss of their eldest son, a young man of great promise.

BOOK REVIEWS

Mount Everest

By Toni Hagen, G. O. Dyhrenfurth, Ch. Von Furer-Haimendorf, And Erwin Schneider Formation, Population, and Exploration of the Everest Region; Translated by E. Noel Bowman. 195 pages, 31 plates, 24 figures, map in pocket. Oxford University Press, London, 1963. \$8.00

The book is divided into four parts. Part I on the Evolution of the Highest Mountain in the World by Toni Hagen concerns the geological history of Nepal with special emphasis on the Everest region. The author, a Swiss geologist, spent from 1950 to 1958 doing geological mapping in Nepal on behalf of the Technical Assistance Administration of the United Nations and consequently is the authority on the geology of the region.

Hagen devotes the first third of his contribution to a description of his methods of study, previous geological research in the Himalaya, and a brief account of his own work and how he pieced together the geology. He obviously enjoyed his work in this fascinating country but his enjoyment was somewhat diminished when his family had to return to Switzerland after two years.

In many accounts of Himalayan travel the writers convey the excitement they felt upon unravelling a complicated geographical problem. Hagen, as a geologist, relates how he derived some of his greatest excitement from geological discoveries such as the finding of key fossils in critical areas, the recognition of great overthrust faults, or bridging the gap between two known structures. Another aspect of Hagen's work is revealed when he relates that it was his unpleasant task to shatter the legends and dreams of the Nepalese regarding their mountains and replace them with facts and ideas founded upon scientific principles.

The main part of Hagen's contribution is his description of the geological evolution of the Himalaya. His discussion is aided by reference to simplified structure maps and sections, especially to restored sections inferred for a particular time in the past. Nevertheless, it is difficult

to follow his account of the area outside the Everest region because of the lack of a good sketch map of Nepal. Although the author has tried to make his account readable for the layman, a reader not versed in geology, particularly Alpine geology, may find the going heavy.

Of particular interest to mountaineers and especially to those travelling in the region is his discussion of the characteristics of the Everest glaciers and their relationship to the vagaries of the climate in this part of the Himalaya.

Part II by G. O. Dyhrenfurth briefly summarizes all expeditions that have travelled in the immediate region around Everest up to 1960. A minor criticism—on page 99—Smythe in 1933 reached a point reached by Norton (not Wager and Harris) nine years before. It is surprising there is only incidental mention of the ascent of the south peak of Everest by Bourdillon and Evans.

Part III is entitled the Sherpas of the Khumbu Region by Christoph von Fürer-Haimendorf, an experienced Asian ethnologist who spent 1953 and 1957 in Nepal. He discusses the origin, distribution, life, customs, and society of the Sherpas, and the changes mountaineering expeditions have made in this society. The sudden affluence of Sherpas who have accompanied expeditions has brought to the fore a class of men formerly in the shadow of families whose status was backed by inherited wealth. Some resentment has been created since sudden affluence has always been regarded with suspicion and, moreover, to the dismay of Sherpa society long years of expedition work has made some porters egocentric. Although earnings from expeditions have benefited many families the absence of young men from Khumbu has necessitated immigrant labour from Tibet.

Part IV by the noted Austrian climber, Erwin Schneider, is on the history behind the preparation of the 1:25,000 map of the Everest region, principally on the Nepal side. Schneider recounts the work of all those, including his own in 1957, who made surveys in the area. He describes the trials and tribulations of the first detailed survey on the Tibet side by E. O. Wheeler (not O. E.). One can perhaps understand Wheeler's feelings on his experience in the region when we realize that forty years ago high altitude clothing consisted of such ancient garments as ordinary climbing boots, puttees, numerous sweaters and heavy tweed coats rather than down jackets, parkas, down pants, and insulated boots!

The 1:25,000 map is shaded differentially not only to produce a three-dimensional relief but also to indicate the various types of terrain. For instance, in addition to indicating snow, ice, rocks, lakes, streams, and forests, various shades and patterns outline regions of bedrock, scree, moraine and overgrown land.

The book is a valuable addition to Himalayan literature and anyone wishing to travel or climb in the Everest region would do well to consult it first. It provides not only the one excellent map of the area but also references to the most important literature on the region up to 1960.

J. O. W.

Nawok!

By Philip Temple

Nawok! the New Zealand expedition to New Guinea's highest mountains. London: Dent, 7,962. 78,9 pp., illus., maps. 30/-

"Nawok" is a Dani word meaning "start walking, get moving". It was a word used increasingly by the six members of the 1961 New Zealand expedition as they shouldered loads and slogged through seemingly endless miles of swamp along the West Baliem River in Dutch New Guinea. Their objective was the 16,500-foot unclimbed Carstensz Pyramide, New Guinea's highest peak which they approached from the north rather than from the south as had three previous

expeditions. Being the first to do so their expedition turned into an exploration of unknown terrain. Failure of an airdrop meant that the party had to withdraw just as it reached the mountain.

