infection seems dominant. At the same time, however, diuretics and oxygen if available should be administered. Rapid digitalis administration should also be given, but only under the supervision of a physician familiar with this drug. In general, the higher the altitude, the more rapid will be the course of either disease, but the failure to respond to antibiotics is strong evidence against the presence of pneumonia.

The writer would be very pleased to hear from others, climbers or physicians, who may have information on this subject.

CHARLES S. HOUSTON, M. D.
Aspen Clinic
Aspen, Colorado

## EQUIPMENT

*Ice Screws.* The first successful use of the newly developed *ice screw* was made by Gary Rose and Dick McGowan on the second ascent of the Nisqually Icefall this summer. The party reported that their use was highly advantageous on a 200-foot, nearly vertical wall of ice at about 11,500 feet.

This, briefly, is their history. While in Switzerland on my way back from Pakistan in 1958, I went climbing with Hans Flachsmann of Zürich. He told me of an ice screw that Arnold Glatthard, head of the Rosenlaui School of Mountaineering, had developed. Glatthard and his friends had tested them in the ice tunnels of the Aletsch Glacier by screwing them straight up into the ice and standing in slings. Three men standing on one screw failed to pull it out. According to Flachsmann, the Swiss Army has them and has been testing them for some time. Not having an ice screw, Flachsmann pulled a lag screw from his pack and screwed it into the ice, using a wrench on the square head. He said that the ice screw was similar except that it had an eye on the top for a carabiner. I was unable to pull it out. Impressed, I brought it to New York, where Oscar Dorfmann made me a small ice screw with an eye-loop welded to it. I told Pete Schoening abount it at the annual dinner of the American Alpine Club in 1958. Since the Northwest climbers were the logical ones to test this, I gave him Oscar's prototype. Pete had Lloyd Anderson ask Fritsch in Zürich to make several kinds using the old piton stock as the basis for the screw. He got about five different kinds, which Pete, McGowan and I tested on the Nisqually. All held while all ice pitons came out. We selected the design that would be most convenient to use and they were ordered.

NICK CLINCH