

The Logan Mountains, Northwest Territories

ARNOLD WEXLER

THERE has been little in the way of mountaineering in the northern latitudes east of Alaska and the western fringes of the Yukon. This may be due, in part, to the prevalent notion among climbers that the interior of the Yukon and the Northwest Territories is devoid of mountaineering possibilities; this may be due, also, to the remoteness and relative inaccessibility of the region. Surprisingly enough, there are attractive mountain ranges in the northern interior, most of which are untrudden. Among the more interesting are those that lie along the boundary between the Yukon and the Northwest Territories and collectively comprise the Selwyn Mountains. These mountains are subdivided into three major groups: the Logan Mountains, the Hess Mountains, and the Wernacke Mountains.

The Logan Mountains are the southernmost group, extending north to the Ross River, west to the Francis River and Francis Lake, and east to the South Nahanni River. The Logan Mountains are little known and have seldom been visited. In 1937, the Harry Snyder expedition made a preliminary survey of the area around Brintnell (Glacier) Lake, traveling by stern wheeler from Fort Smith down the Slave River, through Great Slave Lake, and down the Mackenzie River to Fort Simpson. From here it proceeded by outboard motorboat up the Liard River to the South Nahanni River, ascended the latter to Virginia Falls, and completed the final lap of the journey to Brintnell Lake by air. In an account of the expedition, in the 1937 *Canadian Alpine Journal*, H. F. Lambert wrote about "jagged peaks, like the Dolomites in their bold formation" and "extensive snowfields at elevations of about 7,000 to 8,000 feet."

In the early summer of 1952, Richard Shamp of Washington, D. C., led a small expedition into the South Nahanni River country. Flying from Watson Lake, Y. T., he landed on the South Nahanni River and then made a circuit trip through the northeastern reaches of the Logans, traveling up the Brintnell River valley to Brintnell Lake, crossing a low pass into a northward flowing watershed area, and subsequently returning to the South Nahanni and down the South Nahanni by raft.

That same year the Yale Mountaineering Club sent a party into the Logan Mountains. From a base camp on Brintnell Lake, the members of this group climbed nine peaks, mainly to the south around Fool's River. Dudley

W. Bolyard, in reporting on the Yale expedition in the 1953 Canadian Alpine Journal, wrote in glowing terms of the "unlimited possibilities for ascents of virgin mountains rivaling the Alps and Cascades in grandeur and difficulty" and of "extensive granite pinnacles."

On July 2, 1955, Sterling Hendricks, Donald Hubbard, Dave Bernays, Ray D'Arcy and I gathered at Watson Lake, Y. T. Hendricks, Bernays, and D'Arcy had driven up the Alaskan Highway from Edmonton, while Hubbard and I had flown in from Vancouver. Early the following morning, G. C. F. Dalziel transported men, food and equipment to Brintnell Lake in a de Havilland Beaver and a Cessna 180, depositing us near its western extremity on a prominent spit of land. The air distance was 150 miles; the flight took one and one-half hours. We had asked Dalziel to fly over the mountains, if possible. He cooperated and took us across the heart of the range. The view of the Logans, first from the air and then from the ground, was an exhilarating experience. In spite of the forewarning by Lambert and Bolyard we had not anticipated the ruggedness that confronted us. The mountains were startling in their vertical uplift. The peaks were not high in absolute altitude, attaining, at best, elevations of 9,300 to 9,500 feet; but since the mountains rose out of valleys as low as 2,600 feet, they had an unexpected relief of more than 5,000 to 6,000 feet. The rock was predominately granite, with metamorphic intrusions. Many of the mountains had smooth, exfoliated faces that bordered on the unclimbable, knife-edge ridges, and spire-like summits.

Brintnell Lake is at the eastern edge of the mountains at latitude $60^{\circ} 05'$ N. It lies near the outlet of the narrow Brintnell valley, receiving its waters from Brintnell River and discharging into the South Nahanni River. It is an excellent lake on which to land a seaplane. Some of the finest peaks are easily reached from the lake. The "Cathedral Peaks" are immediately west of the lake, with Mt. Harrison Smith (E. Cathedral Peak) dominating the foreground. Colonel Mountain and Mt. Ida are to the south, forming the true right flank of the valley.

We cached most of our supplies and, with three days' rations, moved up Brintnell valley. Two miles west of the lake, a large basin extends northward into a cluster of peaks. This became our objective. We ascended steep slopes on the true left wall of Brintnell valley, through bush and over rock slabs, to a pleasant alpine meadow at the entrance to the basin. Later, we discovered that the talus slope at the base of Mt. Harrison Smith formed a natural avenue to the basin. Ray D'Arcy had separated from the party during the day and, after spending one night in the bush, returned to Brintnell Lake.



