pressure is applied to the device the eccentric bites into the rope and holds. When pressure is relaxed the device may be slid easily up the rope. Stirrup slings can be attached to the loops for prusiking.

GARY D. ROSE

MARWA Ice Screw. An ice screw has been developed in Austria, which is different from the type described in the *A.A.J.*, 1960, 12:1, p. 190. The MARWA ice screws sent to me to test were about 6½″ long with a shaft 5/16″ in diameter. The upper inch consists of the eye for the carabiner. The lower two inches have threads identical to those of a corkscrew. (I am told they will pull corks admirably.) They are very light, weighing about three ounces, half the weight of the lag-screw type. At first glance they seem too flimsy, but although we have not laboratory tested them ourselves for strength, they certainly withstood all the abuse we could give them by jumping down a steep ice slope against a static belay. The chrome-vanadium steel is reported capable of withstanding loads up to 5720 pounds.

Several obvious advantages turned up during our preliminary testing. We could start them into the ice without hammering at all. Thus it might be possible also to save the weight of the hammer, as well has having two of this type for the weight of one of the other. They screwed in so easily that in most kinds of ice they went in with the fingers. Only in one case, in blue water-ice, was it necessary to make the last turn or two by inserting another ice screw into the eye for leverage. With their small diameter they did not shatter brittle ice. They were quickly and easily removed. Unlike ice pitons, the screws held into the ice with the usual tenacity of the older type of ice screw, even when subjected to considerable pressure, with one single exception: in some rotton, porous ice the standard ice screw with its slightly longer length, longer thread and bigger diameter did hold more solidly. Though this summer we shall also take to the Peruvian Andes a number of the lag-screw type of ice screws, we are sufficiently convinced of the advantages of the MARWA ice screw to rely primarily on them.

H. ADAMS CARTER