two bivouacs. Although the setting is spectacular, the rock tended to be loose and ominous for most of the 25 pitches. The real surprise came on reaching the summit. Looking over the south face, we were astonished to see Mike Clark and Carrigan Daugherty completing a south buttress route on the same tower. This is the first time in the history of the Mendenhall Towers that two teams have met doing separate routes. After descending their line of fine cracks down the south face, we began an extremely gruelling trudge around the Mendenhalls and back to our south-face camp. This was done in a white-out, without skis and in a driving rain. In February Morri Whitney, Dick Ellsworth and I climbed the main tower in full winter conditions. We had -12° F. temperatures and 30-mph winds.

JOHN SVENSON

Devils Thumb, Mount Burkett, Northeast Ridge and Other Peaks, Stikine Icefield. Dave Dahl, Bruce Tickell, Bill Zaumann and I spent three-and-a-half days in early July snow-shoeing up the Baird Glacier system from Thomas Bay to a previously placed airdrop immediately southeast of the Devils Thumb. We bypassed the icefall which caused Krakauer trouble (A.A.J., 1977, p. 403) by the slope to its north. During two days of marginal weather following our arrival at the airdrop site Dahl and I climbed the northeast ridge of P 7700 one mile southeast of the Thumb (first ascent by Donaldson's party, A.A.J., 1972, p. 113). On the 16th our first attempt on the Thumb was stopped by a violent storm at 8400 feet. High winds, rain and/or snow lasted almost continually until the morning of the 23rd. On the following day all 4 of us repeated Beckey's original route on the southeast face and east ridge of the Thumb. We bivouacked high on the southeast face on the descent. Climbing from a base camp at 4000 feet on the Baird Glacier on the 27th Tickell and I made the second ascent of Mount Burkett (9730 feet) by a new route up the northeast ridge (the facing ridge in plate 54, A.A.J., 1965). The lower, highly corniced section of the ridge involved a thin layer of steep loose snow atop ice and a short section of easy fifth-class rock. Near the summit these conditions gave way to mixed ice and frost-shattered F6 flakes and slabs. We reached the summit at nine P.M. and bivouacked near the base of the ridge. While Tickell and I were on Mount Burkett, Dahl and Zaumann made the first ascent of a 5400-foot peak on the south side of the Baird Glacier. The return to Thomas Bay and Petersburg was uneventful.

WALTER VENNUM

Washington-Cascade Mountains

Whitechuck Mountain, Northeast Ridge. On July 14 Jim Cleary and I climbed this ridge on Whitechuck Mountain, east of Darrington. We

approached the north side of the peak via Forest Service Road #3209, parking at the last switchback where an impassable spur leads to the southernmost clearcut on the road (3800 feet). We ascended the glacier on the north side of the peak to its apex (c. 6200 feet) which placed us at the base of a large slabby gully. The gully was ascended to the southeast ridge proper. From there one pitch (F2) on the ridge crest put us within 10 minutes scrambling of the summit. The climb, although relatively short, has fine alpine variety and sound rock.

DONALD J. GOODMAN

Glacier Peak, Scimitar Glacier Variant. On July 21 and 22 Jim Corbin, Vinny Perone and I climbed the Scimitar Glacier route on Glacier Peak. Instead of going up the final headwall directly toward the summit, we traversed to the right on hard névé and steep black ice of 50° to 60° for four or five pitches. We feel we have accomplished a somewhat difficult variant of some 700 to 900 feet.

ROGER L. KAMMERER

Castle Peak, North Face. Significantly peaking just over one mile south of the boundary from British Columbia, Castle Peak has an impressive 1500-foot north face. This feature, standing in firm granitic stock, displays three prominent buttresses, and beneath the rock aprons are five small remnant glaciers. In unexpected neglect, the face had never been climbed directly. Approaching from Canada, Rick Nolting, Reed Tindall and I spent a day trekking to its base, encountering more than the normal amount of hot weather, flies and brush. On August 1 we left our campsite early and in less than two hours were climbing increasingly steep rock at the flank of an ice remnant. Here was a steep buttress dividing two sections of glacier-an impressive location-and about the only place cracks seemed to continue to the higher portions of the face. A complicated zigzag route, with a sequence of hard moves, proved to be a crux that was a slow beginning. Small overhangs were baffling. Then the route unfolded well. Easier pitches along the buttress, which sometimes became a ramp, took us higher. Difficulties returned in the way of some crack systems, exposed edges and one friction traverse. We concluded by taking the buttress fork west of the summit, and found ourselves finally groping up a steep chimney and couloir system, where the one ice axe we had taken was very essential to manage two leads of very steep snow. More good rock on the northwest edge of the summit formation took us to the top of Castle Peak (11 hours from camp). (NCCS III, F8.)

FRED BECKEY

Mount Baker, North Ridge Variant. Norm Brones, Jim Corbin, Vinny Perrone and I on June 2 and 3 did a variant on Beckey's route on Mount Baker's north ridge. Upon reaching the ice steps at 9600 feet we traversed far to the right for some 150 yards and climbed the step from the top of a rock formation on the snow face. At this point the step is a single vertical pitch with some overhanging bulges.

ROGER L. KAMMERER

Argonaut Peak, South Ridge was climbed on May 30, 1977 by Will Parks, Bob Loomis, Dan Schnell and Dave Seman. (NCCS II F6.)

DAVID SEMAN, Unaffiliated

Bonanza Peak, Northeast Ridge. Mark Thornton and I climbed this route on July 20, 1978. Some loose surface rock, though mainly solid. Bypass towers as necessary. (NCCS III F7.)

DAVID SEMAN, Unaffiliated

Mount Rainier, Willis Wall-East Rib. On March 17 through March 22 Craig Eilers, Dale Farnham, Matt Christensen and I successfully completed a winter ascent of Mount Rainier's famed Willis Wall, via the east rib. A bivouac was made two-thirds of the way up the wall and the climb was completed the following day by exiting on upper Curtis Ridge above the ice cliff, making the climb a direct line. Descent was via the Emmons and Winthrop Glaciers and across the lower Curtis Ridge and back to Base Camp. The weather was clear, cold and occasionally windy, offering near perfect conditions. We believe this may have been the first winter ascent of Willis Wall via the east rib.