"CIRQUE OF THE UNCLIMBABLES." (*Below*) "MOUNT HIGHER POLYMER,"
FROM "MOUNT PEACOCK." By Arnold Wexler.





MOUNT SIR JAMES MacBRIEN FROM MOUNT HARRISON SMITH. By Arnold Wexler.



"MOUNT PROBOSCIS" WEST FACE, FROM MOUNT HARRISON SMITH. By Arnold Wexler.



"STURMSPITZE" AND "MOUNT MOOSEJAW" (CENTER) AND "MOUNT IOTA" (EXTREME RIGHT).
East Flint Glacier between "Moosejaw" and "Iota." By Arnold Wexler.

The next day we reconnoitered the terrain above camp. The basin was divided into small amphitheatres; we explored the first two amphitheatres to the west. The "Cathedral Peaks," with Mt. Harrison Smith at the eastern extremity, form the southern wall of the first amphitheatre, while at the western head is "Mt. Proboscis." The peaks rise out of this amphitheater in bleak, black, smooth faces. Even with careful scrutiny through field glasses we could discern no obvious approaches to the summits. The rock was unrelenting in its high angle and unbroken expanse. The peaks forming the second amphitheatre were equally bulwarked with sheer faces. All we did was look and then retreat to camp. This was our introduction to the "Cirque of the Unclimbables."

The following morning we surveyed the third and fourth amphitheatres. These followed the same pattern. We could discern no reasonable routes, except on Mt. Sir James MacBrien. This mountain, which is the highest peak near Brintnell Lake, is at the northern end of the basin. Two slivers of snow on the lower slopes slanted diagonally upwards and to the left. The lower snow shelf gave access to the ridge, but there we encountered a discontinuity that could not be easily bridged. We therefore traversed eastward on the south face between cliff bands to a chimney that connected with the ridge above the discontinuity. Except for one friction pitch, the ascent to the summit, generally over good rock, but in part over snow and bare ice, was uneventful.

On July 6 we broke camp, descended to Brintnell River, returned to Brintnell Lake, and reunited the party. At the time we assured ourselves that the shortage of food and our concern over D'Arcy were the compelling motives for pulling out of the "Cirque of the Unclimbables." In retrospect, I suspect that part of our haste in leaving that area was the feeling of frustration engendered by these peaks with their sheer faces of flawless granite. They looked impregnable and impossible. It is likely, however, that on closer examination interesting routes may be evolved. I know of few mountain ranges in Canada that offer such a challenge to the rock enthusiast.

With provisions for 10 days, we traveled up the Brintnell, camping that same evening at the base of Mt. Harrison Smith, and, on the succeeding evening, on the first gravel flats in the upper Brintnell valley. At the point where the Longwell Glacier discharges into the Brintnell the latter executes a big bend. The river at this bend has gouged out a formidable canyon. We climbed the true left wall of the canyon, contoured above it, and eventually reached the gravel bars near the head of the river. On the eighth of July we climbed the slopes leading to the first basin, above the big bend, on the true left side of the Brintnell. We set up camp at timber-

line, on a level with a prominent waterfall formed by the outflow from the basin.

The basin was subsequently named the "Higher Polymer Cirque" and the prominent mountain at the head (northern end) of the cirque was designated "Mt. Higher Polymer." On the ninth, the entire party ascended "Mt. Higher Polymer"; the climb took 17 hours. A small, but active glacier fills the basin. The snout was bare ice, but the upper area was covered with snow of the consistency of whipped cream. The right (east) arête of "Mt. Higher Polymer" was reached by kicking steps up a snow gully that terminated in a col. From there we ascended about 1,000 feet of firm rock at an average angle of 70 degrees. The climbing was excellent, although, to attain the summit ridge, it was necessary to negotiate several pitches of well-weathered friable rock. About 300 feet from the summit, the ridge broke sharply into a vertical drop of 25 feet. The party split into two groups. Each, in turn, rappelled off, climbed to the summit, returned and reascended the step with a belay from above.

There is a long gully that runs up the north face of the mountain from slightly west of the east col to the eastern end of the summit ridge. On the descent we set up three long rappels in the gully. This was a trying operation, for the rock was rotten and loose. The better course would have been to have descended on the more vertical, but firm, adjoining east ridge. From the col the trek back to camp was straightforward.