The reconnaissance that this expedition made resulted in the successful ascent the following year by Heinrich Harrer's expedition of which Philip Temple was a member. A useful appendix assesses the expedition's findings on plans, weather, maps, Dani carriers, and equipment.

V. S.

Safety In The Mountains

5th ed. 35 pages. Wellington: Federated Mountain Clubs of New Zealand, 1963. 120 pp., diagrams. 3/6.

There are, it is said, many mountain ranges but only one Mountain World, and much of the content of this pocket-sized handbook will be as useful to the North American as to the New Zealander. Emphasis is placed not on merely avoiding dangers but rather on development of skills and techniques to minimize them. Chapters are devoted to such subjects as food and equipment, camping and firelighting, route-finding, weather, and first aid. The section describing techniques of river-crossing is both novel and useful but not many Canadian climbers will agree with the advice in the chapter on equipment that (for ice axes) "Slide rings and wrist straps are not recommended." Other sections deal with the mountain safety problems peculiar to skiers (both the touring and chairlift varieties), hikers and hunters.

It is noted that publication was assisted by a government grant. Other governments might heed this example to encourage the production of a similar low-priced handbook in Canada.

I. B. K.

Athabaska-Saskatchewan Glacier Surveys

Glacial Surveys in Western Canada. Paper presented to the 29th Annual Meeting of the American Society of Photogrammetry, in Washington DC., March 1963, by G. Konecny, Associate Professor, Division of Surveying Engineering, University of New Brunswick, Fredericton, N.B. Multigraphed, 14 pp.

The Editor gratefully acknowledges a presentation copy of this report, which is highly technical in its treatment of a combined aerial photo and ground survey of these glaciers in great detail. The Honorary Librarian received from Dr. Konecny large-scale reproductions of the plotting of two of the principal glacier surveys—The Athabasca Glacier on a scale of 1:4800, on which many of the contours are shown for 10-foot intervals, and the eastern part of the Columbia Icefield on a scale of 1:25,000 with 100-foot contours. These are also gratefully acknowledged, and will be added to the Club's map collection in the Vancouver Public Library.

CLUB PROCEEDINGS

Alpine Club Of Canada Ski Camp, Outpost Lake, March 1963

By Sylvia J. Evans

There is something suspicious about those gaily coloured folders which claim that certain ski resorts have the maximum amount of snow AND sunshine simultaneously. If you cannot have the ideal conditions, you may as well admit philosophically that snow is more useful for skiing



Sylvia Evans

"Ski-doo" sleds and trailers at Wates-Gibson Memorial Hut



Sylvia Evans

Summit Ridge of Mt. Clitheroe

than scenery—and there was plenty of genuine powder snow in the Tonquin region in March 1963. Those who were not sufficiently familiar with the surrounding peaks to visualize them in all their splendour could come back to the summer Camp in July—to see the Ramparts plastered in fresh white snow! All the factors under human control were competently managed to make the 1963 Ski Camp thoroughly enjoyable.

In 1949 Ski Camp was held beside Outpost Lake at the newly built Wales Memorial Hut, with Rex Gibson officiating at the opening ceremony. This hut could not accommodate the usual Ski Camp attendance although many smaller groups of skiers used it. Eventually it was replaced by a larger building, located on the wooded rise above the lake, in time for the 1963 Ski Camp to be held in the new Wates—Gibson Memorial Hut. We felt that Rex would have approved of this camp, and also of our use of mechanized transport, since he pioneered with "Weasel" vehicles to take supplies to the Lord Lovat Scouts in this area during World War II.

Bill Ruddy, helped by other Jasper A.C.C. members and friends, had already made a generous contribution to the new hut by moving in heavy furniture and equipment during the winter, transported on his fleet of motorized sleds of the "Ski-Doo" make. The Park Warden's winter vehicle trail could be followed for about three quarters of the distance to Outpost Lake; Bill Ruddy then found a good route the rest of the way for sledding our supplies and packs to the door of the hut. Fresh meat, vegetables and fruit enhanced our diet, and it was a pleasure to ski to the camp on a well-broken trail, with the drudgery of back-packing eliminated. Some skiers, who preferred to exercise their arms instead of their legs, arranged to be towed by the Ski-Doos as far as the trail was fairly level.

Eric Hopkins, the camp manager, with four other Edmonton members went in a day ahead, and worked hard to get the camp in order. On March 23rd the majority of the group assembled in Jasper, and as soon as the B.C. members arrived on the 9:30 a.m. train we set off by bus for the 17-mile drive to the upper viewpoint on the road to Mt. Edith Cavell. This was the only hazardous part of the trip in, as the road was icy in places; but there was enough manpower to get the bus turned at the crucial hairpin bend. While the baggage was being loaded at the viewpoint the skiers set off along the Astoria River Valley trail. At the halfway point it was a pleasant surprise to find Jo Kato brewing tea and coffee. This service was continued for several hours as groups of skiers arrived to rest and eat their lunches.

Eila Tervonen, our noble cook for this camp, streaked ahead on her cross-country skis; and when all the hungry horde had reached the hut, we had the first of many memorable meals: thick pea soup with chunks of ham, and lattyja. The menu for the following week was duly posted; but anyone who couldn't read Finnish was kept in suspense until the delicacies appeared on the table. The popularity of Eila's fresh apple cake (which was demanded daily) was only exceeded by the popularity of her home-made bread.

On Sunday, 24th March, four more members arrived bringing the total attendance to 32. The cabin was very comfortable for this number of inhabitants. We were all able to sit down to meals at the same time; and in the evenings we could relax without crowding, while reading, chatting, playing cards or planning expeditions on invisible mountains. A few hardy campers decided to sleep outside in snow caves! This was no problem, because the excavation of piles of firewood left deep pits where caves could be cut out of the sides without much trouble. The reason for the move outside is not certain; but it is a fact that Ski Camp is getting so luxurious it does little to prepare one for the rigours of Summer Camp.

Members attending this camp were from the following places: Chicago, Seattle, San Jose

(California), Bozeman (Montana), Ottawa, Vancouver, Kelsey Bay (B.C.), Tofield (Alta.), Calgary and Edmonton. Willy Pfisterer came from Jasper as professional guide and instructor. Although the weather precluded any attempt at fancy mountaineering, Willy's help was much appreciated. He gave lessons in deep snow technique, which were an inspiration to lesser skiers even if we didn't all note much improvement in our ability to wedeln in 36 inches of fresh powder snow. He gave an interesting talk on avalanches, based on practical experience and experiments in "riding" small avalanches.

At least a few inches of snow fell each day. Parties started out hopefully in the morning but often found themselves in cloud after ascending about 1,000 feet. Poor visibility and new snow slowed the return runs. However, it was usually agreeable skiing in the woods and on the "practice hill" to the east of Outpost Lake or the rock slide to the west of the hut. Trips were led by Willy Pfisterer, Phil Dowling, Don Linke, David Wessel, Lucio Mondolfo and Eric Hopkins. Destinations included McDonnell—Bennington Col (via Fraser Glacier), Angle-Alcove Col (via Eremite Valley and Glacier), Surprise Point Meadows, Clitheroe Meadows and Tonquin Hill; but the conditions higher up often made it futile to persevere to the destination.

In spite of the weather two climbs of McDonnell Peak were made through wind and blizzard, to enable some members to complete a graduation climb. Ascents were also made of the north peak of Clitheroe and little Maccarib Mtn. It was not worth while to cross over into the Simon Creek Valley; and Para Glacier was avoided because of avalanche danger. Nevertheless there is a wealth of good skiing terrain in the vicinity of Mt. Fraser, Tonquin Valley and the Eremite, with gentle slopes safe in all weather and more sporting places to ski when conditions are suitable.

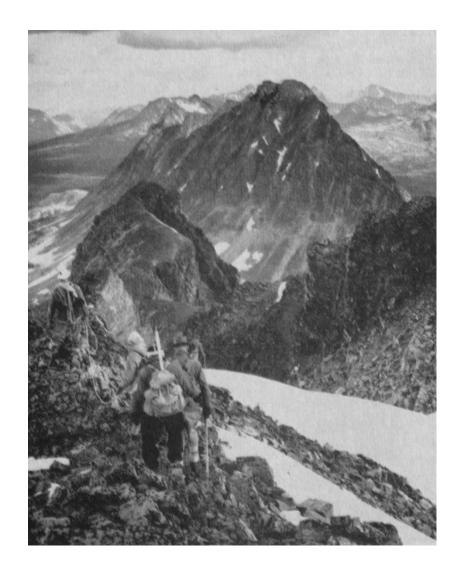
There was an evening of entertaining skits and songs, with characters ranging from an alluring siren to an abominable snowman. The usual Ski Camp meeting was held, giving us a chance to congratulate the camp manager and staff on the success of their efforts and to make proposals for the future. One intrepid individual suggested that the skiers should get up earlier in the morning, whereupon there was a muttered query about whether his membership had been approved, and an unguided missile hurled through the kitchen hatch expressed the cook's views. The motion was easily defeated. The camp boy, Steve Helburn, recommended that at the next Ski Camp the lake should be nearer to the cabin—but it seems that Park regulations will prevent the implementation of this worthy idea.

It was decided we should try to have 1964 Ski Camp in one of the areas (such as the Columbia Icefields or Maligne Lake) where road building and development may soon diminish the wilderness seclusion we prefer. There was unanimous agreement that Outpost Lake is an excellent place for Ski Camp and we should go there again soon. In the meantime the camera fans could concentrate on "mood" photography. In any camp this might be as great an asset as the fine spirit of cooperation which made the 1963 Ski Camp so congenial and happy.

1963 A.C.C. Annual Camp-Eremite Valley, Jasper National Park

By Roy Compston

The memories of the people of the mountains, members of the Alpine Club of Canada, are small treasures to be hidden from many, but released from the storehouse of the mind by the sight of familiar trails and white peaks and the friends who shared them, they become vivid again before the fire ring at the Annual Camp. So the high peaks and swampy meadows of the Eremite Valley

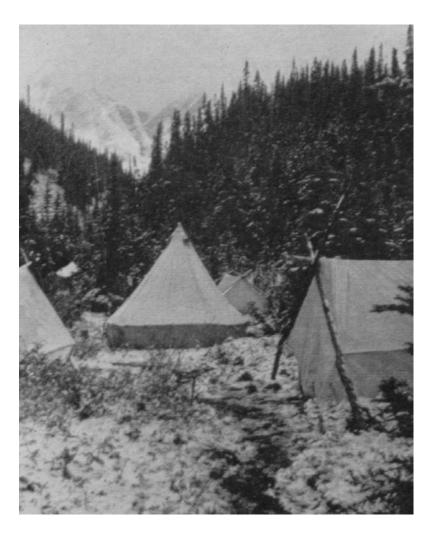




Harry Rowed Returning to Camp

Harry Rowed

Jumping the Bergschrund



Mary Fallis

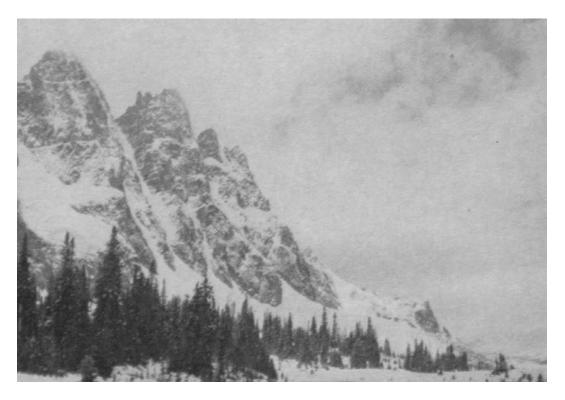
"Summer" (?) Camp, 1963

are added to the storehouse of memory of those who lived briefly with them in 1963, to be brought out once more to be laid for approval before other mountain people who could not be with us to share the contentment that isolation and physical trial bring to all who experience them.

From the staging area at Edith Cavell viewpoint, the trail leads west along the swift Astoria River and it is good to feel the comfort of climbing boots again and to settle into the straps of the back pack as we move in straggling groups to our first rest at the halfway cabin of the Park Service. On our right and left are Oldhorn and Throne and then the mighty Ramparts appear to the west, snow-clad Redoubt, Paragon, Parapet and Dungeon. This is perhaps the most impressive group in the Rockies to many who love the Tonquin Valley. Gradually we become oriented as we check our positions with the map and rare glimpses of the sun. There's a new wooden bridge over the Astoria since we crossed it last on skis and it seems much too elaborate and sturdy to boots familiar with slippery rock and sunken logs. Our re-crossing of the river leads us to climb a bit on shale on the Eremite Trail as we bear a little to the southwest, but all too soon we begin to know the potholes and mud of an overused trail which is to be our lot until we arrive in camp. Ahead we face the Ramparts, their tops clear of cloud, closing us in our valley. Some are forced to move up into the trees to escape mud and mosquitoes; all the while the packs seem to become heavier,

even though we have gone through some of our stores of water and trail food. At Chrome Lake corner some become lost for a time as they wander about following a maze of tracks made by the pack train as it has sought better going in its daily struggle with nature. What wonders these tired horses accomplish as they fight their way through a sinking morass of mud and water, heavy with our baggage and food. To see them on the trail lifts some of the fatigue from stiff muscles of legs and back as we realize that we can choose our path more carefully and judge our pace as we wish. Moving beside the Penstock River we become more aware of the brilliant colours of the high altitudes as the photographers seek out the many species of Indian paint brush, with their variations of white through yellow and orange to red and dark purple—what a profusion of mountain blooms we can find in this valley! The great Ramparts shield us now to the west as we see the horse lines and blue wood smoke of camp ahead. Here we are—the familiar three flags and the fire ring, the brown tents, the white medical tent and the marquee where we crowd together for our meals, the crowded tea tent and the boxes, tables and documents of Cam Ledingham's place. Best of all are the familiar faces of old friends and memories of odd headgear, badges and jackets. These bring back to us the names and nostalgia of past trips together—we are in camp once more. Stragglers arrive in camp throughout the evening and many wait for dinner and baggage from the pack train—late with an overload of food and kit bags of the week-end arrivals. Most are early to bed on their first night, lulled by the rush of the Penstock adjacent to their tents in the meadow.

Each morning's awakening is a cold one, brought to reality by a brave attempt at a military wakee-wakee by George Wallis on a brass bugle. A quick wash and a hot breakfast is the order now, a check once more of the name of our leader for the climb today and by 7 a.m. we join the leader and our climbing companions, shrugging into the light climbing pack and settling into the



Mary Fallis

The Ramparts After Summer Snowstorm

mountaineer's steady approach march pace. Favourite climbs are Angle, Alcove and Anchorite as well as the traverse of Memorial to Outpost. Lunch is shared on the snow slopes or on top, camera fans dash about seizing opportunities to catch some startling shots of roped climbers against the sky. The novices tread lightly along the knife edge approaching the final ridge of Angle and with caution the steep snow slopes of Anchorite. Hans Schwartz, our professional guide, takes this one and accomplishes daily climbs without apparent strain, but for a man recently familiar with Mount McKinley, our valley is no great challenge. The graduating members swear that the snow slopes are 70 degrees—the novices know they are 80 and the leader smiles as he replies that this calls for deeper steps—and be sure to clean them out! Memories of the graduating climbs are discussed around the fire ring in the evening—the slip that pulled the next one on the rope off her feet, the lazy day following the graduating climb, the congratulations, the last exposure in the camera which coincides with the arrival on top, the antics of some of our European visitors, the sureness of the leader as he carefully watches his party and the sadness as the last drop of celebration wine is poured.

Of course it rained—it always does here, but this is an opportunity to catch up on clothes drying in a steaming overcrowded drying tent, letter writing and bridge in the overloaded tea tent, dozing "in the sack" and just plain nattering and visiting and glowering at the sky. Foot blisters are the care of Phyl Mundy, but the hospital tent is uncrowded, we are all healthy, fed in large and well-planned amounts by hard working Tom McCready and the ever-cheerful camp staff, cooks, wranglers and busy high school girls. Who can find grapefruit before morning porridge, homemade pies, sirloin steaks and even TV dinners in any other mountain camp in the world!

The warmth of the fire ring in the evening will be remembered. How we enjoyed the German and English songs and the hour-long lecture by Dr. P. J. Theorides as he described the phenomenon of the eclipse of the sun, a Saturday event. There were no complaints at the thickness of the cocoa in the evening before bed or the bursts of smoke that chased us around the fire; these were our life. No one worried about the grizzly and her three cubs wandering on the scree on Outpost. Many crossed to the New Memorial Hut to help with painting and cleaning up before the official opening of July 21. Who will soon forget the blue and yellow gentians and the lillies on the shore of Chrome Lake, the dashing red tiger lilies of the meadow?

There was more snow than usual on the high peaks this year and many of the big ones were too covered to attempt. McDonnell was successfully climbed by an ambitious party, while devotees of the short day clambered up the "Three Mice" east of camp, a favourite outing. The names of Redoubt, Geikie, Paragon, Beddington and Erebus became familiar to our many members from the U.S.A. and Europe, as climbers from Edmonton and Calgary pointed out their routes of past years. Those who looked for the best view on a day of relaxation climbed Outlook on the east side of camp and many watched the sun's eclipse from the top of this favourite.

And the most ambitious trip of camp? This is one that won't be forgotten by Bill Angus and Phil Dowling of the Edmonton section. Few have the energy shown by these two—a first ascent of the northeast peak of Chevron Mountain, west of Edith Cavell on the way in to camp, and an arrival in the rain at nine at night. This peak is accessible from Verdant Creek. From 6 a.m., the climbers faced an uncertain route on slippery rock and slush, following the east ridge, traversing north across the face, roping here 300 feet below the summit and placing a piton for safety 150 feet below the northeast summit. At 12:30 noon they were on top at 9,000 feet; finding no cairn, they built their mound of rock and placed the record of a first ascent, a day's work of stature, not assisted in the slightest by a peeled-back Vibram sole on Bill Angus' boot!

Yes, there was snow. One morning we woke to find a world of soft and sticky white and cameras were busy as three tired men crawled from a collapsed tent. We remember the Annual Meeting of July 22, the official opening of the Wates-Gibson Hut with Ethne Gibson and her daughter assisting; the quiet happiness of the 34 who graduated this year. Yes, this was a time to remember!

The Wates-Gibson Hut, Outpost Lake

By P. J. Dowling

A gentle rain was falling on our shoulders. Amidst three large fires burning old construction leavings, about 80 members of the Canadian Alpine Club Summer Camp watched as 9-year-old Kathie Gibson cut a strip of red seismic ribbon to open the new Wates-Gibson Hut at Outpost Lake in the Eremite Valley. The date was July 21, 1963. It was an event which I shall not forget and toward which many of us had worked hard for its successful accomplishment. Our road to this success had been long and demanding.

