The next meeting will take place in Brussels in 1951. The following questions have been set:

(*a*) The flow structure and mechanism of glacier ice.
(*b*) The basic physics of the snow cover.
(*c*) The conservation of snow for agricultural purposes.

Resolutions to the following effect were also passed:

(1) That the present Committee of Glacier Measurements should continue the yearly measurements of the length of the greatest possible number of glaciers and also enlarge its scope to include yearly three-dimensional measurements on selected glaciers.

(2) That every effort should be made in the countries concerned to give the fullest possible information to the Danish Meteorological Office concerning the distribution of (Arctic) sea ice for its yearly reports.

(3) That attempts should be made to standardize a system of snow cover measurement. A Committee of three was set up to consider a suitable classification of snow: Messrs. V. J. Schaefer (United States), G. J. Klein (Canada) and M. de Quervain (Switzerland).

The organization at Oslo was in every way admirable and the delegates received many courtesies and were handsomely entertained. The handling of the Commission's meetings was in the capable hands of Professor Knut Faegri, whose good humour remained unruffled at all times.

It must, however, be said that the ceremonious formalities attending the meetings of such large bodies as the I.U.G.G. and its component Associations occupy valuable time. Of the twelve days of the meeting three and a half were originally alloted to the Commission on Snow and Glaciers, patently insufficient for the reading and discussion of over fifty papers. Extra meetings had therefore to be arranged. Even so in order to prevent their encroaching too much on the programmes of other Commissions within the Association of Hydrology (only one lecture theatre had originally been allotted for the whole Association) the entire snow and glacier programme became rushed. The reading of papers was hurried and the discussions suffered. The same thing happened at the Edinburgh meeting in 1936. It is now proposed that papers be pre-printed so that they may be studied beforehand, thus facilitating the discussions. But still more time should be given to the Commission if it is to do its work carefully and without haste. Six papers a day should be the very maximum.

The remedy would be to make the Commission autonomous within the Union. It would then be independent of the other Commissions and their affairs, which at present occupy a good deal of time. There is, with very few exceptions, a clear-cut boundary line between glaciology and the other studies in the Hydrologic Cycle—that is to say, the other studies of the Association of Hydrology. Neither body would suffer by the secession. The number of papers presented by the Commission probably exceeded those of all the other commissions put together and this forms an additional argument for a separate Association of Snow and Ice.

G. SELIGMAN

PAPERS PRESENTED BY THE INTERNATIONAL COMMISSION ON SNOW AND GLACIERS, OSLO, 1948

Abstracts of some, and in a few cases the complete MSS., of these papers are in the possession of the British Glaciological Society and can be lent to members. Owing to shortage of time some papers were read by title only. Publication of all the papers will no doubt take place in due course.

Since many of the papers did not conform exactly with the original questions set at Washington in 1939, the classification has been modified.

ICEBERGS AND RIVER ICE, ETC.

Keeping water from freezing by means of compressed air †	P. Kaitera	Finland
Supercooling and ice formation †	O. Devik	Norway
La genèse de la glace flottante et son apparition sur les cours d'eau de l'Europe centrale appartenant au Bassin Baltique †	J. Lambor	Poland

† Joint meetings.

Remarks on the distribution of icebergs in the Northern Hemisphere with special reference to the south of Newfoundland and possibly related precipitation *	I. I. Schell	Canada

Snow Cover and Run-off, Snow (General), Snow Classifications

General report on snow cover and run-off	V. V. Korhonen	Finland
Standardizing methods of snow surveying and forecasting run-off	J. E. Church	United States
Evolution of snowmelt	J. E. Church	United States
Descriptive and quantitative classifications of various conditions persisting in snow and ice fields *	R. E. Lundquist	United States
Snow data *	R. Smith Johannsen	United States
Canadian survey of physical characteristics of snow cover	G. J. Klein	Canada
Seeking snow supplies in the Andes	D. A. Sardina	Argentina
The dependence of snow cover on altitude in the Alps	W. Mörikofer	Switzerland
Sur la diminution par fonte et évaporation de la couche de neige des alpes	M. de Quervain	Switzerland
Rôle de la neige dans les crues *	M. Pardé	France
Snow conditions in the Hajdurag and Nyireség, Hungary *	—. Kéri	Hungary
Influence de la couverture nivale sur le ruissellement et spécialement sur les inondations *	M. Pardé	France
Canadian interest in snow and ice research (with demonstrations of Canadian snow-testing kit)	R. F. Legget	Canada
Flooding due to melting of snow and ice	W. N. McClean	Great Britain
Physical changes in snow-cover leading to run-off, especially to floods *	R. W. Gerdel	United States
Effects of Chinook (Foehn) winds on snow cover and run-off *	O. H. Hoover	Canada
On the relation between precipitation, accumulation and melting of snow and stream flow in the San Juan River, Argentina *	G. J. Heinsheimer	Argentina
Ice melting in spring and its effects on the opening of the water-ways in Finland *	P. Kaitera	Finland
Observations of Himalayan snowfall and snow-cover made by the Indian Meteorological Department	S. K. Banerji	India
The co-operative snow investigations: Its objectives and operations *	F. L. Rhodes and Walter T. Wilson	United States
Der Wasserabfluss in einem Gletschertal *	R. Streiff-Becker	Switzerland

Glacier Physics, etc.

Horizontal age differences in glaciers *	G. J. Heinsheimer	Argentina
Report on the growth of the glacier crystal on Kebnekajse	H. W:son Ahlmann	Sweden
The growth of the glacier crystal	G. Seligman	Great Britain
Contribution à l'étude du grain de glacier *	A. Renaud	Switzerland
Pressure melting points of ice and their control on the profile of glacier valleys *	J. E. Fisher	United States
Les sondages sismiques de la Commission helvétique des glaciers	P. L. Mercanton	Switzerland
Glacier *penitentes* in the southern Andes	J. E. Church	United States
Glaciological investigations in the Mt. Vancouver area	P. D. Baird	Canada
Glacial features of the Lloyd George Mountains, British Columbia *	N. E. Odell	Great Britain
Recent studies of the Moreno Glacier on Lago Argentino, Patagonia *	—. Madesiki and —. Gilardoni	Argentina
Coast Range glaciation *	W. Don Munday	Canada
Snow and ice studies. United States "Operation Highways" Antarctic, 1946–47 *	A. D. Howard	United States

Glacier Variations, etc.

General report of the Permanent Committee of Glacier Measurements	J. M. Wordie	Great Britain
The variations of Alaskan glaciers 1935–47 *	W. O. Field	United States
Deglaciation in Colombia *	V. Oppenheim	Peru
Glacier recession in Peru *	H. J. Spann	Peru
Die kurzfristigen Schwankungen der Alpengletscher *	R. Billwiller	Switzerland
Observations in the firn and ablation regions of the Great Aletsch Glacier * [1]	R. Haefeli and P. Kasser	Switzerland

* Read *in absentia*.

[1] *Schweizerische Bauzeitung*, Nr. 35 and 35, 1948, p. 477–81 and 489–94.

Variations of western Norwegian glaciers during the last 200 years	K. Faegri	Norway
Glacier variations and fluctuations of climate	G. Manley	Great Britain
The retreat of the Rhône Glacier	P. L. Mercanton	Switzerland
Recent glaciological research in Sweden	H. W. Ahlmann	Sweden
Glacial observations in the Canadian Cordillera *	V. Meek	Canada

UNCLASSIFIED

Progress of glaciological research in Great Britain	G. Seligman	Great Britain
Glaciological plans for the Norwegian-British-Swedish Expedition to Dronning Maud Land, Antarctica	H. W:son Ahlmann	Sweden

FILMS

Avalanche research film made by the Swiss Snow and Avalanche Research Commission (Schw. Schnee- und Lawinenforschungskommission).

The advance of the Grindelwald Glacier, made by A. de Quervain (Switzerland).

Formation of snow and ice crystals in the laboratory, made by U. Nakaya (Japan).

Production of ice crystals in a supercooled cloud in the laboratory, made by V. J. Schaefer (United States).

Snow harvest, made by R. A. Work (United States).

* Read *in absentia*.

REVIEW

GLACIOLOGICAL RESEARCH ON THE NORTH ATLANTIC COASTS. HANS W:SON AHLMANN. R.G.S. Research Series: No. 1. London: Royal Geographical Society, 1948, 83 pages. 7*s*. 6*d*.

IT may, perhaps, be regarded as a tribute to the growing importance of our science that the Royal Geographical Society should have decided to publish the results of Professor Ahlmann's researches as the first issue of its new *Research Series*. This handsome work embodies the fruits of at least twenty-two years' activity in the field on the part of Ahlmann and his colleagues. As he explains in the introductory chapter the work was not carried out according to any pre-arranged plan, but as circumstances directed. Thus a number of glaciers and snowfields of different climatic type have at various times been examined in those lands which encircle the North Atlantic. Each of the areas examined is described in the second chapter and its position shown on a map. These embrace the Horung *massif* (Horungtindene) in southern Norway, Kårsajökeln in Swedish Lapland, North-East Land (Nordaustlandet), West (Vest) Spitsbergen, Clavering Island (Clavering Ø) in north-east Greenland and Vatnajökull in Iceland. We learn in the third and fourth chapters how the processes of accumulation and ablation were determined in all these regions, and come to results of crucial importance in the fifth chapter. Thus a map on p. 46 shows the height of the glaciation level in hundreds of metres above sea-level in the countries around the North Atlantic. The values, which naturally decrease northward, and increase locally inland from the moister coasts, range from 22 in the interior of southern Norway to less than 1, that is to sea-level, in North-East Land (Nordaustlandet). It is interesting to note that, whereas in the highly maritime climate on the southern side of Vatnajökull the value sinks as low as 10, it rises to 14·5, on the northern side facing the central Icelandic desert, and that this latter value also appears over Ben Nevis—a relatively low figure for the latitude, evidently due to the cold summer and heavy winter precipitation. A figure as high as 14 along a strip of the Greenland coast is puzzling but apparently connected with