July 10 was a Sunday and, appropriately enough, a rest day. On the 11th, Hubbard and I traversed "Mt. Peacock" while Bernays and D'Arcy climbed "Mt. Contact." The latter is on the contact line between the granitic rock, which extends to the north, and the metamorphic rock, which fronts on the Brintnell River. The mountain rises to a triangular point and drops sheer for over 1,500 feet on the east. The ascent, from the glacier, was up the west face to the south arête and along the ridge to the summit. The main distinction of "Mt. Contact" is that it provides an approach to "Mt. Proboscis." We had studied "Mt. Proboscis" from the "Cirque of the Unclimbables." Its east face is an unbroken 2,000-foot smooth wall that almost defies description. From the "Higher Polymer Cirque," the west face is almost a mirror image of the east face, although the relief is not so great. The arête from "Contact" to "Proboscis" is the obvious route, except that it is a knife-edge with vertical discontinuities. Bernays and D'Arcy moved up the ridge to the first step and, after expending six pitons and two rope slings, retreated.

Hubbard and I followed the glacier to its western end to the base of "Kleinespitze." To the north was "Mt. Higher Polymer"; to the south,

"Mt. Peacock." We veered toward the latter, but to reach its north face we had to cut steps up a 60-degree slope of bare ice. The rock was so well fractured that the holds gave dubious security. Fortunately, after 250 to 300 feet of climbing, the average angle decreased. At 11:45 A.M. we stood on the summit. The return was made by continuing the traverse to a scree slope on the back (southern) side. This, in turn, connected with a gully that terminated near the snout of the glacier.

On Tuesday, we moved camp once more, this time across the Brintnell River. On the southern side of the valley, the Flint Glacier and Icefield extend northwest at an elevation of 7,000 to 8,000 feet for perhaps 10 miles; the Harlin Icefield extends southeast, also covering an appreciable area. These two icefields give this region an alpine appearance. "Mt. Moosejaw" and "Stürmspitze" occupy a prominent position between the two. Two long ridges extend northeast from the former summit, like the open jaws of a moose; a small stream issues from the tongue of a glacier entrenched between the two ridges. On a shoulder of the western ridge, at about 6,000 feet, we established a camp.

On the following day we divided our forces into two groups. Hendricks, Hubbard, and I traveled up the East Flint Glacier and climbed "Mt. Iota," a peak in the center of the Flint Icefield and "Stürmspitze," the highest mountain in this immediate region. The weather was uncertain to bad, overcast and occasionally snowing. "Stürmspitze" is on the Harlin-Flint divide and in good weather would provide an excellent vantage point from which to view the country. Bernays and D'Arcy first ascended "Moosejaw," approaching it up the glacier between its two ridges, climbing the eastern ridge and following the latter to the top. They then descended to the col between "Moosejaw" and "Stürmspitze," crossed the East Flint Glacier and climbed "Mt. Boot," on the Harlin-Flint Divide, by way of the northwest arête.

Two days of intermittent rain and snow confined us to camp. Early on Saturday, July 16, in spite of dubious weather, the entire party left for an excursion into the Harlin Icefield. To reach the latter, we went up the East Flint Glacier and crossed a shoulder of "Stürmspitze." At the southern edge of the Harlin Icefield, due south of "Stürmspitze," is Mt. Snow Dome. To reach it we trudged across the Icefield on breakable crust. Every few steps, someone would crash through the crust into water saturated snow, sinking, at times, hip deep. However, this was the only hazard. The climb to the summit was up a scree slope to an ice cap. The round trip consumed eight hours.

Our food supplies were running low, forcing a return to the food cache on the lake. On the 17th, we packed down Brintnell valley to the base of the slopes leading up to "Cathedral Cirque." After sitting out one day of rain, Hendricks, Bernays, and I continued to the cache, picked up provisions and returned. On Wednesday, July 20, we pushed up the slopes to "Cathedral Cirque," over slabs and through alder. Camp was set up on the only level spot, at the entrance to the cirque, near a small stream. We were excellently located for the "Echelon Spires," the "Pentadactyl Spires," "Middle Cathedral Peak," and Mt. Harrison Smith. Collectively, these are the "Cathedral Peaks." They offer rock climbing of every degree of difficulty.

Mt. Harrison Smith has a relief of over 5,000 feet. One gets the impression, when viewing it from Brintnell Lake, that it is a monolithic monument of polished granite. The aspect from the "Cirque of the Unclimbables" is no less severe. Hendricks and I set out on Thursday to reconnoiter for the route possibilities. We climbed over the outer right shoulder of the massif above camp onto the south face. A series of ledges broke the face into bands of vertical cliffs. We traversed these ledges, ascended slabs and cracks, and finally intersected the arête below a gendarme. A 35-foot finger traverse on the north face took us around this gendarme to the main peak. Next we climbed the gendarme, then traversed westward along the ridge to the "Middle Cathedral Peak," and descended via the prominent gully below the "Middle."