DAVID E. ROWLAND

Little Tahoma, North Face. George Dunn and I made the second ascent of the 2000-foot north face of Little Tahoma, twenty years after the original Prater-Mahre climb. Our January 8 climb was accomplished under extremely cold conditions which left the face heavily iced. No rockfall was observed. It is unclear how the original route has been altered by the massive 1963 rockslide from this face. Our route was to the right of the original line. We found excellent ice on the high central icefield, reached after a short rock pitch climbed on crampons.

ERIC SIMONSON

Spire Point, Northwest Face. On July 29 Gary Brill, my brother Carl and I climbed this face. An approach was made from a camp on Itswoot

Ridge via a prominent col west of the Spire Point massif. Begin by taking a line up the middle of the northwest buttress (questionable rock), a traverse was eventually made left toward the upper face. On the upper face itself, a weakness of cracks was found just right of center and allowed for a line which topped out high on the northwest skyline. The route was then completed with a short scramble on the summit ridge. Note: the couloir adjacent to the northwest buttress would be a more practical start. (NCCS II, F7.)

GORDY SKOOG, Unaffiliated

Gunsight (main summit), East Face. Gary Brill and I made this ascent on July 31. From a camp on the Blizzard-Gunsight Col we were able to circumnavigate easily to the east by way of the Blue Glacier. Choosing a line on the east face (left), we soon found ourselves on excellent granite following a series of leftward-ascending cracks, flakes and blocks (F7). After one pitch, the crux was encountered near the southeast corner: a large flake leading to a small jam-crack and then followed by a chockstoned F8 chimney. From a semi-hanging belay (due to insufficient hardware) a dihedral-crack system was pursued. This eventually led to a rightward finger traverse (F7-F8) and the upper slabs of the peak. Crossing left over these slabs (F8) to avoid an overhanging wall enabled us to reach the southeast corner again. The route was finished along this corner. (NCCS III, F9.)

GORDY SKOOG, Unaffiliated

Sinister Peak, North Face. My brother Carl, Gary Brill and I completed this snow face on August 1. Starting from the Blizzard-Gunsight Col we made a quick traverse across the Chickamin Glacier in order to gain the face at its lowest point. On 45° to 50° névé and ice, a direct line was taken; deviating only briefly to skirt the schrund. After completing the face, we were left with just a short rock scramble to the summit. (NCCS II.)

GORDY SKOOG, Unaffiliated

Gunsight (main summit), Southwest Arête. On August 2 Gary Brill, Carl Skoog and I made this climb. Crossing the Chickamin Glacier, we tackled the obvious face which lies below the buttress and makes up the lower third of the route. By ascending the face, first right and then left, we were able to gain the arête proper. Once there, the arête was simply followed on its crest to the summit. (NCCS II, F5.)

GORDY SKOOG, Unaffiliated

Phantom III and Phantom II. On August 2 Gary Brill, Carl Skoog and I climbed these two minor 7960-foot peaks. Note: They are located .6 of a mile south of Sinister Peak, on the Sinister-Blizzard barrier. (NCCS I, F4.)

GORDY SKOOG, Unaffiliated

Goldenhorn, Northeast Arête. August 8 Jim Walseth and I climbed this buttress. From Snowy Lakes the arête was gained by descending one of the many couloirs which exist on the Goldenhorn-Tower barrier. Following the obvious line of the ridge, either on or just right of its crest, made for an exhilarating climb. The crux was on the first pitch, consisting of a mantel on a detached block. Some loose rock. (NCCS III, F8.)

GORDY SKOOG, Unaffiliated

Mesahchie Peak, Northwest Ridge. On June 18, 1978 my brother Gordon and I completed this 1400-foot rock climb. The approach route traversed the Mesahchie Glacier from the east; then made a rotten, exposed scramble to reach a prominent notch on the north ridge of the peak at about 6840 feet. A bivouac was made here. After ascending another small glacier, we climbed the ridge, staying close to the crest until poor rock and exposure forced us left to the summit. Much of the climb was scrambling, the harder portions being class 4 and low class 5. Ours was the fifth registered ascent of the peak. (NCCS II or III, F5.)

LOWELL SKOOG, Unaffiliated

Midnight Rock, Curtains. Left of North Ramp, this route climbs orange lichen flakes followed by face moves, and finishes by moving around roof via horizontal finger traverse (5.10 c/d): Bob McDougall and Kjell Swedin. Frog Suicide. Right of Flame, start at extreme right side of grassy ledge beneath Flame. Climb up flakes and mantel into alcove. Climb overhanging bulge and finish on ledge beneath Roller Coaster Chimney (5.10 a): Kjell Swedin and Jeff Baird. Super Crack. Starts as a thin crack about 30 feet from the belay of the third pitch of South Ramp (5.11 d): Pat Timson and Julie Brugger. R.O.T.C. Right of Twin Cracks, this overhanging thin crack was first led free in 1977 (5.11 c): Paul Boving.

KJELL SWEDIN, Unaffiliated

Drury Falls. Drury Falls is one of the more spectacular ice climbs in the central Cascades. Located three miles west of Castle Rock in Tumwater Canyon, this single waterfall produces 900 feet of steep ice climbing. Early in March 1976 on the first ascent, the upper section of the

falls (600 feet) was climbed by Paul Boving and Bob McDougall over a period of two days. The route followed the far left side, avoiding the water and ice blocks that spewed out of the runnel on the right side. The lower section of the falls was not frozen at this time and the upper portion had to be reached via a short rock traverse (F7) onto the terraces which separate the upper and lower falls. The approach to the falls from the road consists of crossing the Wenatche River and scrambling up 1800 feet in the half-mile side canyon. In January 1979 during a considerable cold spell, the entire Drury Falls was completely silenced and frozen. Bob McDougall, Steve Davis and I climbed the 300-foot lower falls (75° - 85°) and then Bob and I completed the steeper and more sustained upper falls the same day. During this ascent the entire falls was well frozen and we followed the left center of the falls. (Lowe grading system: IV, WI 5.)

STEVE M. POLLOCK, Unaffiliated

Bonanza Peak, Winter Ascent. On December 28 my brother Gordon, Mark Bebie, and I completed a winter climb of Bonanza Peak. We followed the Mary Green Glacier route to the summit on the third of five days out from Holden Village. Fortunately, somewhat consolidated snow allowed safe ski travel to the upper limits of the glacier, where at 8000 feet a snow cave was dug. Taking advantage of clear weather, we climbed the snow-covered east face to the summit ridge. The final ropelength of this ice-crusted ridge provided our only belayed climbing. We felt very lucky to have encountered such good conditions during the all too brief vacation allowed by the Christmas holidays.

