

stitute a committee authorized by this meeting to make such a report on mathematics for colleges of engineering as in their opinion will be of service to teachers in such institutions, and to submit this report when completed to the Chicago Section of the American Mathematical Society.

THE INTERNATIONAL GEOGRAPHICAL CONGRESS¹

THE ninth International Geographical Congress, which began with a reception on Sunday, July 26, ended on August 6 with a banquet given by the Council of State of the Canton of Geneva. The congress has been marked by one unique feature—its unprecedented length. Hitherto a week has been the limit of the session of these congresses, and why the Geneva congress should have been protracted to the weary length of thirteen days it is difficult to surmise.

On the social side Geneva has hardly been surpassed by any city in which the congress had previously met. From the president of the republic downwards every one has vied in making the 750 members of the congress feel that they were welcome.

The membership was thoroughly representative, and the discussions in the sections, as well as the daily intercourse outside the sections, between geographers of all nationalities, are sure to lead to good results, to a clearer conception as to the field of geography, and as to the best methods of solving the many problems with which it has to deal. As usual, the educational side of the subject gave rise to much discussion, a good deal of it of little value from the practical point of view, but still not without its uses. Perhaps on the whole the discussions on glaciation in the section devoted to that subject were of wider bearing and of more scientific value than those in any other section; but they had as much to do with geology as geography, as, indeed, was the case with subjects brought before certain other sections. Geography has quite a wide enough field of its own, without having to

burden itself and overweigh a congress with matters outside its sphere. Perhaps the lecture that attracted most attention and had the widest hearings was that of M. Ch. Lallemand on the "Respiration of the Earth." M. Lallemand gave a clear exposition of the researches of Professor Eckert, of Potsdam, which seem to show that there is a daily tide on the surface of the earth, of small dimensions may be, but absolutely real. Other lectures deserving special mention were those of Professor Oberhummer, of Vienna, on Leonardo da Vinci and his influence on the geography of his time, and on the great cities as individuals; of Dr. Filchner, on his masterly exploration in Eastern Tibet and the region between the Hoangho and Yang-tze; and of M. Alexandre Monet, on the Scarab containing the record of the circumnavigation of Africa under King Necho, this last leading to a vigorous discussion. Dr. Otto Nordenskjöld's account of the results of his Antarctic expedition, though not altogether new, suggested several interesting problems. An unusual feature was the exhibition, with interesting explanations by Frau Wegener, of a remarkable collection of Chinese paintings collected by herself, and supplementary to some extent to her husband's account of his expedition in central China.

At the London congress in 1895 a committee was appointed at the suggestion of Professor Penck, now of Berlin, for the purpose of securing international action for the construction of a map of the world on the scale of 1 to 1,000,000, about sixteen miles to the inch. The scale has been adopted as a sort of standard scale, but otherwise little progress has been made. At Geneva those interested in the scheme decided to form a committee for the purpose of agreeing upon lines on which the proposed map should be constructed. After one or two meetings the committee came to definite conclusions, not only as to the scale, but also as to the symbols to be adopted to represent the various features on the map, the lettering to be used, the size of the sheets, the initial meridian (Greenwich), the use of the metric system (along with others if desired by individual states), and other points.

¹ Abridged from an article in the London *Times*.

These proposals were adopted at the concluding meeting, and will be submitted to the governments and societies of various countries, and it is earnestly to be hoped that steps will at once be taken to carry the proposals into practise, and so prepare the way for a standard map of the world. Similar steps were taken for the formation of an International Cartographic Association for the issue of standard maps showing at a glance the progress of exploration in each country. Another scheme brought before the congress was that of M. Lecoq, of Brussels, for the establishment of an International Polar Commission. The congress agreed that it was desirable to submit the scheme to the governments interested, but there is a strong feeling in certain influential quarters that any such scheme is unnecessary, at least so far as those countries most interested in polar exploration are concerned. The proposal of Captain Roncagli, secretary of the Italian Geographical Society, for the establishment of an International Bureau for the dissemination of commercial information as to new countries was approved, apparently without realizing what it implied. Another resolution adopted by a large majority was that France should adopt the Greenwich meridian, that the hours of the date should be enumerated consecutively from midnight to midnight, and that all public clocks, including those of railways, should be regulated according to the legal hour. A commission which may lead to interesting results was agreed to for the creation of a collection of photographs illustrating the various forms of the earth's crust, and another for the more thorough exploration of the Atlantic Ocean and the Mediterranean.

After a keen debate as to the next place of meeting—Lisbon, Budapest and Rome having put in claims—the last-named was adopted, and the date fixed for 1911, when Italy will celebrate the fiftieth anniversary of her independence.

REPORT OF THE BRITISH FISHERIES COMMITTEE

THE report of the committee appointed to inquire into the scientific and statistical in-

vestigations now being carried on in relation to the fishing industry of the United Kingdom has been published. The committee, consisting of Mr. H. J. Tennant, M.P. (chairman), the Hon. C. H. W. Wilson, M.P. (now Lord Nunburnholme), Sir Reginald MacLeod, Under-Secretary, Scottish Office, Mr. N. W. Helme, M.P., Mr. Archibald Williamson, M.P., Mr. P. Chalmers Mitchell, D.Sc., F.R.S., Mr. J. Stanley Gardiner, F.R.S., the Rev. W. S. Green, C.B., chief inspector of Irish fisheries, Mr. R. H. Rew, Board of Agriculture and Fisheries, Mr. L. J. Hewby, treasury, with Mr. A. T. Masterman, D.Sc., Board of Agriculture and Fisheries, as secretary, was appointed to "inquire into the scientific and statistical investigations now being carried on in relation to the fishing industry of the United Kingdom by the fishery departments of the government, the Sea Fisheries Committees, the International Council for the Exploration of the North Sea, and the Marine Biological Association; and to report what work of this character is required in the interests of the fishing industry, and by what methods or agencies it can be most usefully and economically carried out in future."

In its report the committee submits recommendations which are summarized as follows:

1. The establishment of a central council for the United Kingdom which shall have control of public funds for fishery investigations of a national and international character.

2. The strengthening of the Board of Agriculture and Fisheries as the central fishing authority for England and Wales, and the provision of additional funds to this board for the encouragement of local work.

3. The continuance of adequate provision to the Fishery Board of Scotland for local scientific research.

4. The continuance of international co-operation in scientific and statistical investigations upon a definite and permanent basis.

5. The continuance of the annual grant of £1,000 to the Marine Biological Association of the United Kingdom.

The central council should, it is suggested, subject to certain qualifications, be empowered: