While it is always to be welcomed that scientific terminology should be set on a logical and systematic basis, the reviewer feels that many of the terms are too complicated in design and that this, coupled with the large number presented all at once, makes them a trifle overwhelming. The descriptive phrase and "adjectival" noun nomenclature in current use in the study of frozen ground are also readily understood by the layman; "surface zone of annual freeze and thaw" and "ground ice" are examples. The writer suggests that the rationalization of these and similar terms might be a better solution of this difficult problem.

W. H. WARD

ABSTRACTS

[In this section will appear abstracts which are too long to be included as annotations to the list of glaciological works which follows.]

SIMPSON, C. G. Possible Causes of Change in Climate and their Limitations. *Proc. Linnean Society, London*, 1940, pp. 190–219.

(*a*) The mean temperature and mean rainfall of zones are unaffected by the distribution of land and water, but large differences in local climate may be effected by redistribution of land and water, chiefly in the extremes of temperature and rainfall. The changes of climate during the Pleistocene period could not have been caused by changes in land and water.

(*b*) The effect of changes in the elements of the earth's orbit is so small that the mean annual temperatures cannot be affected by more than a fraction of a degree Centigrade, while the temperatures of the warmest and coldest months can only be affected by as much as 2° C. in extreme cases in high latitude.

"Generally speaking, the temperature of the warmest month is above 5° C. in non-glacierized regions and below 5° C. in glacierized regions; the temperature of the coldest month is of little importance."

(*c*) An increase in solar radiation produces an increase in temperature, in the amount of cloud and in precipitation, and a decrease produces the reverse. The large changes in climate during the Pleistocene period are probably due to changes in solar radiation; but it is not yet clear whether the glacial epochs were caused by an increase or decrease of solar radiation.

GLACIOLOGICAL LITERATURE

THE following list still includes many works published in the war years. It covers every aspect of glaciology in all parts of the world. Attention is drawn to the bibliographies in the *Polar Record* which concentrate mainly on polar exploration and literature.

A few copies of some of the works marked in Vol. 1, No. 1, 1947, are still available for distribution.

AHLMANN, H. W:SON. Nutidens Antarktis och Istidens Skandinavien, Nagra Jämförelser. *Geologiska Föreningens i Stockholm Förhandlingar*, Bd. 66, Heft 3, 1944, pp. 653–54. [Compares Antarctica to-day with Scandinavia during the glacial period, from data collected by German Antarctic Expedition 1938–39.]

AHLMANN, H. W:SON. Researches on Snow and Ice, 1918–40. *Geog. Journ.*, Vol. 107, 1946, pp. 11–28. [Reviewed by F. E. Matthes, *Geog. Review*, Vol. 37, 1947, pp. 154–57.]

AHLMANN, H. W:SON. Glaciological Methods. *Polar Record*, Vol. 4, 1946, pp. 315–19. [Discusses various methods of measuring accumulation and ablation in snow fields; defines glacier regime and suggests regions where glacier regimes can be profitably investigated.]

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BOTLEY, C. M. The Great Frost of 1939–40 in Sussex. *Quart. Journ. Roy. Met. Soc.*, Vol. 66, No. 285, 1940, p. 215.

BRADISH, C. J. and others. Vacuum Sublimation of Ice in Bulk. *Nature*, Vol. 159, No. 4027, 1947, pp. 28–29. [Describes the drying of liquids at −80° C. and a pressure of one micron of mercury.]

BROGGI, JORGE A. La desliación actual de los Andes del Peru. *Soc. Geol. Peru.* Bull. 14–15, 1943, pp. 59–90. [Retrogression of glaciers in the Andes of Peru.]

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BRYAN, KIRK. Soils and Periglacial Phenomena in the Carolinas. *Science*, Vol. 91, No. 2370, 1940, pp. 523–24.

BRYAN, KIRK and RAY, LOUIS L. Geologic Antiquity of the Lindenmier Site in Colorado. *Smithsonian Miscellaneous Collections*, No. 2, Vol. 99, 1940, pp. 1–76. [Deals with local conditions and suggests correlation between American and alpine geo-chronologies.]

BRYAN, KIRK. Correlation of the Deposits of Sandia Cave, New Mexico, with the Glacial Chronology. *Smithsonian Miscellaneous Collections*, No. 23, Vol. 99, 1941, pp. 45–64.

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BUETLER, MAX. Ueber Fernauslösung der Schneebretter. *Die Alpen*, 1940, pp. 450–51. [Distant release of wind slab avalanches.]

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