

The Future

There is much good stuff at the end of the book: an "introduction to the future", a description of the Greenlandic magazines and cultural life, and an account of the functioning of the "world's smallest parliament". There is a brief estimate of the mental development of the Greenlanders during the war, when Greenland had its own administration within its own coasts; the political awakening resulting in some most constructive proposals in the Landsraad Assembly on the future of the country; and the significance of recent articles in the Greenland press. There was an anxiety at the end of the war, a fear that the progress accomplished during the war would be nullified by unsympathetic action from Copenhagen. The Greenlander had had a peep out into the world and did not wish the window closed again, and he had come to realize the value of responsible government of the country *in* the country. Vinding concludes that changes in the constitution of Greenland are demanded by present developments, the most important being the establishment of the administration in Greenland instead of in Denmark.

He does not, however, favour opening the country up to private traders, fishermen or sheep-farmers, on the grounds that there is little enough in Greenland for the Greenlanders themselves. Finally, he puts the responsibility for the proper development of Greenland squarely upon the shoulders of the Danish voter and citizen, pointing out that the decision rests with him, and not with a "many-headed civil service". His closing sentence is: "in a free and democratic land there must be no doubt as to who is the master, who the servant".

Development of Greenland Remarkable

"Grönland 1945" criticizes or praises (rarely) the Danish administration of Greenland for the benefit of the Danish people. From the outsider's point of view it should be remembered that whatever criticism is levelled, the development of Greenland is still a remarkable story, perhaps unique in the history of colonial administration. Ole Vinding has written a book of great value at this point in Greenland's history, and one which demands translation into English. The translation, however, would have to be very skilled to match the quality of the Danish original. The author is a writer by profession, and the son of a writer; the tradition of letters is apparent in the work under review.

M.J.D.

RECONNAISSANCE GEOLOGY OF PORTIONS OF VICTORIA ISLAND AND ADJACENT REGIONS OF ARCTIC CANADA.

By A. L. WASHBURN, xi and 133 pp: 32 plates, maps, index. Geological Society of America, 1947.

On October 20, 1947, the Geological Society of America issued a memoir, number 22, entitled "*Reconnaissance Geology of Portions of Victoria Island and Adjacent Regions Arctic Canada*" by A. L. Washburn of the Arctic Institute of North America, Montreal and New York. The memoir is the result of investigations carried out during July and August 1938 and 1939 and from April 1940 to February 1941 by the author and in addition summarizes what information was available from other field studies such as those of Bernier, Douglas, and O'Neill.

In addition to the work on Victoria Island itself, Mr. Washburn made visits to a number of adjacent islands and to parts of the mainland coast.

Victoria Island is the second largest in the Canadian Arctic Archipelago having an area of 79,269 square miles. Much of it is low lying but parts rise over 2,000 feet. The oldest rocks of the region are Precambrian gneisses and granite but none of them are present on Victoria Island. Late Precambrian sediments and volcanic rocks do occur, however, covering large areas. In the general region under discussion Palaeozoic strata ranging in age from Ordovician to probable Permian are to be found. On Victoria Island fossiliferous Ordovician beds are known to be present and possibly Silurian rocks also occur. Strata which may be post-Silurian outcrop along the northwest coast. On Banks and Melville Islands and on the mainland coast Tertiary beds have been found. Though little information concerning the economic geology of Victoria Island and adjacent regions is available, it would appear that none of the known mineral occurrences are of any great economic importance at the present time. They are, however, possibilities for copper and coal.

Probably all of Victoria Island and most at least of the whole area under discussion was glaciated during the Pleistocene. Evidence includes smoothed and striated surfaces, eskers, ground moraines and other glacial deposits. The striae indicate more than one centre of dispersal. On Victoria Island there is evidence that the last movement was from a centre on the island itself.

Well-preserved strand lines show that Victoria Island has recently emerged to a vertical height of at least 500 feet. Marine fossiliferous deposits of mud and sand at various places tell the same story of recent uplift. No tilting of the emerged beaches was recognized. The emergence appears to have been essentially continuous below an altitude of 375 feet and probably below 510 feet although minor pauses occurred at subequal periods of time at least above 120 feet. There is evidence that the emergence was rapid, probably about 50 to 80 inches per century. The emergence is evidently related to deglaciation and was in progress during the closing stages of glaciation.

A considerable portion of the memoir is taken up with consideration of the geomorphic processes which have been responsible for the surface features. Ice rafting is regarded as having been of considerable importance. An excellent discussion of solifluxion and a description of the stone-circles, stone-polygons, mud-polygons, stone-stripes, etc., grouped under the term *strukturboden* is given.

In an appendix are collected the striae observations collected in the Canadian Arctic. A most useful list of references is also given. Thirty-two excellent plates add to the attractiveness and usefulness of the volume. The memoir is accompanied by an index map of the Northwest Territories, a geological map on a scale of approximately 32 miles to an inch and a glacial map on a scale of 40 miles to an inch showing the emerged marine features and the striae directions in the Canadian Arctic.

The volume is attractively bound in cloth and will be a most valuable addition to the library of everyone who is interested in the Arctic.

F.J.A.