

ous, we ascended to the rim, passing a headwall via a moderate chimney. NCCS V, F8, A3.

KENNETH BOCHE

*Aquarius.* In June, Jim Bridwell and Kim Schmitz put up a new line between the west buttress and the dihedral wall. The route starts near the left side of the great apron between these routes and meanders to a ledge about 1000 feet up, where the wall steepens. Earlier this year they had reached a high point several hundred feet above this ledge. At the end of May, they climbed fixed ropes for 2½ pitches and quickly reached virgin territory 12 pitches up. They then climbed to Thanksgiving Ledge and finished up the west buttress, doing that section free, and reaching the top about 1:30 P.M., June 1, on their third day — fast time for an El Capitan first ascent. They drilled 70 holes into which they placed either bolts, or aluminum dowls which, like Harding's rivets, can make use of shallow holes. Bridwell says the route was the hardest he or Schmitz had done on El Capitan. NCCS VI.

ROYAL ROBBINS

*El Capitan, New Route.* This year Rick Sylvester and Claud Wreford-Brown made a new route between the Heart Direct and the John Muir Route, using part of the lower Muir and going up the right side of the Heart (the Kroger-Davis route goes up the left side). After fixing the first five pitches, they climbed to the top in 9 days. They encountered very difficult free climbing and "a lot of A4". NCCS VI.

ROYAL ROBBINS

*Geek Towers.* Jim Bridwell and Mark Clemens reached the top of two narrow, converging buttresses between Yosemite Falls and the Lost Arrow Chimney, which they named Geek Towers. About 800 feet up; 1 day. NCCS III, F10, A3.

ROYAL ROBBINS

*Stone Groove.* This two-pitch route follows a vertical crack between the Rorp and Independent Pinnacle. Jim Bridwell and I climbed it in May. The crux is a finger jam in a dihedral 20 feet above the ground and the rest of the pitch continues jamming. The second lead is a short F8 squeeze chimney leading to a ledge at the top of the slab. NCCS II, F10.

GALEN A. ROWELL

*Chopper.* The Chopper is a single-pitch climb first climbed by Rick Sylvester and me in September. It is located in the second crack system