## ASSOCIATION OF PHYSICAL OCEANOGRAPHY INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS.

A general assembly of the Association of Physical Oceanography was held on the occasion of the Sixth General Assembly of the International Union of Geodesy and Geophysics at Edinburgh from 17th to 24th September 1936, the International Hydrographic Bureau being represented thereat by the President of the Directing Committee, Vice-Admiral J. D. NARES, D. S. O. who read papers on the following subjects:

- A short account of the constitution of, and work carried out by the International Hydrographic Bureau;
- 2) The preparation of the first two editions of the General Bathymetric Chart of the Oceans by order of the Prince of Monaco, and the work now being carried out by the I. H. B. of preparing a third edition of this Chart.

Admiral Nares also commented on a proposal presented by Dr. Wüst for a "New Denomination of the Seas of the World", and after discussion a Committee was formed under the chairmanship of Dr. Weyland Vaughan, U.S.A. and with the President of the I. H. B. as Secretary (provided that the next International Hydrographic Conference agrees to the Bureau undertaking this work) to consider the subject and formulate proposals to be presented at the next Assembly of the Union in three years' time.

A proposal was also presented by Admiral Nares to the Secretary of the Union and to the Director General of the Ordnance Survey, Southampton, that in cases where it is decided to show the Bathymetry of the Oceans on the International 1/1,000,000 Map of the World, this should be taken from the Bathymetric Chart of the Oceans, the depth contours on the third edition of which are derived from soundings plotted on a series of sheets on approximately the same scale as that of the International World Map.

Admiral NARES also assisted in discussions on various Tidal problems and, in order to facilitate discussion on a proposed extension of a network of Tidal Stations of the World for the Study of Mean Sea Level, presented a Map of the World which he had prepared showing all Tidal Stations both existing and dismantled for which information has been received in the I. H. B.

Copies of certain of the Bureau's publications were distributed to various members of the Oceanographical Section of the Assembly.

The Association of Physical Oceanography held ten meetings during the course of this Assembly, of which the following is a summarised report. For six of these meetings the chair was taken by the President, Professor KNUDSEN, and for four, including a joint meeting with the Association of Meteorology, the chair was taken by the Vice-President, Monsieur FICHOT.

- I. Committees were reappointed on :-
  - I. Tides.
  - Mean Sea Level and its Variations.
    and new Committees were appointed on :—
  - I. Nomenclature, units and methods of determination of the chemical constituents of sea-water.
  - 2. Proposed international survey of the Gulf Stream Area.
  - 3. Criteria and Nomenclature for the major divisions of the ocean bottom.
  - 4. Standard levels for oceanographical observations.
  - 5. (Jointly with the Association of Meteorology): The interaction between the sea and the atmosphere.
  - 6. (To cooperate with the corresponding committee of the Association of Geodesy): Gravity at Sea.
- II. Reports were received from the Secretaries of :-
  - I. The Association, on the work of the Executive Committee and on the finances of the Association.
  - 2. The Committee on Tides.
  - 3. The Committee on Mean Sea Level and its Variations.
  - 4. The Committee on the Nomenclature, units and methods of determination of the chemical constituents of sea-water.
  - 5. The Committee on Standard Levels for Oceanographical Observations.
  - 6. The "Commission pour l'étude des Raz de Marée".

## III. Resolutions were passed :-

- 1. authorising the preparation for publication of a new edition of the "Bibliography on Tides".
- 2. authorising the preparation for publication of a volume of data on observed mean sea level and its variations.
- 3. regarding the nomenclature, units and methods of determination of the chemical constituents of sea-water, and authorising certain publications.
- 4. regarding standard levels for oceanographical observations.
- 5. recommending the study of sea-swell, submitting this matter to the "Commission pour l'étude des Raz de Marée" and soliciting the assistance of the International Meteorological Organization.

6. recommending increased activity in the taking of observations from oceanic areas, and in particular from a stationary ship in the North Atlantic.

Resolutions 5 and 6 were also passed by the Association for Meteorology and were adopted at a General Assembly of the Union.

- About fifty reports, lectures and discussions were heard, on the following subjects :--
  - The work of institutions and expeditions.
  - Topography of the sea-bottom. 2.
  - Tides and sea-level. 3.
  - Waves and swell. 4.
  - Currents in special areas. ۲.
  - Temperature, salinity and pressure of sea water in special areas. 6.
  - The chemical oceanography of special areas. 7.
  - The interaction between the sea and the atmosphere. 8.
  - Submarine light. g.
  - 10. Bottom-sampling.
  - Gravity at sea. II.
  - V. Financial estimates, involving expenditure of 12,000 Swiss francs per year, were adopted.
  - Professor B. Helland-Hansen was elected President of the Asso-VI. ciation and the Executive Committee was re-constructed according to the Statutes of the Association.
- VII. Hospitality was received from:-
  - The Fishery Board for Scotland, in a cruise in the Firth of Forth on the Fisheries Research Steamer "Explorer".
  - The Geographical Institute of Bergen, in a cruise in the Firth of Forth on the Research Motor Vessel "Armauer Hansen".

## OFFICERS AND EXECUTIVE COMMITTEE

of the International Association of Physical Oceanography for period commencing 1936 December 24.

Professor B. Helland-Hansen. President: ..... Det Geofysiske Institutt, Bergen, NORWAY.

Monsieur E. Fіснот, Vice-President: .....

47, Avenue de Neuilly, Neuilly-sur-Seine, France.

Professor J. PROUDMAN, General-Secretary: . . . The University,

Liverpool, 3, ENGLAND.

## MEMBERS OF EXECUTIVE COMMITTEE.

Admiral E. Caballero y Lastres.

Mr. D. J. MATTHEWS.

Professor T. G. THOMPSON.

Professor R. WITTING.

To retire in 1939.

Professor M. KNUDSEN.

Dr. T. OKADA.

Dr. A. RAMALHO.

Dr. P. M. VAN RIEL.

To retire in 1942.

J. D. N.

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