LOWELL SKOOG, Unaffiliated

Kimtah Peak, Northeast Ridge. Located on a ragged ridge, Stimson Bullitt and I completed this fun climb in August. Our approach was from the south to the Kimtah-Katsuk Col, down onto the Katsuk Glacier, across the glacier and onto the northeast ridge of Kimtah. Climb steep ice, crossing onto the ridge from the glacier, and then a F5 layback up an obvious corner, traverse left onto the face fifteen feet, then up fifty feet to a large terrace. Pitch two continues up the face and left to a series of ledges. Then back onto snow for a pitch, then up to the right to the summit (800 feet of 4th class). NCCS II, F5.

ERIC SANFORD, Unaffiliated

California-Sierra Nevada

Palisades, Traverse of the Crest. In late July Gerry Adams and I completed the first traverse of the Palisade Crest. The Palisade, with

many small glaciers and five peaks over 14,000 feet, is the most alpine region of the range. Atypical of the range in general, the mountains are precipitous on all sides and connected by narrow ridges. The first attempt to traverse the entire Palisade was in 1969. Since, there had been perhaps a dozen attempts. An attempt in mid-July by Vern Clevinger and Nigel Gifford ended, four days out, when they ran short of food. The traverse is eight miles long: a mile and a half of moderate 5th Class, three miles of 4th Class, some snow and mixed pitches, and acres of scrambling. The complete traverse took seven days and seven bivouacs, with approximately 12,000 feet gained and lost respectively. In Steve Roper's *The Climber's Guide to the Sierra Nevada*, the complete traverse was predicted to be "a multi-day classic." Indeed, the situation is fantastic and the quality of the climbing outstanding: the rock varies from the finest High Sierra granite to teetering stacks of shattered diorite.

JOHN FISCHER

Pyramid Peak, Desolation Wilderness Area. Last summer I made several ascents on this peak and on a neighboring buttress. In July Steve Iverson and I climbed Pika Crack on the northwest face of Pyramid Peak. This is a crack right of the main dihedral, running to a shallow, leftfacing corner above a small roof. NCCS II, F8. In August Rick Scott and I returned and climbed a line in the main dihedral, calling it Desolation Angel. Climb up the main corner to an overhanging crack. At its top, head up the right-hand dihedral to a pedestal with a fixed pin, and up from there trend right near the top. NCCS II, F8-F9. Two weeks later Tom Walter and I put up two routes on the first buttress north of Pyramid. Astra starts on the prow of the buttress at the base of the prominent chute. Climb up and left to a wall with a fixed pin. Move up a finger crack above an overhang. Jams and mantels lead to a ledge, then up to another ledge on the prow. Lieback a flake, stem the corner to ledges, then up the face to the right of the arête. NCCS II, F10. Flondix starts downhill from Astra. Go up the face towards a fingerand-hand crack. Near its bottom run right under an overhang into a book. Stem this into a corner that is followed to the top. NCCS II, F8. In October Ed Coulter, Rick Scott and I did another fine three-pitch route on the northwest face of Pyramid Peak. Start in a short finger crack downhill from the big corner in the center of the face. Climb up and traverse left to the base of a steep corner. Follow this, cutting left at its top to a bowl and another dihedral. We called the route Pete's Dihedral. NCCS II, F8.

ROBERT BRANSCOMB

Pinnacles National Monument. Hard free climbing continues this year at Pinnacles. Reports in Climbing Magazine, January-February

PLATE 77 Photo by Galen A. Rowell Mike Farrell on the West Pillar of MOUNT CHAMBERLIN.

1979, indicate Jim Beyer and Bob Sullivan (unaffiliated) have done several new routes, including *Butter* (F10), *Digger* (F10), and *Hook and Drill* (F9). Jim Collins (unaffiliated) has free climbed an old aid route on the Monolith, according to *Mountain 68*. Another multi-pitch aid route has also been done free, the 1961 Bradley-Roper-Sacherer route on The Balconies by Chris Vandiver and me in May (F10+). The first pitch is very substained F9 and F10, with one long stem near the top being the crux. Some of the old aid bolts should be used with caution, or replaced.

THOMAS J. HIGGINS

The Balls. There are four main domes at the Balls, an area just north of Bass Lake and Oakhurst. All are immediately north of a dirt road leading to the area. From west to east, the domes have tentatively been named Ski Track Dome, Little Dome, Tempest Dome and Big Red. Since many climbers, including Royal Robbins and his rockcraft group, have visited the Balls but not recorded ascents, it is difficult to know what are new routes. Nevertheless, on July 14 and 15 several members of the Sierra Nevada section of the AAC did a few routes in the area that are most likely new. The most significant routes are on Tempest Dome. On the north side of the rock are Little Froggy, Jerry Koch and Jerry Boch, NCCS I, F7, and Shady Lane, Bruce and Kathy McCubbrey, NCCS I, F7. The first follows a green, lichen speckled wall; the second takes the main dihedral. On the south face, toward the left side, is Odyssey, Tom Higgins, Shary McVoy, Alan Nelson, NCCS II, F9. The route follows a large indenture and arch for two pitches, then a 30foot flake to a fantastic, steep, knobby wall, F9. Havana Ball, Higgins, McVoy and Nelson, takes the blank face left of the black waterstreak toward the right end of the south face. It begins on a flake, continues past two bolts to a two-bolt belay above a short roof. It then passes the large roof above (F10) about 15 feet right of a break marked by two fixed pitons set for another route.

THOMAS J. HIGGINS

Mount Chamberlin, West Pillar. The 1400-foot vertical granite face of this peak is not fully visible from any road or major trail, and thus it escaped the recent heavy pressure of Sierra rock climbing until July when Mike Farrell and I made the round-trip in two days. The first day was, for me, almost more difficult than the Grade V route itself. With only a weekend to spare, I started from Berkeley, drove 360 miles to Whitney Portal, began hiking with Mike at four P.M. at 8600 feet, crossed 13,700-foot Trail Crest on the shoulder of Whitney at eight P.M. and angled to the base of the wall down a long canyon to Crabtree Lakes, camping at dusk. The next morning, neither of us had the patience to

haul our big bag of food, water and clothing up the first chimney, so we just lowered it and left it there. With no sack to haul, we were committed to do the route in a day, and the climbing went very quickly. We ascended a prominent vertical pillar on the west side of the face by means of a single, straight-in crack system that lasted until the summit pitch took us out onto the prow. The 13 pitches took eight hours, and might have taken until dark if we had brought the sack. The climbing was consistently varied and spectacular on typically solid High Sierra granite. NCCS V, F10.