On the same day, Hubbard, Bernays, and D'Arcy climbed the "Outer (First) Echelon Spire." A snow chute, in the gully between the "First" and "Second Echelon Spires" gave access to the north face, and thereby, to the top.

On Friday, Hubbard, Bernays, and D'Arcy repeated the ascent of Harrison Smith and the "Middle," and continued on to climb "Pentadactyl One." The "Pentadactyl Spires" are interspersed in a row between the "West" and "Middle Cathedral Spires."

Hendricks and I climbed the "Second," "Third," and "Fourth Echelon Spires." A precipitous snow-filled gully cleaves the western wall of "Cathedral Cirque." Near the lower end of the gully, where the snow fans out on talus and scree, a narrow ledge could be attained. This we followed upwards across the base of the "Echelons"; it broadened and opened onto a high boulder slope which connected with the summit of the "Third Echelon." From there we ascended the "Fourth" and then retraced our steps to the "Third" and onto the "Second."

The following day we made a mass attack on the "Pentadactyl Spires." The result: Nos. 2 and 3 were climbed. Hendricks and I had observed a system of connecting greenery and recesses from the "Echelons" that offered the promise of a route. We headed for this system, intersecting a broad diagonal bench that commenced on a vertical line with No. 4 and ran upward and to the right. After 500 feet we took the second pronounced gully that went slightly back to the left. At its terminus we crossed a shoulder, again to the left, followed a narrow grassy shelf into a large couloir, and ascended directly to the col between "Pentadactyl Spires Nos. 3 and 4." Once there we could generate no enthusiasm for venturing out on the high angle faces of "Pentadactyl Spire No. 4." We turned our attention to No. 3. It was vertical on the south; on the northwest it was inclined, rooflike, at an angle of 45 to 50 degrees for 300 feet. Handholds were sparse so that the climbing was largely on friction; there were no breaks in the rock and few belay stances were visible. After two attempts at negotiating the roof, we retired from the col. Part way down the couloir we chose a shallow chimney that slanted up and to the west, leading to the col between Nos. 4 and 5. Once more we were confronted with an inclined roof on No. 4 and steeper walls on No. 5. No. 5 is actually a double-peaked spire, cleft on the south by a precipitous, narrow, and wet chimney. Again we felt no inclination to do more than look. We then traversed across the south face of No. 5, about 100 feet below the level of the No. 4-5 col, to the narrow chimney. It was less attractive than the routes from the col. At this point we were content to return to camp to the comfort and security of our sleeping bags.

The others were successful in their approach to the "Spires." Following a large gully, they reached the No. 1-2 col and traversed over Nos. 2 and 3. The climbing was interesting and enjoyable.

The weather deteriorated sufficiently so that we were immobilized the succeeding two days. On Tuesday, July 26, with food at a low ebb, we descended to Brintnell Lake. Two more days of uncertain weather confined us to low altitude activities. On Friday, July 29, our pilot arrived and evacuated us to Watson Lake.

Summary of Statistics

- ASCENTS: Mt. Sir James MacBrien, July 6, 1955; entire party.
"Mt. Higher Polymer," July 9, 1955; entire party.
"Mt. Peacock," July 11, 1955; Hubbard and Wexler.
"Mt. Contact," July 11, 1955; Bernays and D'Arcy.
"Mt. Iota," and "Stürmspitzze," July 13, 1955; Hendricks, Hubbard,
and Wexler.
"Moosejaw" and "Mt. Boot," July 13, 1955; Bernays and D'Arcy.
Mt. Snow Dome, July 16, 1955; entire party.
Mt. Harrison Smith and "Middle Cathedral Peak," July 21, 1955;
Hendricks and Wexler.
"Outer Echelon Spire," July 21, 1955; Hubbard, Bernays, and
D'Arcy.
Mt. Harrison Smith, "Middle Cathedral Peak," and "Pentadactyl
One," July 22, 1955; Hubbard, Bernays, and D'Arcy.
"Second, Third, and Fourth Echelon Spires," July 22, 1955; Hen-
dricks and Wexler.
"Second and Third Pentadactyl Spires," July 23, 1955; Hubbard,
Bernays, and D'Arcy.
- PERSONNEL: Dave Bernays, Ray D'Arcy, Sterling Hendricks, Donald
Hubbard, and Arnold Wexler.