

## GLACIOLOGICAL RESEARCH IN GERMANY

In September 1950 the Deutsche Quartärvereinigung of Hanover met at Munich. Three days were spent in the "classic region of Alpine Pleistocene stratigraphy, the 'Iller-Lech' area of Penck." Papers were read and discussed for three days on the return to Munich. After the sessions further tours were carried out.

During the sessions twenty-six papers were read. Of these many were of pure geological interest and should be recorded elsewhere. The following papers however have closer bearing on the subjects of special interest to this Society:

- R. Finsterwalder: Die bayerischen Gletscher.
- H. Louis: Zur Theorie der Gletschererosion in Tälern.
- H. Lembke: Über periglaziale Erscheinungen im Jungdiluvium Norddeutschlands.
- K. Richter: Die klimatische Auswertung der glazialen Stillstandslagen in Norddeutschland.
- D. Wirtz: Das Pleistozän vom westlichen England und Irland.
- A. Dücker: Ein Untersuchungsverfahren zur Bestimmung der Eismächtigkeit.
- J. Büdel: Die Klimaphasen der Würmeiszeit in Deutschland.
- F. Klute: Niederschlag und Temperatur zur Eiszeit.
- E. Ostendorff: Zur Dynamik des Inlandeises.
- A. Mirtsching: Über die absolute Dauer des Eiszeitalters.
- A. Cailleux and F. Tricart: Moderne granulometrische Methoden in der Quartärforschung.

It is the hope of the organisers to publish all the papers in the Year Book of the Quartärvereinigung. So far the investigation of living glaciers and the study of glacier physics in particular, do not seem to have revived to any marked extent in Germany, nor for that matter in Austria—the two countries which have contributed so much in the past.

## INSTRUMENTS AND METHODS

## SNOW CLEARANCE

A NEW type of snow clearance machine has been designed by Dr. E. Bucher, the former director of the Weissfluhjoch Snow and Avalanche Research Station (Schnee- und Lawinenforschungsinstitut Weissfluhjoch) at Davos.

The machine, of which illustrations are shown on page 502, is designed on the principle of the small hand-directed cultivator now common on small holdings.

It is driven by a 10 h.p. air-cooled, totally enclosed engine of 88 mm. bore and 76 mm. stroke, using petrol at the rate of 2.7–3.2 litres an hour at sea-level. The snow is gathered into the machine by an eight-bladed "fraiser" whence it is either delivered into trucks or blown out, in the latter case to a distance of 10–15 metres. It will clear 300–500 cubic metres of snow an hour or load 1,000 kg. a minute.

These figures are probably optimum calculations for new snow and will naturally depend on the exact conditions obtaining. The speed of travel can be regulated according to conditions from 545 to 4,370 metres an hour with four intermediate speeds.

The small size and handiness of this machine should make it a valuable tool for operating in confined spaces such as footpaths or between buildings.