systems on the south side of the west spire of "Ruth" took them to rotten gully systems leading to the summit. The class 3 ascent took 3 hours from the summit of Mount Carrie.

## Roy Etten, The Mountaineers

The Citadel. On August 28 Joe Munson and Jim Parolini made the first ascent of this 7378 -foot peak from $11 / 2$ miles below Royal Basin. Brush and scree were encountered to the low point on the ridge connecting with Greywolf Ridge. The ridge was followed south, where easy chimneys and slabs led to the summit. The ascent took $41 / 2$ hours.

Martin Peak, from Surprise Basin. Joe Munson and Jim Parolini completed a new route on this 7550 -foot peak on August 26 from the prominent terminal moraine. An adjoining chute was ascended, keeping left of the Arrowhead to the summit. This class 3-4 ascent took 4 hours from Royal Basin.

Belvedere Peak, Nortbwest Ridge. This new route on this 7528 -foot peak was completed on August 27 by Jim Parolini and Joe Munson. From the glacial valley north of Belvedere and Sundial they ascended to the low point in the Belvedere-Adelaide ridge. An exposed class 4 slab was climbed and the ridge ascended southeast to the summit. The climb took 4 hours from Royal Basin.

## Sierra Nevada

Leaning Tower, West Face. The Leaning Tower rises 1863 feet above the floor of Yosemite Valley about 400 yards to the right of Bridalveil Falls. Charles Michael made the first ascent by the eastern slope (date unknown). A route up the west face, however, never got beyond campfire discussions until last year when Warren Harding and I planned an exploratory assault. The unique feature of this face is its continuous overhang-at points more than $30^{\circ}$ off the vertical. Our climb started 300 feet up a prominent ledge, which traverses the face, and continued in a straight line directly to the summit. On the first attempt on December 31, 1960, Warren, Les Wilson and I were prepared for a three-day reconnaissance but were stopped 70 feet up when a large flake of rock dislodged, hitting Warren on the head. He managed to prusik down from tiny $1 / 4^{\prime \prime}$ bolts and get to the Yosemite Hospital under his own power. The second attempt was from June 17 to 24 . Warren and I were joined by Glen Denny and George Whitmore, and in eight days of climbing reached a very comfortable ledge 450 feet up. As the week progressed, the terrible strain of placing bolts on the severely overhanging wall in heat well above $100^{\circ}$ had an exhausting effect on us. One day we gained 25
feet. The main ledge was reached at three A.m. on June 23 by Warren and Glen after 19 hours of continuous climbing. During the next two days, we cleaned the pitches of bolts and pitons and rigged fixed lines for prusiking on the third attempt. This took place from October 7 to 13 . Warren, Glen and I (George was unable to join us) carried supplies up the talus and spent the major part of two days hauling them to our former high pointthe main ledge. This equipment included several $7 / 16^{\prime \prime}$ nylon climbing ropes, 1200 feet of $3 / 8^{\prime \prime}$ nylon hauling line, 12 gallons of water, a large supply of food, sleeping bags and other climbing equipment. The first pitch above the ledge diagonaled upward and to the right. Of exceptionally severe class 6 climbing, requiring 34 pitons and three $1 / 4^{\prime \prime}$ bolts, it took Warren eight hours to lead. Two five-inch wide footholds provided the belay stance. The next day, October 10, Glen continued, using 4 knifeblade pitons, 2 horizontals and 12 bolts (mostly $3 / 16^{\prime \prime} \times 1^{\prime \prime}$ ) to reach the base of a 220 -foot overhang, which is interrupted by small roofs and required belay in slings. A long lead up an excellent piton crack filled with weeds and dirt and a short pitch brought us to a small tree beneath a large roof. Warren led straight out over the ceiling using bong-bongs (oversized angle pitons) on very strenuous and difficult 6th class. Above the roof he was able to climb 20 feet higher to two small sloping ledges. The prusik of this pitch was at least 25 feet from the wall with a 1200foot drop below! We bivouacked on the ledges in anticipation of the summit the next morning. The final pitch, overhanging to the last, proved difficult 6th class up to a right-angle chimney. At 12:15 P.m. on October 13 we reached the top. In summation there were 11 pitches, all class 6 , up the 1100 feet of overhanging wall. We used 111 bolts and 135 pitons. The ascent took a total of 18 days to complete. Anyone wishing to repeat this ascent should bring a large supply of $1 / 4^{\prime \prime}$ bolts, as many of these were removed to conserve hangers and nuts for the $3 / 16^{\prime \prime}$ bolts.

## Allan Macdonald, Sierra Club

El Capitán, Southwest Face. A completely new route was made on the 3400 -foot face of El Capitán by Chuck Pratt, Tom Frost and Royal Robbins. Three separate pushes were required to finish the climb: September 12-13 (two full days), September 15-16 (one day and one night), September 19-24 (six full days). The 36 pitches needed about 500 pitons but only 13 bolts. This climb has been reported as the longest and most difficult yet completed in Yosemite Valley.

Steven Roper, Sierra Club

Higher Cathedral Spire, Northwest Face. The first ascent was made on