In 1960, after approval of construction of a new hut to replace the old one at Outpost Lake, a survey party from Edmonton under the direction of Eric Hopkins and Don Linke made a survey of general sites around the lake. Park regulations necessitated the construction to be at least 100 feet removed from the lakeshore. A committee of the Edmonton Section chose a site about 150 yards around the lake to the north of the old hut. This provided the most level area, least clearing, easy access, good foundation conditions and acceptable outlook. The site was staked for future reference and Don drew a site plan for the benefit of the Parks Department.

During the winter of 1960-61, Eric Hopkins approached Mr. H. A. Dowler of Pigeon Lake to propose a layout and prepare a plan of the new hut. Dowler's plan was an ambitious one, a 2-story structure measuring 20 feet by 40 feet long and having a large kitchen and common room on the main floor, with sleeping accommodation for 40 persons on the second floor. Two staircases were to be provided as well as a large fireplace in the common room. We approved the idea of a sleeping shelf in the loft to allow the separation of bodies and baggage and, if need be, to accommodate twice the number of incumbents on two layers—one layer on the floor and one on the shelf. Specifications were written for calling of tenders which included particular reference to foundations and outhouses, not the least of our responsibilities.

Two prices were obtained in the spring of 1961, the highest of which was submitted by Dowler. Our experience with less-qualified contractors had proven to be a poor investment of Club money and we knew Dowler's reputation and work at the Wheeler and Stanley Mitchell Huts. We favored him and gathered support in this regard from Ethne Gibson who had a first-hand interest in the project. Our recommendations to his acceptance were approved by the Management Committee.

In July 1961 the Club president, Harry Green, gave authority to the Edmonton Section to form a Hut Building Committee. The responsibilities of this committee were to draw up a contract with Dowler, to supervise construction, and to furnish the hut. By August, with the help of Cam Steer, a contract had been executed with the builder for the bid price of \$12,500. Horse packing of floor boards and cedar shingles commenced mid-month and log cutting was undertaken before the beginning of September. The Labor Day inspection party found the ladies' quarters of the old Wates hut to be filled to the brim with lumber and supplies. The kitchen floor was heaped with



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Kathie Turns the Key

tin goods from the work crew of three who slept before the fire. Feminine hands soon tidied up the mess, but our party had to sleep in the loft, a memorable experience for me as I was the only man in the group. Our evenings were pleasantly engaged in conversation with Buster Duncan of Valemount, B.C., who was cutting the logs for the cabin. Duncan was working for Johnny Unland of Jasper who had contracted this portion of the work with Dowler. A good stand of timber was not found close to the site, requiring a considerable amount of skidding of logs from neighboring areas. Mostly balsam was cut and the timber was stockpiled parallel to the cabin position for winter seasoning.

The materials which had been packed to Outpost Lake had to be transported in two lifts—firstly to Brewster's Amethyst Lake Camp and secondly to the hut. Two packers and twenty packhorses were required. Samples of sand and rock were sent out for Dowler's inspection as he was determined to have good mortar for his stonework, even if he had to pack the proper aggregate to the site. Poor mortar had meant the literal downfall of the first Tonquin Hut.

Following this initial period of activity, the construction of the hut went into a limbo period known as winter. In March 1962 a group of three Section members met with Dowler at the University Hospital in Edmonton to discuss construction. Dowler himself was too old to do the work but hoped to have his sons Bill and Don execute the construction. Don had recently left for the Wildlife Service and so Bill, the elder brother, would be in charge. Mr. Dowler reminisced about his early alpine days, his first ascents in the Coast Range,⁴¹ his enthusiasm for the mountains and his hope of visiting the site on horseback that summer.

Less than a month later, on April 3, 1962, Hobart Allen Dowler died at Fisher's Home, Alberta, at the age of 82 years. The load of construction fell squarely on the shoulders of his son, Bill—and on us.



Mary Fallis

Signing the Register

Later in April we received Permit No. 02756 expiring October 12, 1962, for the construction of a cabin, as planned, with some minor revisions among which, to our amusement, was one amending the risers on the staircases as being too steep! These stairs were 3 feet wide, of half-split logs facing up with landings and handrails! Strictly Class 1 climbing difficulty!

Via the mountain grapevine, we heard that Bill Dowler was taking his crew in on July 5. This crew was to include Mrs. Dowler who was to do the camp cooking. An unfortunate accident occurred during the journey on the way up Penstock Creek. Mrs. Dowler's horse, while climbing on the broken ground surrounding the creek, reared back and fell. Mrs. Dowler had one leg pinned beneath the horse and against a rock. This resulted in severe damage to her leg. The next day she was evacuated by horse and spent about a week in Jasper Hospital. She was a loss to the work party in that the men had to do their own cooking and Bill lost his wife's company.

Apparently undeterred by mishap, Dowler commenced construction on a 7-day-a-week, dawn-to-dusk basis. The foundations and first wall logs required care and attention which took time, but once the base of the hut had been laid, work progressed rapidly. Some extra timber had to be cut as an insufficient supply had been stockpiled the previous summer.

