

worked from a small belay ledge left, up and back right to a prominent jam-crack (bongs, 5.7). They then climbed to the false summit and along the jagged crest to the true summit. They used 11 pitons and some runners. On November 10 Charles Raymond and I made a *second new route* on the south and upper southeast faces. We followed the obvious diagonal chimney that slants from the lower left corner of the south face to its upper right corner to where it merges with the southeast face, having crossed the Fowler-Ray route near the top of their second pitch. There are two pitches of difficulty on the upper southeast face, the crux being a 5.7-section where we moved left across a slab from a crack. Both routes were Grade II.

FRED BECKEY

California—Yosemite

Lost Arrow, Direct Route. On June 21, after 4½ days, Warren Harding and I completed what seemed to us an exceptionally esthetic new route on the Lost Arrow. It follows a nearly vertical line for the entire 1400 feet from base to tip, a line which, for the most part, appears completely blank from the Valley floor. I understand it was Herb Swedlund who conceived of the possibility of this route. He and Warren had climbed some 200 feet of it the preceding autumn but had to turn back. The route is built upon four main features which, besides contributing to the feasibility, lend an appealing continuity. These are three pinnacles and a tower. For the benefit of those not familiar with Yosemite climbing terminology, a pinnacle is an isolated flake (or the beginning of one) with a ledge on top. Consistent with this definition is that if there exists the hint of a notch separating the flake from the main wall (that is if one cannot chimney or lieback right to the summit) then it is called a tower. The first two pinnacles are called First Error and Second Error; they are 400 and 800 feet above the ground respectively. Both have large ledges and are well known to those who have climbed the classic Arrow Chimney route, the deep cleft forming the left side of the Lost Arrow. This is because both may be reached by climbing about 100 feet out of the Chimney. Although not visible from the Valley floor, there is a fine crack system connecting these two pinnacles. Two hundred feet above Second Error is a graceful tower and 200 feet higher is a 30-foot detached flake; we named these two First and Second Terror respectively. (The latter might also be called Last Error). Second Terror is only 100 feet below Salathé Ledge which is on the regular route to the Arrow's summit via the notch. The route utilizes the right side of each of these features. We bivouacked

on First Error, Second Error (twice), and Second Terror (an uncomfortable place relative to the others). There were some blank areas in between which required bolting but the labor of this was considerably reduced by a technique which Warren, with characteristic imagination, had developed. This involved using Chouinard cliffhangers in short bolt holes instead of placing bolts. Bolts were used only as dictated by safety. Thus only 21 bolts were placed although 55 holes were drilled. (A fear of being short of hangers caused us to leave 4 or 5 bolts without hangers on the first pitch; the nuts were left however.) Several factors make the climb an especially enjoyable one. First of all is the setting. The Arrow has long been an attractive challenge to climbers and on this route its tip is almost constantly in view. It is next to impossible to put into words the pleasure of watching the nearby falls during the endless belays. It is a comfortable climb. There are no less than five large ledges on which it is possible for two or more climbers to sleep stretched out. (Besides First and Second Error and Salathé Ledge there is one just below Second Error and another just below Second Terror.) Finally, the climbing is continuously interesting; not one of the 14 pitches is fourth class. Though often exhilarating, the climbing is never severe nor horrifying. *Technical Notes*: NCCS VI, F8, A3; Necessary equipment includes 2 4-inch bongs and 3 Chouinard cliffhangers ground down to fit 1/4-inch bolt holes. There are several long pitches of direct aid.

PATRIK CALLIS

El Capitan, North America Wall. On September 6 Dennis Hennek and I completed the second ascent of the North America Wall on the southeast face of El Capitan. We made four bivouacs and were hampered by 100° temperatures.

DON LAURIA

Penny-Nickel Arête. On April 7 Kep Stone and I climbed a new route on the wall to the left of the Penny-Nickel Arête. The route starts several hundred feet left of the arête and leads up cracks and ramps, angling slightly to the left for seven pitches. We placed about 20 pitons, half of them for aid. NCCS III, F8, A1.

CHARLES KROGER, *Stanford Alpine Club*

King Tut's Tomb. In May, Mike Covington and I climbed a new five-pitch route one-half mile west of Sentinel Rock on the south side of Yosemite Valley. The route ascends a 400-foot buttress which is capped by a spectacular roof. It is within 100 yards of the "Pharaoh's Beard"