

pitches to a spectacular snow bench. One more pitch up and right got us to the top, which we reached in the early afternoon. The climbing although not difficult was a little precarious due to snow and ice balconies which periodically swept the route. The major problem was to keep from being hit by the tombstone locomotives.

MICHAEL COVINGTON

*Notchtop.* In late April Doug Snively and I completed a new route up the steep snow-plastered north face of Notch Top. The climb began from a bivouac situated above the Grace Falls where we followed a snow and rock ramp which led up and right to the base of a large snowfield. In low-angle snow we skirted the first rock band on the right and climbed up steepening slopes to the second rock band. The first pitch led up and left to a belay above the notch on the main wall just across from a prominent spire. From here we diagonaled up and left for 7 pitches on 45° and 50° snow to finish in a col between the Notch Top ridge and Continental Divide. The crux was a long unprotected snow pitch which averaged 50°. Eight hours.

MICHAEL COVINGTON

*Ptarmigan Towers, East Side. Tower 2:* To the right of the bottom of the 2-4 gully is a deep, wet chimney/gully. On the vertical wall to its right is a prominent and attractive jam-crack, which diagonals up and left for about 300 feet before joining the more broken rock of the "Sunshine Ledges" route. Tom Gries and I climbed the jam-crack (the "Tundra Turkey Crack") in August, encountering three leads of good climbing and even difficulty. NCCS II, F8. *Tower 4:* Just below and right of the top of Tower 4, as seen from Lake Nanita, are two deep, overhanging 200-foot chimneys. We established a route that followed the indistinct northeast corner of this tower, mostly in clean dihedrals a bit to its left, and finishing in the rightmost of the two aforementioned chimneys. The rock was generally good until the crux summit pitch, which involved a very wide, overhanging chimney of crumbling granite. NCCS III, F8 or F9. Both routes were climbed hammerless.

LAWRENCE HAMILTON, *Unaffiliated*

*Arrowhead Peak, South Face.* Two new routes were established on this appealing face in July. "Artemis" ascends the large, prominent dihedral about 100 feet to the right of the low point of the McHenrys-Arrowhead Ridge. Moderate slabs lead to a ledge at the base of the main corner, which is followed for two leads, past several overhangs, to the top. Tom Gries and I did the first ascent. NCCS II, F9. To the east of this lies "Warhead", which climbs the face near its highest part. John Byrd, Tom Gries, and I began this route from a huge flake lying

on a ledge at the slabby base of the wall. Wet and tricky friction was encountered on the second pitch, and the third pitch surmounted the major left-curving arch that blocks access to the upper face by laybacking up a black flake. Above this, very clean and enjoyable climbing followed the left-facing dihedral formed by a higher arch, and continuing cracks and corners beyond. Seven pitches were done, all on excellent granite. NCCS III, F9. Both routes were done clean.

LAWRENCE HAMILTON, *Unaffiliated*

*New Route, Glenwood Canyon.* In August, Harvey Carter and I completed *The Internationale*, the longest and most sustained route in Glenwood Canyon to date. It consisted of 18 pitches of climbing; many of these were 5.8 or 5.9, and there is one 60-foot section of aid. The climb connects two granite buttresses and a limestone one; we climbed the granite and a third of the limestone on our first attempt, during which we made one bivouac. On the successful climb, we traversed into the limestone band (avoiding the first 10 pitches) re climbed to our high point and finished in good order the same day. The route awaits a continuous ascent, and might be possible in a day to a fast and strong party. NCCS V, F9, A-2 (2000 feet).

MICHAEL KENNEDY, *Elk Mountain Climbing Club*

*Notchtop Mountain, East Face, Religion.* Australian Keith Bell and I established this long excellent free climb on the highest part of the face in late August, 1973. We began (with a jump) in the left-most of three prominent roofed right-facing dihedrals on the lower east face, well to the left of *Optimismus*. This first pitch was fairly sustained and ended on a ledge to the left of the dihedral's roof. A pitch higher easy climbing was encountered, as *Religion* was crossed by the *Spiral* route's meadows. The steep upper wall was attacked on the fifth pitch, with a long diagonal traverse up and to the left. The sixth pitch then diagonaled for a rope-length back right, in one of the exposed maneuvers so characteristic of the harder Notchtop routes. Climbing continued more or less up the center of the face to a prominent vertical gully that ended a few feet from the summit of the Notch Spire. The last pitch and a half contained several old pins; evidently we had joined the finish of the *South Ridge* route at this point, which went free with one section of very solid F8. Except for the vicinity of the *Spiral* meadows, the climbing on this route was very consistent and worthwhile, comparable to the *Culp-Bossier* route on Hallets. At least four of the pitches involved F8 difficulties. NCCS III, F8.

LAWRENCE HAMILTON, *Unaffiliated*