wide gully if he were not in perfect control with his self-arrest. He then continued 60 ft. down the gully with increasing speed until the gully fanned out where he was able to go into a self-arrest. Observers said he did this correctly and was slowing down, but he was unable to stop before bumping over a projecting rock in the snow. He then slid into a pile of rocks at the bottom of the couloir, where he received only minor injuries.

Source: Report from Mr. Thomas C. Miller, Acting Superintendent, Grand Teton National Park; the Mountaineer 47:4, 1954 (Dec.).

Montana, Glacier National Park—On June 19, 1954, Miss Claudia Keil (17) and two companions were returning from an ascent of Mt. Altyn when an accident occurred. They were approximately one-quarter of the way down when Miss Keil stepped out on a snow drift apparently with the intention of sliding down the drift. She was unaware of a 40-ft. drop off at the end of the drift. She slid down the drift and disappeared over the end falling 20 feet to the ground. One of the other girls immediately went for help while the other went to the injured girl. She suffered a broken right wrist, chipped right elbow, cuts and bruises about the head, a broken front tooth and shock.

Source: Ranger Higgin's report from Stanley C. Joseph, Acting Superintendent, Glacier National Park.

Idaho, Local Cliff near Idaho Falls—On May 7, 1954, Dale Harker (14) was climbing down a cliff using a fixed rope when some rocks gave way beneath his feet. He was unable to hang onto the rope and fell about 30 feet to the base of the cliff. He broke his right arm and received severe lacerations on his scalp and right leg. A companion had previously made a successful descent.

Source: Newspaper report.

Analysis: Apparently improper rappel technique was used.

Idaho, Cliff near Lava Hot Springs—On June 2, 1954, Ray Duane Richards (17) fell while descending a cliff. He and a companion had successfully climbed the cliff and during the descent, Richards apparently lost his footing and fell 75 ft. to his death.

Source: Newspaper report.

Arizona, Santa Catalina Mountains—On April 20, 1954, three University fo Arizona students, William Bingham (21), Robert Frederick (21) and Ned Cranston (21) started up Mt. Lemmon to find Picture Rock and Finger Rock. Late in the afternoon, Bingham, while attempting to retrieve a climbing rope, jumped down a 14-ft. cliff and landed in the gravel and shale of the saddle high on the peak, twisting his ankle so severely that he could not walk. Frederick and Cranston tried to carry Bingham out, but his weight, 180 pounds, made this impossible, so Frederick left for help, while Cranston stayed with Bingham. Cranston and Bingham were able to light a fire and keep warm.

Frederick traveled the seven miles to their car and alerted the authorities who organized a rescue party. The rescue was effected with considerable

difficulty due to the ruggedness of the terrain and the desert heat. It was found that Bingham had fractured a bone in his foot.

Source: Peter Gardner; Appalachia 20:277, 1954.

California, Mount Whitney—On September 5, 1954, Henry Mandolf (55) with two sixteen-year-old boys, climbed Mt. Whitney by the trail and were descending the north slope toward the Whitney-Russell col. They were carrying packs. On the descent to the col Mandolf slipped on an ice-covered rock. He rolled and slid approximately 100 ft. on the rocks. He was bruised and battered and semi-conscious. His companions immediately set up camp and one of them made a difficult climb that night to get help. A rescue party reached him the next day and he was evacuated. He received severe bruises and sprains.

Source: Charles Wilts, a member of the rescue team; James Bonner.

Analysis: Insufficient care on the part of the climber on difficult terrain (Class 3) at the end of a long hard day. Undoubtedly fatigue contributed to this accident. His companions deserve credit for their handling of the emergency.

San Jacinto Mountains, Taquitz Rock—On June 19, 1954, Joe Fitscher (16) and a companion, Kodis, visited Taquitz Rock on a scheduled Sierra Club climb. They first climbed the horn route using one piton. This is a difficult rock climb and more conservative climbers agree four pitons should be used for minimum protection. After completing the climb, Fitscher and his companion walked around the side of the rock to get onto the friction route, the usual route of descent. Rather than climb up a short distance and reach this friction route by walking, Fitscher traversed around the edge of the rock and came across difficulties with steep, short, exposed faces. He said, "this looks like a run across." He ran but did not make it, and slipped, bounced, and fell approximately 200 ft. down steep slabs and short steep pitches. He received extensive cuts and bruises and a blood clot in the optic nerve which later cleared.

Source: Charles Wilts present at the time of the accident; James Bonner. Yosemite Valley, Cathedral Spires—On April 10, 1954, Larry Lackey (19) in company with Dick Long and Jim Wilson were trying a new route on the higher Cathedral Spire. All three are experienced mountaineers and climbers. They turned back from their climb, roped off, and started to descend unroped down a step chimney. Lackey was last man. In descending, Lackey pulled off a large rock (estimated weight 200 lbs.) and fell about 8-10 ft. The rock landed on his legs and crushed them severely. One of his legs was fractured in seven places. First aid was given and he was removed the next morning in a Stokes litter.

Source: Gil Roberts, Sierra Club, and Stanford Alpine Club present at the scene; report of N. B. Evans, Supervising Ranger, Yosemite National Park; statement of climbing party signed by James Wilson and Richard Long: James Bonner.

Analysis: All rocks, even big ones, must be treated with caution. It is doubtful that a rope would have been any help here.