out" effect which makes other climbers look as if they floated in white space. An acute sense of direction enabled the party to reach the foot of a great bergschrund separating the glacier from the upper ice cap, at an elevation of 11,000 feet. It was getting rather late, and, although the weather was beginning to clear, a decision was made to remain until the next morning, since the lower lip of the bergschrund afforded a good spot for a bivouac.

The next morning, July 28th, fortunately brought the best weather of the entire trip. After the inevitable spilled pot of cereal in the tent, crampons were again adjusted and the ropes straightened out. Leaving the tent and equipment, the party proceeded west until a place was found where the bergschrund could be surmounted with a bit of step cutting. A short rest was made after the southeast arête was gained. The arête, a series of large cornices which rise 1700 feet at a constant 45-degree angle, was perhaps the most dangerous part of the climb. The climbers remained on the arête in two ropes, even though cornices went crashing down a few feet from them. Wading in snow which reduced the effectiveness of the crampons, they approached another bergschrund 250 feet from the summit. This was the point at which Claunch had been forced to withdraw on his last attempt because of high wind and bad weather. From a technical standpoint this was the most interesting part of the climb, requiring the cutting of a great number of steps on a face that descended to Kinney Lake, now nearly 10,000 feet below. Once the bergschrund was finally surmounted, the ascent was readily made. An hour was spent on the summit, taking photographs and placing an American flag with a record of the first ascent in 14 years of the highest peak in the Canadian Rockies. GERRIT T. BRATT

Mt. Robson from the East. "God made the mountains, but good God! who made Robson?" exclaimed Conrad Kain, who led the first ascent in 1913. It was with high hopes, but with bleakly realistic expectations that Dave Bernays, Craig Merrihue, and Dmitri Nabokov set out to climb Robson; our ambition was not to use the relatively straightforward traditional route on the south side of the mountain, but to make a second ascent by Kain's original itinerary.

Arriving by hearse from the Harvard Mountaineering Club climbing camp in the Northern Selkirks, the party went from Jasper by the new dirt road to Robson Station. After 50 miles through the Yellowhead Range and other foothills, our growing impatience was abruptly dispelled as we beheld Robson for the first time, its summit veiled in dark storm clouds, a peak both ominous and majestic.

The first night was spent in the yard of Roy Hargraves' ranch. It was decided that the following day, if the weather improved, Roy would send packhorses with us to his Berg Lake Chalet, which was to be our farewell contact with civilization. Sunday, August 9th, dawned bright and promising. The morning was devoted to general organization and making up of loads for the horses. Soon after midday the party set out, accompanied by two packhorses under the charge of a mounted guide and a personable young lady on her way to take over housekeeping duties at the chalet. The entire caravan arrived at the chalet just at nightfall.

The following morning, again a beautiful one, we departed for the lower Robson Glacier. As we ambled the pleasant mile and three-quarters to the glacier behind our little pack train, our imagination was dulled and we did not think of the abrupt cessation of luxury awaiting us at the edge of the ice and stemming from the unfortunate fact that a crampon had not as yet been devised for pack animals. After the initial shock had passed, we resolved to take the largest loads possible on our first trip up the glacier and return for the rest. Each laden with some 75 pounds of equipment, clothing, and food, the party trudged up the easy slope of the lower glacier. Camp I was established comfortably below the icefall, and a pleasant night, interrupted only by occasional glacial creaking, was spent by all.

The next day was passed in a reconnaissance, with three objectives: first, it was necessary to find the best route through the icefall; second, to decide upon a second campsite; third, to supplement theoretical route planning with a good look at the mountain itself. The basic plan of attack was to mount the Dome, the shoulder below the main ridge of Robson, and to climb from a high camp there. Our observations, however, did not reveal a straightforward way onto the Dome. The possibili-

ties consisted of a crevasse-ridden circumvention to the southeast, or left, of the Dome (roughly Kain's route of ascent), a scramble up a rather tenuous rock gully on its face, and a traverse on snow to the right, or north, of the Dome, alarmingly close to the trajectory of frequent missiles from the upper icefall. We decided, therefore, to establish high camp on the upper glacial plateau, at the foot of the Dome. On the reconnaissance we had tried to cross the icefall as low (i.e., its westernmost portion) as possible, where we had hoped to encounter more or less gentle terrain. This way, however, turned out to be rather unpleasant for a heavily-loaded party; camp was moved on the 12th via a much more easterly route, at the steepest, but at the same time the shortest and simplest part of the icefall. We ascended an obvious ice trough near a spectacular cave in the ice wall, climbed past a most alarming teetering serac, found our way across several large crevasses at the top, and crossed the moraine of the upper glacier to reach the new campsite.