GALEN A. ROWELL

P 12,860, Cyclorama Wall. This obscure summit, located in the middle of a netherworld between the Palisades and Leconte Canyon, is a milewide, 1000-foot, vertical wall every bit as impressive as the Diamond on Longs Peak. To reach it, one must cross either three of four passes over 12,000 feet and travel cross-country for most of twenty miles. Even this inaccessibility would not have deterred determined climbers, were the face visible from traveled areas. From every side except the north, P 12,860 is a non-descript Sierra rubble pile, rising at about 30° to a cone-shaped summit. From the north, however, this cone is quarried out so extensively that the wall drops vertically from the summit forming a tight arc of cliff that virtually hides itself from all but a straight-on view. Standing beneath it, Vern Clevenger, Claude Fiddler and I felt as if we were viewing a cyclorama in a museum. We approached the climb via Southfork, Mather, and two unnamed passes, reaching a camp about two miles from the face in a very long day. A crack system that appeared straightforward from below turned out to be discontinuous, overhanging, and bottoming. Four F10 pitches in a row, together with a few moves of direct aid and two tension traverses, gained us a steep dihedral with a good crack that aimed for the top. Two pitches below the top, the hauling pack jammed and came free after a hard tug. This opened the top flap and I noticed two objects falling free all the way to the talus. One was a water bottle, the other a single running shoe. I screamed in horror, because the loss of that running shoe was more devastating than a long fall; while the shoe was still in the air, I was contemplating the pain of crossing all the passes the next day wearing one E.B. After twelve solid hours of climbing we finally summited just as the sun touched the horizon. Our descent down the northeast side brought us into the only cliffy terrain in sight, just as the light was failing on a moonless night. Stumbling about in our E.B.'s, we decided to bivouac rather than risk crossing a col that separated us from our camp. Without jackets at 12,000 feet in September, we got to know each other quite well before dawn allowed us to continue to camp, and later in the day to the roadhead in Big Pine Creek. NCCS V, F10, A1.

GALEN A. ROWELL

Kings Canyon, The Red Blade. This formation is easily seen from the Cedar Grove roadhead up the hill to the east of North Dome. In May Fred Beckey, Mike Scherer and I climbed a route on the southeast face. We walked up the Copper Creek trail for about two miles, and from there approached the northeast end of the rock. Once the southeast face was reached, we climbed a crack system in a recess to reach the ceiling that diagonals across the face. Our route continued up crack systems rising from the left end of this ceiling. NCCS III, F8, A2.

MICHAEL WARBURTON

Tower à la Neptune, Wheeler Crest. This is the farthest left of the "Hot Tuna" towers, a row of pink granite spires about 3000 feet above the Owens Valley floor on the Wheeler Crest. In December Mike Graber and I started before dawn and roped up at 8:30 A.M. below a direct start into an obvious chimney system on the left side of the 1000-foot wall. After several starts and a couple of hours time, the first pitch was completed with a move of aid where a nut placement interfered with a fist jam, and the leader, me, chickened out. Graber followed the pitch free, finding it moderate F10 with difficult protection. Time dictated an 80-foot leftward traverse into a chimney system at the end of the second pitch, rather than having a go at a more difficult single crack directly above. The chimney provided consistent F8 and F9 climbing for two pitches, before breaking back into easier going near the top. The eight pitches took seven hours, and the descent into darkness took another three. NCCS III, F10, A1.

GALEN ROWELL

Hot Tuna Tower, Sargasso, Wheeler Crest. In April Tony Puppo and I climbed this route that ascends the right side of Hot Tuna Tower, following the similar but smaller dihedral to the right of Starkissed. Two pitches led to the base of the corner that was ascended in two more pitches. Above, a snow-filled gully blocked progress, so we traversed right around a corner and up a difficult crack. One more pitch led to the north ridge. A more direct finish seems desirable. NCCS III, F9.

ALAN BARTLETT, Buff Alpine Club

Thor Peak, Rainbow Bridge. Allan Pietrasanta and I climbed this route in May. It starts in a long, slender, right-facing book a short distance right of the Principal Dihedral Route. Two pitches lead to a point just below the top of the book where a hand traverse left takes one to a ledge. A brushy crack leads to another stance, then one moves left and up past two bolts to a crack. Three easier pitches lead to the east shoulder of Thor, a long way from the summit. NCCS III, F10.

ALAN BARTLETT, Buff Alpine Club

Tuttle Creek Obelisk, School's Out. In June Brent Norum and I established the second route on this striking pillar. Starting a short distance right of the Rowell-Jones route, ascend a right-slanting ramp for 200 feet to the base of a large corner. Two crack pitches lead to a huge ledge. From here ascend the right of three possibilities: a curving, "quartermoon" crack. Above this, the original route is joined. NCCS III, F9.

ALAN BARTLETT, Buff Alpine Club

Whitney Portal Buttress, Wonderwall. This route was first attempted in June, 1978 by David Black, Kim Walker and me. Walker and I returned in April, 1979 for two more unsuccessful attempts. Jack Roberts and I made a first ascent on May 18-19 with a bivouac on the wall. Start from a ledge several hundred feet right of Sartoris and climb up and left past three bolts to a Class-4 ramp leading up to a huge tree. Climb through the tree to a flake, then past two bolts to cracks leading to a bolt belay. Move left to a two-bolt ladder, then pendulum left into a huge open-book. Difficult mixed climbing, or F10, leads out of the book to a sloping stance. Climb up, then left on a dike, then up a knobby face past a bolt to a belay. Follow a water streak into a low-angle bowl, then up and right to bolt anchors. Continue up and slightly right past two bolts to a belay at the base of a dike. Follow the dike up and left, then go straight up, then right to a ledge with a bolt. The crux pitch follows right-facing corners up and right to a point where it is possible to step left (F9) and climb to a belay at the base of a chimney. Two more pitches lead to the top. Eleven pitches, 20 bolts. NCCS IV or V, F10, A1.

