

many tables and figures scattered throughout the volume had been translated. The lack of large-scale maps of the glaciers and the adjacent terrain is a serious handicap to the student who desires a clearer concept of the glaciers and the spatial location of the study areas relative to the local terrain. However, this valuable and timely contribution of results obtained in a little-known area is welcomed heartily by those interested in the results of the I.G.Y. program. Not only are specific data made available, but an opportunity is presented for comparison of results with those obtained by other I.G.Y. programs in far separated areas of alpine ice cover.

LOUIS L. RAY

J. CORBEL. *Neiges et glaciers*. Paris, Librairie Armand Colin, 1962. 224 p. (Collection Armand Colin, No. 361.) Fr. 5.70.

IN this midget volume the author has briefly reviewed the more descriptive aspects of the broad subject of snow and glaciers. With the aid of many tables and diagrams a surprising amount of useful information has been compressed into the relatively few small pages. The purely factual information is presented in an interesting manner and illustrative examples have been drawn from the multitude of available sources.

The author's approach to the subject as a whole is certainly logical, describing in turn the physical characteristics of snow and snow cover, the relationship between climate and snowfall, and the physical processes of the glacier. The latter part of the book is devoted to a careful discussion of glaciers of three separate latitudinal species, the erosive processes and morphology of glaciers, and the Quaternary glaciation. It is unfortunate that no serious attempt has been made to include a section on the mathematical theory of glacial movement.

At the end of the book there is an appendix of "statistical tables", which contains useful facts on the Antarctic and the Arctic, snow and glaciers. The selected bibliography is comprehensive, including most of the important papers to be recommended to the intending student of the subject.

This "pocket-size" handbook is well worthy of consideration by anyone seeking an introduction to "snow and ice".

R. J. ADIE

G. O. RAASCH, ed. *Geology of the Arctic: proceedings of the first international symposium on Arctic geology held in Calgary, Alberta, January 11-13, 1960 under the auspices of the Alberta Society of Petroleum Geologists*. 2 vols., map folder. Toronto, University of Toronto Press, 1961. (Distributed in G.B. by Oxford University Press. £10 4s.)

AT last the many fascinating facets of Arctic regional geology have been brought together in one volume of 732 pages and containing 60 papers. The majority of the papers provide detailed information on restricted topics and only one or two present thoroughly complete geological summaries of any one area. The downfall of this volume is the lack of co-ordination of the stratigraphy, etc., from one area to another—this is a symposium volume, not a textbook, and the reader is left to deduce any correlations there may be.

The second volume of 462 pages is in two separate sections; the first contains a selection of 30 papers and abstracts on glaciology, permafrost, climatology, geomorphology, etc., whereas the second has 13 papers on the problems of logistics and exploration.

There is no single theme in the glaciological papers. They cover a wide range and include such diverse topics as seismic refraction sounding in permafrost, thrust fracture patterns in young sea ice and the more routine glaciological studies in Arctic Canada or Greenland.

The two volumes are superbly printed and bound, and all the illustrative maps (including those in the separate folder) are generally of a high standard. The editor is to be congratulated on bringing together so many interesting papers in such an attractive form.

R. J. ADIE