

bulging ledges and a pair of slightly bushy dihedrals. Broken climbing brought us to the junction of the buttress and the left side of the great east face. I worked up to the left, resorting to bathooks and small nuts to reach a belay at the top of a 20-foot vertical chimney. Above, after a leader fall, I stormed back to the highest point in cracks and replaced the nut which had held me though its sling was half cut. After a blank section, cracks led to an easier left-leaning dihedral, which led in turn to a long ledge on which we bivouacked. The next morning we finished the headwall with a long F9, A1 pitch straight up from our bivouac and got to the edge of a small snowpatch. Three more pitches up to the left from the snowpatch brought us to the upper snow patch. The dark, large-crystaled rock changed to a beautiful medium-grained granite. From the upper snowpatch we did a couple of short fourth-class pitches of low angle. John led a lovely F7 pitch up an arête. I had a long, poorly protected lead over rounded ledges, a thin 40-foot traverse and a 60-foot dihedral. John stemmed over me on the last lead to the ridge, working around and over big, loose chockstones. We picked our way up the ridge toward the main summit to a nice bivouac site. The next morning we continued along the ridge for three pitches of fifth class and one of fourth to the summit. NCCS V, F9, A3.

D. DENNIS MULLEN, *Unaffiliated*

Bugaboos

South Howser Tower, East Face, The Big Hose Route. On the right side of the east face lies a thin, straight couloir, almost a chimney, that provides an unbroken line of very steep water ice from the 'schrund to within 80 feet of the summit. This hose makes a fine alpine ice route that goes to a distinct summit, and though not extreme, it is difficult enough not to bore winter waterfall climbers: a lot of 70° to 80° ice, as well as a short crux bulge of dead vertical, inch-thick ice. I climbed this route alone on June 29 in three to four hours, 'schrund to summit. Where the ice hose ends, I encountered moderate rock and rotten snow mushrooms before I reached the top. I freaked out and jury-rigged a 30-foot loop of my rappel rope through some nuts to protect myself over the summit snow mushrooms, but climbed the entire ice hose below free, unroped, and unprotected.

JONATHAN KRAKAUER

Canadian Rockies

Mount Edith Cavell, North Face, Two New Routes. July 21 was Colorado's big day on Edith Cavell. There was a pair from Boulder who did the classic Jones-Faint-Chouinard route on the same day as our two parties made new routes. Harry Kent and I were the team on the

"McKeith Spur," named for Bugs McKeith, who had just been killed on Mount Assiniboine. Our route was to the right of the classic route. Jon Krakauer, Mark Hesse and Joe Hladock did their new route starting at the upper lefthand corner of the Angel Glacier, ending at the east summit. Both teams started at midnight and climbed the center ice tongue of the Angel Glacier by headlamp. This was a quick way to the upper glacier, but it was the technical ice-climbing crux and slightly dangerous. We had séracs collapse on both sides. After we got to the Angel Glacier plateau at four A.M., we went our separate ways. Harry and I sat for an hour, looking for a logical line. We were scared, principally because it was so warm. We could see an ugly rockfall scar to the left of our climb which had happened the day before. Our route was protected by a buttress of rock a third of the way up the face. From there an obvious spur led to the last 300 feet of the climb, a steep ice slope to the top. The rock climbing on the lower third was excellent, mostly 5.4 with two 5.7 pitches that were well protected. We did 300-foot pitches on a 9mm rope. Once on the spur the climbing was 5.0 with some 50° to 60° ice. We arrived on top at four P.M. and were back in camp at eleven P.M. (NCCS V, F7.) The other new route was done to a great extent unroped. They stayed in shallow gullies, following ice most of the way. They put the rope on in the upper face when a large rock hit Joe nearly causing him a fatal fall. They continued on to the summit and bivouacked on the way down. They had to endure one of the worst electrical storms ever, which lasted some four hours. (NCCS V.)

LARRY BRUCE, *Elk Mountain Climbing Club*

Edith Cavell, North Face Indirect. In mid-July, Mark Hesse, Joe Hladick, and I put up a new route on this 4000-foot roadside face. Leaving our car sometime after midnight, we climbed directly and anxiously up the very active icefall of the lower Angel Glacier. We moved unroped until the icefall's final two pitches, which involved some sections of vertical and overhanging sérac climbing (done free). From the upper Angel Glacier's eastern corner we contrived a line that is steeper than, and well to the right of, the upper Chouinard-Faint-Jones route. We were on steep blue ice for all but 150 feet of the mountain. We broke through the difficult, rotten summit cornice 300 feet west of the east summit after taking a distinctive ice couloir (up to 75°) up the right margin of the east summit's rock pyramid. We topped out at dusk in the face of a violent electrical storm. We did the entire upper wall unroped except for one lead over a low rock band and the final six leads.

JOHN KRAKAUER

Mount Alan Campbell, Frigate Mountain and Other Peaks, Freshfield Group. On July 22 Jack Cade, Geoff Dougherty, David Henley, Ron