

Five broken ribs were not discovered until six weeks after the accident when it was determined that they had penetrated the pleural cavity and caused bleeding as he walked down the mountain.

Moss is a member of the Mazamas. Both he and Dave Young are climbers of many years experience.

Source of information: account by Harry W. Moss in "Mazama", December, 1951, and account by another member of the party.

Analysis. Accidents of this kind usually result from failure to exercise the ordinary precaution of treading tentatively on rock of questionable structure, a measure which seems especially advisable in many parts of the Canadian Rockies. The victim of this accident, however, believed that his chosen stance was sound as he had observed the first party's uneventful passage over these rocks. Failure to use the intermediate belay point and the use of a shoulder belay by Moss's second man may have contributed to the seriousness of the accident. Successful application of a direct rock belay by the third man in this instance should not be construed as evidence supporting the use of this type of belay for safeguarding the leader. For such purpose, the direct rock belay may be unsound. In this case the shock of the fall was partially absorbed by the second man. The use of a direct belay to anchor the second to a nearby rock while he gives the leader an indirect body belay or piton belay is in accordance with good technique.

This accident illustrates the ever-present danger of loose and unstable rock and the need for constant vigilance to detect it. Even the most experienced mountaineers are not immune to this danger, as Moss himself has emphasized. The accident further illustrates the principle that in roped climbing especially *each* member of a mountaineering team is responsible for the security of his party, and should pay constant attention to the proper handling of his rope.

Mexico. It is encouraging to note the decrease in the number of fatal accidents on Mexican mountains in 1951 compared to 1950. Two fatalities as a result of a total of four accidents were reported to this committee by the

Chairman of the Safety Committee of the Club de Exploraciones de Mexico. On 13 September 1951 one person disappeared and his companion was badly frozen on the volcano Citlalpetl (Orizaba). In addition, three accidents on rock were reported. In March, two people were hurt in falling from a cliff in the State of Hidalgo. Failure to use pitons for safety was given as the cause of the accident. In September, one person died and another was hurt in a fall from a cliff in the State of Mexico while climbing in rainy weather. In the same month, three persons were hurt in Monterey while trying to make a climb, apparently without much knowledge of the fundamentals of mountaineering techniques.

It is particularly interesting to note that about two thousand persons attempted the ascent of Popocatepetl for the 1951 Celebration of the Flags. About sixty percent of these reached the lower summit. There were no injuries. This fact is attributed to the organization of special brigades to watch dangerous places. It is gratifying to learn that no one was allowed to begin the climb without the necessary equipment and some satisfactory indication that he was in condition to attempt the ascent.

A letter from "Alpinismo", a Mexican climbing journal, states that there were only eight fatal accidents in 1949 rather than the nineteen reported. It is also stated that there were seven or eight deaths on La Muela instead of the "about twenty" reported to this Committee in that year. The statement that accidents on the descent of the Pachuca Crag often occurred while the victims were under the influence of alcohol is suggested as being an exaggeration. The most frequent causes stated in the "Alpinismo" letter are inexperience and inadequate equipment.

OTHER MISHAPS AND INCIDENTS

The annual review of accidents presented by this committee does not purport to be complete, although it is believed that the majority of serious or otherwise significant accidents are covered therein.

Each year a number of mishaps occur which can be considered mountaineering accidents only in a related sense. A few such incidents are briefly reported below.