

*New Mexico, Shiprock*—The accident occurred on 29 May at approximately 6 P.M. on the west face of Shiprock on a pitch commonly known as the "head-wall" about 25 feet from the "notch". A descent to the ground was in progress after a second ascent of the North Tower of Shiprock. Bernard E. Topp (21), A. Harry Earle (20) and Harry S. Davis (30) all had moderate to considerable experience. The weather was clear and the party had two hours of daylight, adequate for the complete descent. The slope of the pitch was near vertical. A rappel sling had been rigged as follows: a vertical piton had been driven into a crack to which a 1½ inch rappel ring was secured by several loops (estimated 3 to 5) of nylon shroud cord. The loops were not individually tied as it was felt the rig would be stronger if there was an equal strain on all segments of the cord. A sheet-bend knot backed up with overhand knots was tied. Earle and David had descended to a lower ledge on a 50 foot rappel. Topp had just begun the descent and was not belayed when the knot came untied. Topp's body hit the ledge on which Davis and Earle were standing and continued in a series of free-falls and rolls to the bottom of the headwall, a distance of about 500 feet. Earle and Davis reached the body about a half hour later and found the skull crushed.

Subsequent inspection revealed that the rappel rope which became tangled with Topp's body during the fall was still through the rappel ring. On the headwall the piton was intact and the shroud cord was still hanging loosely in the piton. It was in no way frayed or damaged and the ends which had been melted to prevent fraying were both present indicating conclusively that the knot had slipped. The shroud cord was of the hollow variety with several strands through the middle. Supplier's estimate for strength of this type material is 550 lbs.

*Source:* Harry S. Davis.

*Analysis:* (Davis). It is left to the reader's judgement whether shroud cord or the sheet-bend knot should have been used in this application. A belay from below would have been of little use for it is felt that Topp was killed when he struck the ledge where his belayer would have been stationed. A belay from an upper anchor point, although involving the use of additional hardware, rope and time would have saved his life.

Finally, it is felt that the knot did not fail instantaneously but must have slipped incrementally with each rappeller. No one observed Topp when he got into the rappel but we believed he assumed that the rappel was safe as it had previously supported two climbers and hence did not check the rig. Had Topp carefully inspected the knot before descending, he might have found it was slipping and taken corrective measures.

*EDITOR'S NOTE*—The accident raises doubts concerning the safety of nylon shroud line for use as rappel slings, particularly since this is not the first accident of this sort associated with nylon shroud line. (Accident report 1954, p. 4 and pp. 7 and 8; also *Appalachia* 19, 598-60, Dec. 1953, for evaluation of nylon shroud line.)

*California, Mt. Baden-Powell*—On Jan. 9, Richard Skultin (29) and Alice Kuhn (27) were descending Mt. Baden-Powell after completing the ascent. The wind was strong and icy. On the descent they started across a steep slope—the footing was bad and tricky. Skultin was ahead when suddenly