

*THE TENTH INTERNATIONAL
GEOGRAPHICAL CONGRESS AT ROME.*

THE report of progress and the discussion regarding the international map of the world and polar exploration were the two predominant subjects at the International Geographical Congress just concluded at Rome. The long postponement from October, 1911, to April, 1913, was sufficient to account for the meagre attendance of British representatives, of whom there were only ten, and indeed foreign members as a whole. Polar exploration—both arctic and antarctic—was, however, well represented. Of the former, Admiral Peary, Admiral Cagni, Dr. Bruce, Mr. Bridgeman, and Mr. Stefánsson were representative, whilst Dr. Bruce, Dr. Nordenskjöld, and Lieut. Lecointe represented antarctic exploration. There were also many others specially interested in polar research, as was testified by the presence of thirty delegates at the Polar Commission, which took the opportunity of meeting at the same time and place as the Geographical Congress. Although no striking results have accrued from this rather anomalous body, yet it gives an excellent opportunity for polar explorers and their supporters to meet and discuss matters of common interest, and, being in strong force, special interest was naturally shown in their work, and several important communications given.

International Map.

The most important result of the congress was the discussion and agreements reached regarding the international map of the world on a scale of 1 : 1,000,000. The British representatives who took special part in this section were Col. C. F. Close, Director-General of the Ordnance Survey of Great Britain; Col. W. C. Headley, Mr. F. Grant Ogilvie, C.B., and Mr. G. G. Chisholm. General Jules de Shokalsky, St. Petersburg; Prof. Albrecht Penck, Berlin; Engineer Charles Lallemand, and Prof. Paul Helbronner, Paris; Lieut. A. H. Byström, Stockholm; Dr. H. von Hartenthurn, Vienna, also took part in the discussion. Nine States had undertaken the production of sheets of the international map in accordance with the resolutions of the official conference held in London in November, 1909, namely Argentina, Chile, France, Great Britain, Hungary, Italy, Japan, Spain, and the United States, and preparation work was also reported by the delegates of Portugal and Sweden, and the thanks of the congress were voted to those States.

By direction of the president of the congress in accordance with the resolution proposed by Prof. Penck, and approved at the general meeting of the congress, March 29, delegates of all countries interested in the international map held a meeting on March 31, 1913, and passed the following resolutions unanimously, and the resolutions were submitted to the congress:—

(1) It is desirable that another official conference should be held to consider questions affecting the international map of the world on the scale of 1 : 1,000,000, in the capital of a State which has already undertaken the preparation of sheets of the map; and it is thought that it would be convenient to all concerned if this capital were Paris.

(2) In view of the fact that the general principles governing the construction of the map are already settled and adopted, the new conference should be asked to consider questions of detail only, such as the size of the lettering, character for railways, &c.

(3) It is desirable that all civilised States should be invited to send delegates to the proposed conference.

(4) It would be convenient if the date of the proposed conference were towards the end of the year.

(5) London (Geographical Section of the General Staff, War Office) remains the official centre of the undertaking until the assembly of the proposed conference, and communications of interest with regard to the international map should be addressed to that office. Also, it is desirable that a set of not fewer than fifty copies of a selected sheet already printed should be sent by each country which has produced a sheet or sheets to the above office, at an early date. These sheets will be distributed to those Governments invited to the new conference, and to recognised private authorities.

Polar Exploration.

In arctic exploration special interest was also shown in Mr. Vilhjálmur Stefánsson's plans of the Canadian Arctic expedition, which leaves Vancouver about June 1 for a period of three and a half years. As a preliminary to laying these plans before the congress, Mr. Stefánsson gave a detailed account in two sections of his six years' work on the Mackenzie River and along the arctic shores of Canada and on the islands to the north. During practically the whole of that time he lived as an Esquimaux among Esquimaux, learning their language and many of their customs, and making himself dependent on the resources of the country. By this account of his previous work he showed that no one was better fitted to carry out the plans of the new Canadian Arctic expedition, which he himself had formulated. It was of special interest to hear Mr. Stefánsson emphasising not only the importance, but the great accuracy of the work of the late Dr. John Rae.

Mr. Stefánsson's plan generally is to explore the Beaufort Sea and to seek for new lands to the north-west of those known islands lying to the north of the mainland of Canada, and to carry on further research, especially as regards his discovery of Esquimaux of a blonde type living to the north-west of Victoria Land. Special interest attaches to the expedition, because the theory which Mr. Stefánsson and others have is that the tides indicate a considerable area of land lying in the Beaufort Sea to the north-west of Victoria Land.