The Dowler party lived in the old Wates hut during the construction of the new one and when Ethne Gibson visited the site later in the month, she found that there was hardly anyone who had enough time to speak with her.

The Building Committee had suggested some modifications late in June and asked the builder to incorporate these during construction. Ethne Gibson performed the invaluable service of checking on these details which included a serving hatch from the kitchen to the common room and the installation of six skylights in the roof to provide more light in the loft during daytime hours. Unfortunately, the latter were installed at right angles to their proposed position but later use has proven this to be no great inconvenience.

Exactly one month after commencement of construction the crew left Outpost Lake, a completed structure behind them, an amazing example of co-ordination of manpower and materials in so short a period of time.

Three weeks later, Robi Fierz and I made an inspection trip for official acceptance of the finished work. Neither of us will forget that moment as we came through the rain-soaked trees into the clearing to that great hut, its logs all creamy white because of their newness, a monument seemingly placed as if by a miracle in the wilderness. We thought it had been placed there just for us.

"Holy Mackinaw", said Robi. "My gosh", said I. To our eyes, this was no hut, it was a chateau!

We were puzzled by the sight of a large tree which had fallen across the back of the hut topping itself on the roof ridge, the uppermost 10 feet laying in front of the hut. The balance of the tree had apparently slid to the ground but not done any damage except for punching a few small holes in the roof.

Notwithstanding this, our stay was spent checking the drawings and specifications and detailing requirements for cupboards, benches, etc. We found that the specifications had been closely followed and few details had been overlooked. The old Wates hut had been demolished with only the foundations remaining intact and the logs neatly piled beside it. We reported to the Management Committee, and recommended that final payment be made. We walked out via the high trail with Robi muttering about the autumnal coloring of the mud.

Labor Day weekend 1962 saw a large party of Edmonton Section members on the site

cleaning up the rubbish around the hut and cutting wood for the winter supply and Spring Ski Camp. An inexhaustible heap seemed to have been prepared with the use of two chainsaws and many able hands. The women took an inventory of the existing utensils and from this we made up a list of our new requirements. A large woodshed was ingeniously constructed and all the blankets and sleeping bags were packed out by horse for cleaning and repairs.

The following winter had no limbo period for the Building Committee. The furnishings had to be decided on, designed, ordered, manufactured and shipped to the hut. We were pressed into acting quickly in order to take advantage of the use of snow toboggans for packing and also to make the hut ready for the following spring camp.

Our plans included benches beneath the common-room windows with seat boxes, polyurethane padding on the sleeping shelf, a large wood heater in the common room with sheet metal convectors, a rustic table and four chairs to match, temporary seating for 40 persons at meals including stacking stools, tables and chairs, a new kitchen stove, stainless steel sinks and drain, new vermin-proof cupboards, work tables, tools, utensils, plates and all the useful whatnots that are required of a good alpine hut.

The warehouse facilities of our company were made available for stockpiling of these items in Edmonton and the staff became used to the clandestine movements of trucks and manpower at odd hours. Finally, by Christmas, the majority of items were ready for shipment and all were transported by van to Jasper and restock-piled at Snowmobile Tours.

Over the Christmas holidays and in early January 1963, Bill Ruddy, with two skidoos, performed a task of transport probably unequalled in the Rockies. An estimated 1500 pounds of furnishings and supplies were pulled over the 16-mile trail to Outpost Lake. The services of this equipment and the men to operate it were volunteered to the Club and the expense was borne by our Jasper members. Such items as 4- by 8-foot sheets of plywood, complete sets of kitchen cupboards ready for installation, a cookstove, and other odd-shaped items, made the wintry trip. All was deposited in the common room. A sum slightly in excess of \$2,100 was spent on the contents of this hut.

One day prior to opening of Ski Camp, a work party from Edmonton arrived to prepare the hut. There was so much material stacked in the common room, we were hardly able to commence the unpackaging. A phenomenal amount of cardboard and paper was stripped from the shipment, surely enough to start fires for the next 20 years. We burned it all and installed the furnishings in a flurry of arms and legs.

During the spring and early summer we corresponded with Ethne Gibson concerning the choice and wording of a new bronze plaque in memory of E. R. Gibson. Two plaques have now been mounted over the fireplace. The earlier one was in memory of C. G. Wates and is mounted to the left, reading: "The members of the Alpine Club of Canada have erected this hut in loving memory of their fellow member and one-time president, Cyril Geoffrey Wates. May his spirit rest in this region that he pioneered and loved so well". To the right of this memorial, we mounted the Rex Gibson plaque, thoughtfully worded by Ethne Gibson as follows: "The Wates Hut was rebuilt and enlarged by the Alpine Club of Canada in 1962-63 in loving memory of Rex Gibson who had also served as president of the Club. His early climbs in Canada were made here with Cyril G. Wates. Wherever he afterwards climbed, he regarded this valley as his home".

