

CORRESPONDENCE

The Editor,
British Glaciological Journal

SIR,

Wind Slab Avalanche

During a ski-ing expedition in the Ben Lawers range above Loch Tay I had the interesting experience of observing the formation of a wind slab. It was a January morning, a calm, clear day with a bright winter sun. The whole hillside facing south-west was covered to a depth of approximately 2 feet with perfect powder snow. We were congratulating ourselves on the wonderful ski-ing conditions when quite suddenly a strong north-west wind sprang up sweeping the snow in clouds across the slopes. Almost at once we detected the difference in the surface of the snow. We halted under a slight bluff and examined the surface closely. There appeared to be innumerable small pellets of snow the size of small shot rushing across the slope. In about half an hour the slab was over $\frac{1}{4}$ inch thick and in approximately 50 minutes I crossed the slope on my skis, breaking the surface into small slabs fully $\frac{1}{2}$ inch thick. With a little persuasion the whole slope avalanched. There did not appear to be any air space between the slab and the underlying powder snow. Doubtless the latter had not had time to settle down.

By the time our observations were finished the whole hillside was practically unski-able and all prospects of a satisfactory day's sport completely ruined.

Yours truly,

H. MacRobert.

26, West Nile Street, Glasgow, C.1.

[It is interesting to note that Mr. F. S. Smythe has described wind-driven snow, just before it consolidates into wind slab, in exactly the same way as Mr. MacRobert—small pellets rolling over the snow surface. The point is that they appear to be to some extent rounded. In a film taken by me at the Jungfrauoch these grains can be very distinctly seen to disappear as they consolidate on the snow surface to form wind slab.—G. S.]

NOTES

HONORARY MEMBER. Dr. Hugh Robert Mill, the Geographer and Meteorologist, has accepted honorary membership of the Society. He was one of the original members of the Association for the Study of Snow and Ice.

PROFESSOR A. B. DOBROWOLSKI, a member of the Society and author of many works on ice and snow including his well-known *Histoire naturelle de la glace*, has recently communicated with us. He is safe after many bitter war-time experiences. We hope to publish an article on glacier research by Professor Dobrowolski in a subsequent issue.

OXFORD UNIVERSITY EXPLORATION CLUB. At a meeting organized by Dr. K. Sandford and Mr. C. Elton on 18 June 1946, this Club was reformed after the war interval. Professor K. Mason was elected Vice-President, Mr. R. Scott Russell Chairman and Mr. Malcolm Conway (68 Abingdon Road, Oxford) Honorary Secretary. Several expeditions have been proposed and it is hoped that one will set out for the Arctic in the summer of 1947.

THE JUNGFRAUJOCH RESEARCH PARTY, 1938. The work of this party has been recognized by the Royal Geographical Society in their award of the Back Grant of 1942.

GLACIER RESEARCH COMMITTEE. The Glacier Physics Sub-Committee which has been under consideration for some time is now in process of being formed. Dr. M. F. Perutz of the Cavendish Laboratory, Cambridge, is the Honorary Secretary. The names of its members will be announced shortly. Its function will be to carry on the researches into the physics of glacier ice started by the Jungfrauoch Research Party in 1938. It is hoped to train one or two young physicists for this work.

Contributions for the next issue of the *Journal of Glaciology* should be sent to the Assistant Secretary, British Glaciological Society, c/o Royal Geographical Society, Kensington Gore, London, S.W.7.

GLACIOLOGICAL LITERATURE

IT has been found impossible at this stage to compile a complete bibliography for the period immediately preceding the war to date, and additions to the following list will be made in due course. It contains for the most part reference to non-polar works. Attention is drawn to the bibliographies in the *Polar Record* which deal mainly with polar literature. Readers will greatly assist the Editors by notifying them of their own, or any other, publication of glaciological interest.

Copies of papers marked * are available for distribution. There are also a few copies of each of about a dozen of the papers written by the late R. M. Deeley between the years 1888 and 1918, dealing mainly with Glacier Flow and the Viscosity of Glacier Ice. These have considerable historic interest.

All the above will be sent free to members on application to the Secretary.

- AHLMANN, H. W. SON, Researches on Snow and Ice, 1918-40. *Geog. Journ.*, Vol. 108, Nos. 1, 2, 1946, pp. 11-28. [A more comprehensive account will appear in the new "Geographical Research Series" of the Royal Geographical Society.]
- ARENBERG, D. L. Microscopic Study of Rime. *Bull. Am. Met. Soc.*, Vol. 23, 1942, pp. 276-80.
- BAGNOLD, R. A. *The Physics of Blown Sand and Desert Dunes*. London: Methuen, 1941, pp. xiii + 265. [A full exposition of the mechanics of drifting sand with many references to drifting snow.]
- BENFIELD, A. E. Terrestrial Heat Flow in Great Britain. *Proc. Roy. Soc.*, Vol. 173, No. 955, Ser. A, 1939, pp. 428-50. [Refers briefly to the effect of past glaciation on rock temperatures.]
- *BONACINA, L. C. W. Drift Problems suggested by severe Snowstorms in the British Isles with special reference to the permanent Scottish Snowbeds. Trans. Int. Com. Snow and Glaciers, Edinburgh, Sept. 1936. *Bull. Int. Ass. Hyd.* 23, Riga 1938, pp. 91-110.
- BROOKS, C. E. P. Climatic Changes. *Met. Mag.*, Vol. 74, No. 879, 1939, pp. 65-71.
- BROOKS, C. F. Example of Arctic control of our seasonal weather and uses of the metric system in meteorology. *Blue Hill Notes*, No. 2, 1939.
- BUSH, RAYMOND. *Frost and the Fruitgrower*. London: Cassell and Co. Ltd., 1945, pp. vii + 119, 10s. 6d. [Although primarily written for fruitgrowers, this book contains much of general interest in connection with the practical problems of frost control.]
- COOLING, L. F. and WARD, W. H. *Damage to Cold Stores by Frost-Heaving*. [A paper published in pamphlet form by the Institute of Refrigeration and read before the Institution of Mechanical Engineers, London, 1944.]
- *DEBENHAM, F. Friction on Sledge Runners, *Polar Record*, Vol. 4, No. 25, 1943, pp. 7-11.
- DEMENTIEV, A. I. and TUMEL, V. F. Civil Engineering in Frozen Soil, U.S.S.R. *Canadian Geographical Journal*, Vol. 32, No. 1, 1946, pp. 32-33. [Notes on the work of the Obruchev Institute for the Study of Permanently Frozen Soil.]
- DEMAREST, M. Glacier Flow. *Journ. Geol.*, Vol. 156, 1938, pp. 700-25.
- DEMAREST, M. Ice Sheets. *Bull. Geol. Soc. Am.*, Vol. 54, 1943, pp. 363-400.
- DEVIK, OLAF. Ice formation on lakes and rivers. *Geog. Journ.*, Vol. 103, 1944, pp. 193-202.