ALAN BARTLETT, Buff Alpine Club

West Fuller Butte, East Face. In May Don Reid and I climbed this face via a long dihedral that curves up and right, then ends just over halfway up the face. Three pitches lead to a sling belay at a point where one can move left across an easy face and up to a ledge. Two pitches lead straight right to where it is possible to climb up into left-slanting cracks leading to the summit. Two points of aid were used on the first pitch. NCCS III, F9, A1.

ALAN BARTLETT, Buff Alpine Club

West Fuller Butte, South Face. This route and the next are easily visible from a logging road southwest of the two buttes. Easy Wind climbs a flake which lies flat against the face to the west of a prominent gully on West Fuller Butte. Fourth-class climbing leads to the base of the flake. Chimney and layback (F8) to the top of the flake. A long face pitch (F8) protected by two bolts continues to large blocks. The

third pitch leads left around these blocks to easier climbing. This route was climbed in July 1977 using roped soloing techniques. NCCS II, F8. Gerri Dayharsh and I climbed Zephyr, the route just left of Easy Wind in June 1979. From a manzanita-covered ledge, climb up and left past two bolts 90 feet to a small right-facing open-book. Follow the book up, then right, past a wild three-foot-wide undercling to double bolts. The easy third pitch leads to a huge ledge which is followed right, almost to its end. An unprotected F5 pitch is climbed to the summit. NCCS II, F9 or 10.

STEPHEN MCCABE, Manx Mountaineers

East Fuller Butte, Fear of Flying. In September John Stoddard and I climbed this route between the Southeast Face and the Songs to a Morning Star routes. The route climbs the 350-foot-high thin crack just to the left of the Songs route. A small ledge to the left of an oak tree marks the start of the route. Face climb past two bolts (F11+) and layback to an arch. Undercling right (F10) just around a corner to the belay. Face-climb left directly out of the dihedral and on to the wavy face. Climb up and left past three bolts (F10) to the main objective, a long, thin crack which splits the blank face. Continue up the superb crack-system (some F10) for three pitches to a belay at its end. Face-climb to double bolts and then to a large flake. Our route has joined Songs to a Morning Star by this point and continues with it up to the large ledge and around the summit blocks to the left. The upper pitches include long runouts on climbing of F4 to 6. NCCS III+, F11+.

STEPHEN MCCABE, Manx Mountaineers

Disappearing Dome, Southeast Face, Memphis Blues. This obscure route, visible from Balloon Dome, was found after many hours of deciphering mazes of Forest Service roads. After one aborted attempt we wandered through seemingly endless logging slash trying to return from the rock; hence we named it Disappearing Dome. The climb follows cracks for two pitches to Mobile Ledge and then meanders up five more pitches to a third-class walk-off to the thick brush fields. The dome is southeast of Squaw Domes. John Stoddard, Mary Ellen Lawrence and I finished this route in October 1978. NCCS III+, F11.

STEPHEN MCCABE, Manx Mountaineers

Fuller Buttes Area, East Face of Jackass Rocks. This face has many fine cracks visible from the road, but closer inspection shows the cracks tend to start 15 to 20 feet above the ground. In May Mark Blanchard, Conrad Van Bruggen, Fremont Bainbridge and I climbed an interesting two-pitch route located at the north end of the face. We bypassed the

blank section at the base by traversing straight left out of a chimney on a dike to where the crack began. NCCS I, F9.

SIMON KING, Unaffiliated

Lower Bear Creek Reservoir. This route follows the obvious first buttress on the east side of the gorge. Five pitches of face and friction climbing on beautiful orange granite led to the brushy slopes atop the face. I made the first ascent solo in May, 1977. NCCS III, F8.

SIMON KING, Unaffiliated

Magician Needle, Sidewalk Surprise, The Needles. In September Dick Leversee and I climbed this route on the east face of Magician Needle. From the broad saddle between Magician and its neighbor to the east, notice a prominent ramp, "The Sidewalk," diagonaling up the face to the right. Start at the ramp's base and follow it for about oneand-a-half pitches to where the wall steepens. From here climb up and right past a bolt to a prominent flake. Climb the right side of the flake and belay at its top. The third pitch continues straight up the face 50 feet to a bolt. Move up and right, past another bolt, to an arch and traverse right to a third bolt. Here mantel over the arch and belay. The last pitch follows a second arch left for a few feet, then heads right and up a thin crack to the summit. The route has exceptionally fine face and friction climbing on excellent rock. NCCS III, F10.

DAVID OHST, Unaffiliated

Shuteye Ridge, South Face, The Big Sleep. This face is visible from the south on the Shuteye Pass Trail. The formation is just above the letters "Sh" in the words Shuteye Pass on the USGS fifteen-minute quadrangle "Shuteye Pass." Doug Mathews and I climbed this enjoyable route which follows a line 100 to 150 feet right of a prominent black water streak. From a ledge 30 feet off the ground, climb four very long pitches to the base of the headwall. Most of this is F5 and F6 climbing with extremely long runouts on solid granite. A #2 Friend is essential to prevent placement of another bolt on one anchor. The fifth pitch climbs a F9 fist crack to a face with two bolts. Traverse straight left from the second bolt and climb past knobs (F9, long runout) to an easy rightslanting crack which is followed for one or two pitches to a walk-off. Most pitches are at least 160 feet long. NCCS III, F9. Shuteye Ridge, Voodoo Child. This route is on an unnamed 400-foot tower east of the dome with The Big Sleep. On the next day after climbing The Big Sleep, Doug and I climbed this excellent one-pitch route. (The approach takes approximately 30-40 minutes.) There is an undercling left around

a ten-foot roof to start the climb. The crux is a steep twenty-foot-long section of $1\frac{1}{4}-1\frac{1}{2}$ inch crack. Rappel from double bolts. NCCS I, F10 or 11.

STEPHEN MCCABE, Manx Mountaineers

Charlotte Dome, E.B. White. Alan Bartlett and I put up a new route on this magnificent formation in August. Several hundred feet right and slightly uphill from Charlotte's Web is a small pillar below two parallel water grooves. Our route follows the left-hand groove (past two bolts and a bolt anchor belay) for several pitches. Move left, continue up cracks to where the dome angle gradually kicks back and then ascend the headwall to meet the southwest arête and the summit. NCCS IV, F9.

