## GLACIOLOGICAL RESEARCH ON THE NORTH ATLANTIC COASTS.

BOOK REVIEWS

By Hans W:son Ahlmann. Royal Geographical Society Research Series No. 1, London, 1948. 83 pp. Maps, diagrams, graphs, tables, index.

Professor Ahlmann points out in his introduction to "Glaciological Research on the North Atlantic Coasts", that it was impossible to standardize the publications of the various research teams which have carried out glaciological research under his guidance. It was because of this that he "decided to complete a critical and uniform summary of what I considered to be the most important results of our twenty-two years' labour in the hope that it might benefit future research". The present report is a critical study of the behaviour of glaciers: it contains the essence of the previous research papers. It is a search for a "closer understanding of glaciers and the laws governing their behaviour".

Professor Ahlmann deals with six areas that encircle the North Atlantic from Norway to Greenland, the number of sites being limited only by time, finance and other practical considerations. Care was given to the selection of areas which included Jotunheim, the largest alpine area in Norway; the Karsa Glacier is the only glacier in Sweden that has been examined periodically since the beginning of the century; the ice sheets of North East Land, the typical valley glacier in West Spitsbergen, the Vatnajökull (Iceland) a glacier cap covering a mountainous area, and Clavering Island which has an arctic-continental climate. The physical phenomena associated with each glacier are treated separately under the

major chapter headings of Accumulation, Ablation, Firn and Glaciation Limits, Regime, Rate of Movement and Classification. Each chapter begins with a clear definition of the scientific term, to be followed by the methods employed in securing information and an analysis of the physical phenomena associated with each of the processes in the life of a glacier. Maps and graphs are excellently employed to illuminate the technical discussion. Chapter IX on "Variations of Glacier Margins and Volumes, and the Causes of such Variations" is likely to be of particular interest to the nontechnical reader in search of information on the much-discussed topic of climate variation in the recent past. It is pointed out that "the glaciers in Iceland were far less extensive . . . [during] A.D. 870-1264 than they were at the beginning of the 1930's. The present recession of the glaciers has now proceeded so far that districts cultivated by the Free State (A.D. 870-1264) farmers are again exposed, after having underlain ice for six hundred years".

Professor Ahlmann ends the summary of his results by noting that "The investigations refer for the most part to regions round the northernmost part of the Atlantic . . . and it is not possible to decide on the extent to which these results can be applied outside the region investigated. The investigations are of such general value . . . that it may be considered desirable to extend them to other parts of the earth. . . . At the present rate of development in aviation it should not be difficult to establish and maintain stations on the ice areas".

W. A. Black.

## NO PATHWAY HERE.

By John H. Marsh. Hodder and Stoughton, London and Howard B. Timmins. Cape Town. 1948.

In January 1948 news began to leak into the world's press of the occupation of some small islands somewhere between South Africa and the Antarctic by South African naval forces. In the absence of more exact information, the writers necessarily used their imaginations as to the whereabouts of the islands and the reasons for occupying them. No Pathway Here is an account of the undertaking, written by a journalist who travelled on one of the units of the expedition. It was published with remarkable speed, being off the press by May 1948, thus making available most of the details of the enterprise even while they were closely guarded secrets in some government files.