Since the official opening last summer, we commissioned Bill Harrison to oil logs, paint the roof and do certain interior painting. Leonard Jeck of Jasper made the rustic furniture we required. We think the job is now finished.

It was a long time from the first conception to the minister's opening words over a pot of alpine flowers last July. Many members did much for that last hour. For my part, I thought it was well worth the effort to know that we had contributed to that occasion when Harry Green, our president, presented the key of the hut to Ethne Gibson and she, with her daughter Kathie, spent a golden moment which they, and we, will long remember.

The following letter was received from Mrs. Cyril Wates:

Will you please convey to the members of the Alpine Club my very deep gratitude for the honour they have paid my husband's memory in building the new Wates-Gibson Memorial Hut. It is indeed a great joy to me to know that he is still remembered in the Club.

It is particularly fitting that the Hut be called Wates-Gibson, linking the names of two men who not only pioneered the Tonquin Valley but also were firm friends who made many delightful climbs and expeditions together.

I am indeed sorry that I cannot be present at the official opening but I wish the members many years of happy climbing from the Wates-Gibson Memorial Hut.

Sincerely yours Helen B. Wates

A Short History Of Alpine Huts In The Eremite Valley

By P. J. Dowling

The Wates-Gibson Memorial Hut at Outpost Lake is the third to be built in this valley by the Alpine Club of Canada. An interesting history has been developing in the region for a period of more than 30 years.

The first hut was known as the "Memorial" and was built of stone, near Penstock Creek at the foot of Surprise Point. It was distinguished by the fact that it had been designed by M. C. Wright, an architect. Jack Hargreaves of Jasper constructed it. Funds for this undertaking came from three sources, the first of which was a memorial fund set up to remember members of the Edmonton Section who had died during the First World War and on mountaineering expeditions. The second source of funds came from the Slark-Rutis Memorial Fund. After making the first ascent of Redoubt Peak in 1927, both men were killed during the descent. The fireplace and a bronze plaque were made available from funds sent by alumnae and students of Purdue University in memory of their past president, Dr. Winthrop E. Stone, who was killed while descending from the first ascent of Mt. Eon in 1921.

It is interesting to note that the project of constructing the first climbing hut was originated by the Edmonton Section in 1927. It was considered to be a very pretentious undertaking for a Section which had a membership of less than twenty. Its ruins can still be seen on the true left bank of Penstock Creek about half a mile from the tongue of the Fraser Glacier at an altitude of 6150 feet. The chairman of the original building committee was Cyril G. Wates and it was officially opened on August 17. 1930, by a party including the chairman, Rex Gibson, Cora Sutter and Jack Hargreaves, among others.

At the end of the Second World War, the Club decided to replace the ruin of the first memorial hut with a new structure which would act as a memorial to C. G. Wates, affectionately known as

"The Skipper". A past president of the Club, he had been a most distinguished gentleman not only in mountaineering matters but also for his outstanding achievements in amateur astronomy. At the Club's 1947 Glacier Camp a building committee was formed which included Eric Brooks, Sydney Vallance and John Brett. The latter member prepared the drawings for the new hut. A contract was made with Edgar B. Martin, a log builder and stonemason who had done work at Sunshine. The structure was 28 feet by 16 feet and had a small front porch. Mrs. C. G. Wates donated the fireplace in the common room on the face of which was mounted The Skipper's ice axe. The site was chosen by Dr. Canfield Beattie and Sydney Vallance, who remembers that the whole period of construction was marred by hordes of mosquitos. The hut was finally inspected and accepted by the chairman of the hut committee, H. H. Rans, on August 22, 1948. An official opening took place at the first Ski Camp in the area on April 18, 1949. This hut provided shelter for many climbing and skiing parties during the 15 years it was in use and many of us have come to know and love the Tonquin and Eremite Valleys by virtue of its presence in the area.

CORRECTION

Mt. Waddington

Re the article "First Woman Up Main Tower of Waddington", page 34 of C.A.J. 1963, and "Kafer Party Climbs Waddington", page 30. We have just been notified by Mr. Henry Hall that Virginia Gill Mohling (now Mrs. Powers) was, in 1960, the first woman to reach the summit of the main tower of Mt. Waddington.

A brief summary of the trips to Mt. Waddington in 1960 follows: July 1960 —First party was the ill-fated Vancouver party led by John Owen. C.A.J. 1961, p. 64.

August 3rd 1960—Second party was Seattle Mountaineers who climbed the summit of the main tower of Mt. Waddington. C.A.J. 1961, p. 28.

August ? 1960—Third party, led by Franz Mohling, with Virginia as a member of the party, climbed the summit of the main tower of Mt. Waddington.

We have never been notified of this ascent before; consequently Mrs. Esther Kafer is the second woman to climb the main tower of Mt. Waddington. She also was a member of the party led by her husband, Martin Kafer, to climb the Northwest Summit of Mt. Waddington by a new route in 1962.

-Editor