ALLAN PIETRASANTA, Buff Alpine Club

Mount Russell. In late September Alan Bartlett and I climbed two new routes on the west side of this peak. 1). Bloody Corner. Just left of the Direct Southwest Buttress route is an obvious steep dihedral, the crux of our route. Climb up for a few hundred feet on progessively harder rock to this intimidating, but beautiful, corner. Two pitches of Yosemite-like climbing on this corner lead to easier rock and the summit ridge. NCCS III, F10. 2). Pilgrimage. Right of the Mithral Dihedral and lower down on the face is a left-facing broken dihedral. Our line follows a crack on the left side of this feature, past a small roof, and up the face for several pitches to easier climbing and the summit. NCCS III, F9.

ALLAN PIETRASANTA, Buff Alpine Club

California-Yosemite

Cleaning Half Dome—Twenty-Two Years After. Bart O'Brien told it as it was ("Climbing Half Dome—Twenty Years After," A.A.J., 1978, pp. 466-470). The bivy site and the foot of the northwest face of Half Dome were deep in the litter of hundreds of climbing parties. Certainly one of the most spectacular climbs in the world should not wallow in filth. Reacting to years of accumulation of garbage, the Sierra Nevada Section of the American Alpine Club arranged with the National Park Service to remove the trash in October. We would scour the area; they would fly it out by helicopter. We cleaned the wall from the base of Tis-sa-ack to the start of the standard route, and ten days later the 17 burlap bags were sling-loaded into a helicopter and removed. Thanks go to John Dill and Hal Grover of the Search and Rescue Group of the National Park Service, who helped us organize the project. The problem at Half Dome is chronic: A typical party packs in a big dinner anticipat-



PLATE 79

Members of the Sierra Nevada Section of the American Alpine Club cleaning up trash at the foot of the northwest face of Half Dome, Yosemite. ing short rations. Somehow, the tin cans and wrappers never get into a haul bag. The party never intends to return to the start of the route. A portion of the problem seems attributable to foreign climbers. Several foreign parties have been reported generating a barrage of falling litter. But the question is how to show them we don't treat mountains that way here, unless we clean up our own act? The rate of accumulation is staggering. Another cleanup had been done in 1973 and several times since the trash has been burned. We had hoped that a freshly-cleaned area would inspire the next climbers to take extra care, but not so! The National Park Service crew that removed the bags reported fresh litter from just the few intervening days.

GREG DONALDSON

Utah

Climbing in Arches National Park and Zion National Park, Southern Utah. Climbing activity is picking up in southern Utah where climbers are taking advantage of warm weather and abundant rock. The following is just a sampling. Arches National Park: Despite regulations restricting climbing, Pat Miller and I made the second ascent of Owl Pinnacle, which I had soloed in 1978 (F8). Dead Horse Point: "Dream of Dead Horses" by me solo, February, 1978; second ascent by Miller and me, September, 1979 (IV, F7, A3). St. George Area: "Petroglyph Corner" right side soloed by Dave Jones (F9) and left side by Jones, Rob Schnelker, John ? and me (F9). Zion National Park: "Archangel" was soloed by me in 1978 and had its second ascent in May, 1978 by Brian Becker and me (VI, F8, A3). Becker pushed the free climbing on several of the 17 pitches to F9. We completed the route after six hours on the second day. I made the first ascent of Cerberus Gendarme solo in 1977 via "Touchstone Wall" (V, F9, A2). It now has two more routes. "Coconut Corner" was done by Mike Weiss and David Breashears in 1978 (III, F10) and a nine-pitch F9 route by Randy Aton, Mike Stern and Mike Allison. Wes Krause, Randy Cerf and I climbed "The Central Pillar of Spry" in 1977, an extremely sustained and difficult route, which has repulsed second-ascent attempts (IV, F10, A2). "Monkeyfinger Wall was ascended by Schnelker and me in 1978 and had its second ascent in the early winter of 1979 by Terry Lien, Brian Smoot and me (V, F9, A3). Mount Nemea was first ascended by Kent Stephens and me, involving much scrambling and some F7. The best climb in Zion in 1979 was the first ascent of the Minotaur, a 700-foot tower which had unsuccessfully been attempted five times. In 1977 Scott Fischer and I had tried the climb but were stopped by an overhanging off-width crack. Fischer attempted the crack free but fell from the lip of the overhang. I caught him in my arms after a 15-foot fall without using the rope as the

pitch was unprotected. This spectacular failure was outdone this year when we returned. This time I aided the overhang on stacked cam nuts and placed a drilled angle and a sideways bong at the lip, then lowered down, cleaning the nuts. Fischer then led the overhang "free" using the bong and angle as holds. Nearly halfway up the tower we found a ledge for the night. I fixed an aid pitch after a bolt ladder and a pendulum. Fischer led the next pitch but after 65 feet fell onto a good nut. However the runner connecting the rope to the nut broke and he continued to fall past me, jerking me into the air. The spectacular plunge ruined the brand-new rope as well as nearly burning through the $\frac{3}{4}$ " tubular sling connecting the rope to the hex that caught the fall. Nonetheless we continued on and reached the virgin summit that afternoon (IV, F9, A3). Descent was made by Tyrolean traverse to Scott's Lookout on 100 meters of rope thrown down and across to us by Deacon and Pam Banks.

RON OLEVSKY, Southern Utah State College Mountaineering Club

Wyoming—Tetons

Grand Teton, Northeast Couloir Gully. In mid-July Charlie Fowler and I climbed a gully filled with water-ice which rises from the northeast couloir. The gully begins about 1000 feet above the bergschrund of the couloir. After six pitches it ends at a small notch in the east ridge, just east of the Molar Tooth. It is probably the hardest ice route in the Tetons, though there are other early-season possibilities on the north side of the east ridge.

