Analysis: Parsons should not have been on this climb (near the Swedlund route) without being roped up.

California, Yosemite National Park. On 26 September while descending a boulder field with a slope of approximately 45°, Gary Leonard (25) stepped out onto a large boulder about the size of a dining room table. It tipped forward, causing him to jump down the slope. He jumped and ran about 30 feet before he realized that it was hopeless to try to stay under control. He tucked and rolled and slammed into the boulders, trying to protect his head as much as possible.

## Source: Gary Leonard.

Analysis: Assuming that the boulder tipping was unavoidable, the only things that could have lessened his injuries would have been heavier boots (he was wearing rock shoes), long pants instead of shorts, and he should have been wearing his hard hat instead of carrying it.

California, Sierra Nevada, Matterhorn Peak. On 11 October Craig Williams (41), Bob Bowen (34), and Clarke Smith (35), all experienced mountaineers, were descending on a sunny day from a successful and uneventful ascent of Matterhorn Peak. This involved a three hour walk on trail and talus and scree to the Saturday night campsite and on Sunday a 2,900-foot climb at first on talus and then a glacier, gradually steepening to about 35° at the base of the North wall. The final pitches are rock, class 2–5, depending on the route. This party took the easiest eastern gully and east face.

The glacier was very hard ice, studded with rocks. Crampons and ice axes were used and a rope carried, but never uncoiled. No hard hats were carried. Feet had to be stamped to get the crampons to bite.

At the top of the glacier, Smith, while traversing to get to an easier place to descend, slipped and started sliding down the glacier. One ineffectual attempt at self arrest was made, but the ice axe was lost (no wrist loop), probably because it was here that he broke his thumb. He came to a stop about 300 feet below, conscious, but bleeding from severe scalp lacerations. Bowen and Williams made him as warm as possible with the clothing on hand, then went down to camp; Williams continuing to Bridgeport for help and Bowen returning with a down jacket and sleeping bag. Luckily the Sheriff was able to call a twin engine Marine Corps helicopter. It arrived and hovered for nearly an hour while the Marine Corps stretcher crew climbed up the steep part of the glacier and roped the victim down. He spent a week in the Bridgeport Hospital.

Source: Clarke S. Smith, Jr.

Analysis: In retrospect, it seems that the climbers should have seen the possible consequences of a slip and been roped, and should have worn hard hats as well.

California, Sierra Nevada, Mt. Owens. On 12 December Donald Gibson (19) and a companion were attempting to climb the east ridge of Mt. Owens (class 4). One had tried twice before and apparently had some knowledge of belaying. The victim refused a belay and attempted