

miles up the glacier and four days later we unanimously called it quits. Beyond this point, because of impending rock cliffs, we would have to go up the middle of the glacier, but there we could see absolutely no feasible route. Moreover, the hanging ice cliff by which we had just traveled was daily deteriorating. Gigantic chunks of ice, some the size of a small house, were breaking off with great regularity to go booming down to the glacier below.

On the return, two days were spent at Gunsight Pass making observations. The low point of the main glacier here was 830 feet below the pass, with the ice cliff consisting of an upper 260-foot pitch and a lower 250-foot pitch separated by a shelf 350 feet wide. From the pass we climbed Gunsight Peak on the north, and on June 30 the first main peak on the ridge to the south. Thirteen gallons of kerosene were cached at Gunsight Pass.

KENN CARPENTER, *Mountaineers*

Ascents above the Lower Muldrow Glacier, McKinley Range. Our group was unusual because of age. Leaving me out, but counting our "old men"—Harvard graduate students Harold Boeschstein and Roger Dane, and the latter's wife Lee—our average was only 19 years. The others, Douglas Bingham, James Estabrook, Francis Blake and Barrett Morgan, were all schoolboys. We were there at an interesting time, for the normally stagnant, black lower Muldrow Glacier was in utter turmoil. Something, possibly an earthquake, in the spring of the year had apparently upset the equilibrium of the glacier and had set it in headlong motion, in much the same way as the Black Rapids Glacier in 1937. Aerial photographs show an unprecedented rate of advance. The usually flat surface of the lower Muldrow was contorted into an unstable, everchanging gallery of huge, fancifully sculptured séracs. Different every day, we found black and white pandas, busty old women, white rabbits with long ears, even a black mammy helping her pickaninny up the cliff. On the central Muldrow these grotesque statues crashed continually into the fingerlike acres of blue lakes formed by trapped melt-water which could find no exit.

On June 23, 1957 we left the road to Wonder Lake at Mile 87½ to pack our supplies 15 miles up the eastern trough of the Muldrow to Base Camp in a flowery meadow at the foot of Anderson Pass. The pack route was good; it rained every night but never while we were working. On June 30 we set up Base Camp in the shadow of icy peaks that rose 5000 feet above us.

Although worried that the side glaciers which enter the Muldrow might

impede our progress, on July 2 we continued up the Muldrow trough towards Mount Mather and Mount McKinley. We could not so much as set foot on the unstable ice of the Muldrow itself. After having worked our way across a half dozen side glaciers, we were stopped on the second day by the seventh. This one, now a hideous confusion of churned-up ice, enters the Muldrow beyond the ridge that rises directly to the summit of Mather (12,125 feet). A thunderstorm mercifully drove Dane and me back from a reconnaissance up this unpromising steep ridge of Mather, where rotten rock unbelievably defied gravity. We joined our companions in camp on a tiny ice shelf overhanging the Muldrow. Between rain squalls the next day, we moved camp up onto the next ridge in the direction of Base Camp. At 7500 feet we were within one day's striking distance of Mather, though a 10,000-foot unclimbed peak intervened. In gloomy weather next morning Dane and I reconnoitered this new ridge, found a route up the cliffs on rock less rotten than that of two days before and continued up the snow and ice ridge to just below the 10,000-foot summit. Since this new route up once-climbed Mather seemed feasible, we turned back there to avoid robbing the others of the first ascent of the intervening mountain. As we reached camp, a brilliant show of lightning heralded a storm that raged for three days without let-up. On the eighth day of this trip, we had no choice but to return to Base Camp, for we had no more food.

The weather bettered as we approached Base Camp and July 10 dawned crystal clear. We attacked the central of the three ridges that descend the north face of unclimbed Peak 8620, just southwest of Anderson Pass. To 6400 feet the climbing was easy. There the knife-edged ridge turned abruptly skyward and for the next 1000 feet averaged a measured 54° . To our dismay this was not firm snow, as it had appeared, but blue ice covered by eight to twelve inches of unconsolidated ice-crystals overlain by four to six inches of new snow. Belayed through ice pitons, we hacked away the treacherous surface to clear firm ice for our crampons. This stretch took us six hours of incessant step-chopping! The last 1200 feet of the climb were steep but straightforward. Few mountains can boast such a view as the one up the Muldrow and over the summit of Mather to the soaring twin peaks of Mount McKinley. It was a $17\frac{1}{2}$ -hour round trip. Two days later we made the first ascents of two other glorious viewpoints, the peaks on the northern side of Anderson Pass. Our party packed out in murky overcast and reached the road July 17. Our trip to the Ruth Glacier side of Mount McKinley is covered elsewhere in this *Journal*.

ADAMS CARTER