JEFF LOWE

Wyoming-Wind River Range

Orion's Reflection. The great canyon walls of the Wind River Range contain many spectacular features seldom seen by the climber, but perhaps nowhere are there more surprises than in the southeastern portion. Glimpses from the Bears Ears Trail in past years tempted me to investigate the valley of Smith Lakes. My first peek at the walls here, some years ago, proved inconclusive; the tight contours of the map suggested a return. In 1978 Jim Kanzler and I hiked from Dickinson Park to Cathedral Lake, to focus on a prow of grey granite fully 1200 feet above the talus footings. The prow looked vertical, and in that light impossible. Only after we had done a climb on a crag farther into the valley did we study the face of the prow again, this time with better lighting. The binoculars told us we had a classic at our disposal. After Labor Day we returned, heavily laden for the apparently considerable aid. The companionship of Margo Erjavec was appreciated, for she helped carry loads and photographed our progress from various vantages, then later met us

near the summit. We made a carry to the big ledge that enters the face low on the right, stockpiling food, bivouac gear, ropes, a wall rack, and water. The next morning, Jim did a difficult and taxing stem behind a gigantic block, from where a slanting lavback crack continued to a spacious ledge; the ledge proved so inviting that we finally made it our bivouac site for the first night. The next pitch was my turn: a rightfacing corner that became aid, then a long section of nailing on a vertical wall beneath a horizontal arch. It was a slow, difficult, and most spectacular pitch. Chocks and friends took over again as Jim continued a difficult pitch, both free and aid, much of it a right-facing dihedral. It was after dark when the lead was complete to a tie-off station. The night was warm. The route continued up a series of vertical, difficult cracks, usually with only one solution. The second pitch of the morning proved to be full of dirt and grass, with exasperating slow aid. Progress here was slow, and the bypass of a giant detached block was delayed by the placing of a protection bolt. From a ledge beneath a great concave wall the crack systems now looked discontinuous and poor; this was a surprise, for here we thought progress would improve. Jim made a very difficult traverse, using aid and underclings, to make a leftward bypass of the bottom of a great orange-colored pillar. Steep climbing, but with good holds, led to a belay recess on the exposed outer edge of the pillar. Darkness was nearly upon us, a poor position for the night here. Continuing, Jim found a left-facing corner, one with several short overhanging sections; placements were so awkward that we later lost several valuable items. Cleaning on Jümars was illuminated by first the starlight, then a magnificent full moon. There was a bivouac ledge of sorts; an uncomfortable slope was long enough, but the dryness and position made sleep difficult. But the situation was splendid, with the reflection of the constellation Orion in Cathedral Lake. In the morning a route left of a blind corner, awkward at first, proved the key to success. Always one crack system-just one-kept continuing, usually on a rightward slant. A deep crack we had noted from below made a baffling overhanging slot, but just when we needed a bypass, a thin aid crack appeared on its right. A deep squeeze chimney (F9 or 10) solved the problem on the orange wall, a final barrier to where the face provided some route latitude for the first time. After some complex rope management, a flaring squeeze proved to be the last problem. Above were blocks and ledges, and we were close to the gigantic leaning summit block. The dryness and unusual warm weather had added to the exertion of the climb, but now we could relax, finish our last water, and pack the haul bag for the ceremonial throw-down. Together with most of the rack, the 1200-foot free fall proved most successful: everything was recovered that evening. (NCCS V, F9, A3; 10 pitches.) September 5 to 7.

FRED BECKEY

Lizard Head Peak, Northeast Corner. From July 21 to 24 Michael Jackson, Stephanie Petrilak and I climbed a new route on the 1800-foot northeast corner of Lizard Head Peak (12,842 feet). Each of the three previous unsuccessful attempts had high points slightly above our first bivouac. The route follows the northeast skyline as viewed from the circue lake under the north face. We started at a small saddle on the northeast ridge, 200 feet above the lake. We climbed directly up the ridge to near the top of a pinnacle, which we bypassed on the left (south). We then ascended to the base of the east face and climbed diagonally right to a ledge on the northeast corner, where we bivouacked. On the second day we climbed some four difficult pitches (F8 and F9, A2 and A3) on or near the northeast corner. We bivouacked hanging in a miserable wet alcove, a rope-length below a large ledge. Above the ledge the climbing became somewhat easier although at one point we had to traverse onto the north face on a ledge, which was dangerous, rounded off with loose, wet rock and moss and no protection. A gully led to the exposed summit wall (F8). From 20 feet above a hanging belay, it was a scramble to the top. We reached the summit at 6:30 P.M. Descent was by the north ridge, a poor choice with snow, loose wet rock and mud. We bivouacked for the third night above slabs on the north ridge. NCCS VI, F9+, A3.

MICHAEL WILLIAMS, Only Footprints

Steeple Peak, West Face, 1977. In June, 1977 my brother and I made what we believe was a new route on the west face of Steeple Peak. We climbed six pitches in a direct line up the face. All the cracks are clean and lead directly to the summit with the final moves being a mantel out of a steep layback crack onto the summit cairn. NCCS III, F8.

STEPHEN POLLOCK, University of Washington Climbing Club

Steeple Peak, East Temple, Haystack. Lured by the unclimbed northeast face of East Temple, David Black, Alan Bartlett and I completed three new routes on the seldom climbed rock forming the east faces of East Temple, Steeple Peak, and Haystack. Leaving the Big Sandy entrance in late afternoon, we camped at Black Joe Lake and moved up to near the base of East Temple the next morning. That afternoon we climbed the east ridge of Steeple Peak picking one of the many variations possible on the mostly third-class route. NCCS III F9. The summit provided a good view of both the northwest and northeast faces of East Temple as well as Little El Cap across the valley. The next day we started work on the northeast face of East Temple. A prominent right-leaning crack system at bottom center of the face seemed an obvious starting point, but closer observation revealed loose rock and extensive vegetation, mak-

ing a left-leaning lesser system 200 feet to the right more attractive. Three pitches up we intersected the original prominent crack. Hoping for more secure rock above, we continued three more pitches to a horizontal band and reached a small bivouac ledge. The next morning we traversed left one pitch and ascended a clean left-leaning crack which brought us directly below but still a long way from the apex of the face. Two more pitches left us on a highly vegetated sloping ledge. While Alan pioneered the only all-aid pitch on the discontinuous face directly above, Dave and I gardened, creating a plausible bivy for three sardines. The final day began up the fixed-aid pitch, continued up and left, and culminated just left of a large overhanging finger of rock jutting from the summit. Perhaps more ascents would lessen the rotten rock and dirt. NCCS VI F9, A.3. Perfect weather wouldn't let us rest and the next day we ascended a fine route on the east buttress of the south summit of Haystack (see photo in Bonney's guide, 3rd edition, p. 511b). Nine classic pitches of diverse climbing made up for the difficulties encountered on East Temple. Beginning just right of center on an obvious plate that leans on the east buttress, we face-climbed to a deep crack that continued several pitches thinning and steepening to classic F9 jamming. NCCS III. F9.