August 13th presented us with the most magnificent morning to date. Robson glistened in the early sun, its summit seemingly within a snowball's throw of camp. Leaving at four, we followed the third of the previously-considered routes, not a bad choice, it turned out, but also not the best. Using crampons from the start, we kicked up easy snow and scrambled over some outcroppings of rock, to arrive on a broad shelf consisting of the twisted masses of the upper icefall, directly to the right, or northwest, of the Dome. We proceeded up the Dome itself by a direct route over snow and ice to the west of the rotten rock ridge and just to the east of the principal avalanche chute.

After a brief snack on top of the Dome, we set out, at about eleven o'clock, across a wide shelf of rolling snowfields and approached the central mass of the mountain, the principal problem of the climb. We were confronted with a formidable ice slope, ranging in angle from 50° to 60° and supporting a small hanging glacier in its upper reaches. This wall had been the impasse for many parties and the object of much speculation for ours. Kain's party had been obliged to chop many of its 600 steps here, while we found ourselves blessed with almost ideal conditions, which enabled us to kick steps nearly all the way

to the ridge crest, except for a minor and fruitless digression onto adjoining rocks to the south (where much of Kain's route lay). The last 30 feet required considerable care because of very poor snow.

It is a tribute of sorts to the optimism of Robson mountaineers that the great majority have been benighted on their way down. Bernays' proposal that we carry sleeping bags at least part of the way up the mountain was met, therefore, with unanimous approval. The crest of the ridge was reached at 2:30 P.M.; since the weather was as excellent as had been our progress, we decided to leave the bags at this point.

The direction of the climb now changed. Advancing northwestward, we enjoyed a pleasant walk along the crest of the knife-edged arête, which soon faded into the southeast face. Light clouds now obscured the upper portion of the route. We soon noticed willow wands of a green variety, marking the route onto the ridge from the west followed by three previous parties during the summer. Further testimony to the recent presence of other climbers was the remains of the Sierra Club group's camp on a shoulder more than a thousand feet below, to the west. Beyond this shoulder and far below it, one could see Kinney Lake and the valley of the Fraser, through which we had passed four days before. After two hours of easy but spectacular traveling, we arrived at the base of the summit mass. It was necessary to make a long traverse of the south face under a large overhanging ice cliff to reach the only gap through which the summit could be gained. The final pitch proved the most dangerous of the whole climb; it consisted of an 150-foot ice slope close to 70° at its base and tapering off to about 30° at its top, and encrusted with frost feathers up to three feet in thickness. Merrihue's 120lb. weight here stood him in good stead. He negotiated this difficult bit with admirable competence. Bernays and Nabokov, both considerably heavier, found the going a little more exciting. From the top of this pitch it was 15 nearly-level yards to the summit.

On top we found a tattered American flag, left by one of the previous parties and anchored in a most thorough fashion. It was now 4:30 P.M.; a quarter of an hour was devoted to eating

and photography before the descent began. Once the slightly thin topmost pitch had been passed, the arête presented no problems. Progress down the long ice slope, however, was slow; once the sun had left the slope, the snow had frozen so hard that crampon points would barely stick in the surface. Crossing the upper schrund at a more comfortable point than on the way up, we arrived on the Dome just as the last rose tints of sunlight left the snows of Mt. Resplendent. The satisfaction of our success and the magnificent, almost palpable, beauty of this twilight spectacle made us forget for a moment the two vital questions before us. The first, i.e., where to spend the night, was quickly solved for us, as it immediately became dark and cold. Finding a reasonably convenient crevasse, we settled down to a cool but not uncomfortable night.

The second question faced us upon awakening in the warmth of another perfect morning: Should we return to camp by the route of the previous day or follow a very promising alternative that now presented itself? The first course was ruled out as dangerous and generally unpleasant. The route followed consisted of an eastward traverse of 500 yards about 100 feet below the crest of the Robson-Resplendent ridge to a point whence a direct descent was possible. Near the bottom of this slope we encountered a delightful spot for those who like to jump bergschrunds. Bernays, seating himself inside the schrund, took magnificent pictures of the aerial descent of the rest of the party. We returned to camp at noon, exceedingly hungry and tired, but nevertheless the happiest of men. DMITRI NABOKOV

ALASKA

Mt. McKinley Map, Second ascent of Mt. Brooks, second and third ascents of Scotts Peak, Alaska Range. During the summer of 1953, the U. S. Coast and Geodetic Survey and Boston's

THE GREAT BERGSCHRUND,

where a bivouac was made at 11,000 feet. Two climbers may be seen at the site of the bivouac on the lower lip of the bergschrund. Photo, J. H. Gardey