RICK BRADSHAW, Great Basin Bozos

Warbonnet Peak. In June Charlie Fowler and I made two free climbs in the Wind Rivers that equal and surpass the free routes on the Diamond of Longs Peak in length, difficulty and beauty. Both routes were on Warbonnet Peak. Feather Buttress follows the prominent crack system on the steep northern face and finishes via a spectacular but moderate layback up the incredibly sharp crest below the summit. NCCS V, F10+, 11 leads. On the southeast side of Warbonnet there is a large, flat wall of perfect granite, the first such rock that one sees on the approach over Jackass Pass into the Cirque of the Towers. Black Elk took a line slightly left of center, eventually climbing behind a huge chockstone which is wedged three-quarters of the way up the face. It has a little of everything; face-climbing, laybacks, cracks of all sizes and stemming added up to the finest free-climb either of us has ever done. NCCS V, F10, 10 long pitches.

JEFF LOWE

Colorado

Climbing in Rocky Mountain National Park, Spring and Early Summer. Climbing in Rocky Mountain National Park continued to suffer from the lack of a guidebook. For nearly two years Walter Fricke's guide has been out of print and many climbers hesitate to visit the area.

This, coupled with heavy winter snows which lasted into June and the fuel scare, resulted in few visitors. The local guide service has been collecting route descriptions for the past several years and given them to Scott Kimball and Chip Salaun, who have completed a new climbers' guide to the sub-alpine regions like Lumpy Ridge. This book should be available early in the fall of 1979. A guide to the mountains is still a long way off. Activity has been concentrated on Lumpy Ridge. New and difficult routes have been put up by local climbers and climbers from Boulder, as well as by British, European and Australian climbers. In early June, Jeff Lowe and Charlie Fowler solved an interesting problem created by the first guidebook, which described the route Mr. President on Sundance as a moderately difficult free climb. Subsequent parties attempting the climb were unable to get beyond the middle of the second pitch where the crack ends. The first ascent by Layton Kor and Steve Komito climbed the second pitch on aid, which the guidebook failed to mention. Lowe and Fowler did the second pitch free at F11. Scott Kimball and Australian Greg Childs completed a new route on the east side of Sundance with two pitches of F9+. The route, Lichens to Lick, ascends a large roof just right of a prominent chimney near the prow and right of the Dalke-Covington route. Kimball and Bill Wylie did a new route on the Bookmark left of Star Trek; the climb, Romulan Territory, has three pitches with F10 on the second and F9 on the third. Kimball and Nancy Herron made a new two-pitch F10 climb on the Checkerboard, Rainy Day Women. Also on the Checkerboard Kimball and Chip Salaun did a new F9+ route which they describe as "bizarre," Fallen Shark. On the Pear, Kimball and Carl Harrison climbed a very difficult section of the route right of Whole Thing, Fat Bottom Grove (F10+). Harrison and Salaun did a new route on the Bookend between the chimneys of Pinch and Sicilean Defence, Corinthian Column. It had four pitches of F9 and one of F8. Billy Westbay and Doug Snively put up a new route on the Book left of Isis, Ramses, with one pitch of F10. Another route by these two done in 1978 to the right of Golum's Arch. Close Encounters (F10+) received much attention this season. Also on the Book, right of Perelanda in the prominent corner, is Alec Sharp and John Clever's new route, Howling in the Wind (F11). Alligator Rock is near where the Devils Gulch Road descends to Glen Haven. Snively and Westbay climbed F10+ Head Over Heels, one pitch of steep hand-crack and lay-backing and Kimball and Wylie put up Possum Hand, a F10 jam-crack through a large ceiling.

MICHAEL COVINGTON

McHenry's Peak, Northwest Face, Rocky Mountain National Park. Late in the fall of 1978 Bill Feiges and I departed the Bear Lake parking area at 2:30 A.M. for a headlamp approach to the hanging valley below

the northwest face of McHenry's. We entered the seldom-visited valley at sunrise. The 1200-foot northwest face of McHenry's, directly above, looked almost as good as Bill had said. The face is broken up into five rather distinct parts. First a rock band contained the crux rock climbing (F8) on very loose rock; then a low-angled icefield led into a dead-end ice gully. We exited from the gully by climbing the airy overhang directly above. A little more easy rock climbing put us on the névé above the second rock band. Several hundred feet of easy mixed climbing just to the left of the vertical rock took us to the summit.

PETER METCALF

CANADA

Yukon Territory

Mount Logan, South-Southwest Ridge. After four unsuccessful attempts, the south-southwest ridge of Mount Logan was climbed in June by Alan Burgess, Jim Elzinga, John Laughlan and me. After fifteen miserable, wet days at Kluane Lake, we were finally flown by fixedwing plane and chopper to the large south cirque of Logan, between our buttress on the left and the Hummingbird Ridge. Base Camp was set up at 9000 feet where we acclimatized for two days and placed bets on the timing of the next avalanche. We climbed the initial 2500-foot couloir during the short arctic night to dodge the rockfall. A camp was established on a 55° ice slope at the head of the gully just short of the first major difficulties. A rock band gave some interesting problems up to F8 and led on to a Peruvian-type ridge with mushrooms, bottomless snow, poor belays and a lot of swearing and cussing. The climbing was never extreme but the going was slow and tedious. Finally at 14,000 feet we stumbled across the previous stopper on the route. First Al Burgess and I shoveled a way up a nearly vertical trough of powdery fluff, then John Laughlan led, fell, and led again through a rotten band of rock (F8+), the site of last year's accident which had left Jim Elzinga with a slight dent in his head. We waited for two hours while Al traversed 30 feet of vertical, bottomless snow with 2000 feet of gravity pulling down on him. The weather turned awful while we struggled up the easy but horrendously dangerous snow-and-ice slope below the crux rock band. Camp VI was perched at the head of the big snow slope, two platforms having been hacked out of the ice on a small rib running down from the rocks. Two nights later, still waiting for decent weather, all hell broke loose; a small slide came down from the rocks, ripped through one tent, burying Al and throwing me down the face for a small, unwanted ride. Two