Admiral Peary, in supporting the plans, pointed out that the American Geographic Society and the American Museum of Natural History had in the first place come forward, each offering to pay half, but that subsequently the Government of Canada had desired to make the expedition a Canadian one, seeing that it was for the exploration of Canadian arctic regions, and had offered to pay the whole cost. They in the United States appreciated the attitude of Canada. They had followed Mr. Stefánsson's past and present work with the greatest interest, and wished his expedition the success it deserved. Dr. Bruce, in supporting the proposal, pointed out how, whereas the Pacific side of the south polar regions had received most attention from explorers, it had been on the Atlantic side that the north polar regions had been chiefly explored. This was due, he said, to the fact that the Atlantic side of the arctic regions was nearer the centres of civilisation. The regions Mr. Stefánsson intended to explore was particularly interesting from the oceanographical point of view, because no oceanographical research had been carried out on the Behring Straits side of the Arctic Ocean. Mr. Stefánsson was taking with him a considerable oceanographical equipment and an excellent oceanographer, in the person of Mr. James Murray, who had done signal service with Sir John Murray in the Scottish Loch Survey, and with Sir Ernest Shackle-

ton in the antarctic regions. He thought the action of the Canadian Government was to be applauded, and served as an example to other Governments on this side of the Atlantic.

Mr. Bridgeman gave a note on the Crocker Land expedition, as well as an interesting eulogy on Admiral Peary, entitled "Peary: the Man and His Work." Mr. Bridgeman showed a most beautiful series of slides of arctic scenery. Among other arctic papers was one by Dr. O. J. Skattum, of Christiania, on the map of Spitsbergen. Excellent as is the recent work of the Norwegians in Spitsbergen, he made a serious omission by making no reference to the highly detailed geodetic work in Prince Charles Foreland that has been done by Dr. W. S. Bruce and Mr. John Mathieson in 1906, 1907, and 1909. Neither did he acknowledge the financial and other help given to the Norwegians by the Prince of Monaco, who has also helped the Scottish expeditions. Dr. Skattum should spell "Spitsbergen" with a central "s" and not "z," the word being of Dutch and not German origin.

An arctic paper of great interest and importance was given by General de Shokalsky, who also made several other important communications. It was on the work carried out by the officers of the Russian Navy and the Russian Geographical Society during the last twelve years. This work includes much detailed and valuable geographical research, on strictly scientific lines, that has been done along the arctic shores of Russia and Siberia, and seas adjacent. His paper on the new hypsometrical map of the Government of Moscow on a scale of 1:168,000 might also be regarded as an important contribution to arctic geographical research.

Antarctic Research.

Dr. W. S. Bruce gave an account of his plans for another Scottish Antarctic expedition, which have already been given in detail at a meeting of the Royal Scottish Geographical Society, and for which the treasurer of the society is receiving subscriptions amounting already to a considerable but, as yet, by no means adequate amount. The plans, it will be remembered, are to carry out further extensive oceanographical research in the region of the Weddell Sea, to explore the continent in the neighbourhood of Coats Land, and to complete a sectional survey of Antarctica, by a journey across from the Atlantic to the Pacific side of the continent. The plans were very strongly supported by Admiral Peary, who urged the special importance of a journey to the south pole on the Weddell Sea side of Antarctica, and the importance of detailed oceanographical research. He agreed with Dr. Bruce that there was plenty of room for many nations to work together in the antarctic region, and hoped that the United States would take part in the south polar campaign. Mr. G. G. Chisholm, secretary of the Royal Scottish Geographical Society, said that the plans had the hearty support of that society. The plans were also cordially supported by Prof. Penck, of Berlin, who referred to the work of Lieut. Filchner and his important discovery of an extension of Coats Land to the south-west. Dr. Otto Nordenskjöld's was the other antarctic contribution, namely, "A Comparison of the Inland Ice of Arctic and Antarctic Lands," an important contribution to glaciology.

Dr. Gerhard Schott, of Hamburg, gave an account of recent German oceanographical research in the Atlantic Ocean, and Prof. Drechsel, of Copenhagen, dwelt on the importance of continuous and periodic hydrographic researches carried on at definite stations, such as has been carried out recently by the Prince of Monaco and Dr. Richard in the Mediterranean. Prof.

J. Thoulet, of Nancy, dwelt on the construction and utility of bathy-lithological submarine charts, a paper that was in many respects very suggestive. Miss Owens's account of the geysers of Yellowstone Park was an important contribution.

On the whole the papers were of good quality, and showed the result of steady geographical research during the past four and a half years. But there is little doubt that the congress was seriously affected by the postponement on account of the Turco-Italian war, many who had offered contributions withdrawing them and presenting them to various geographical societies in the meantime.

It was resolved to hold the next congress at St. Petersburg on the invitation of the Russian Government, presented to the congress by General de Shokalsky.

A rather heated discussion arose on the question of introducing Spanish as an official language, but this proposal was withdrawn, a special veto being given to the proposal by General de Shokalsky threatening to introduce Russian as an official language if the proposal were insisted on.

INTERNATIONAL METEOROLOGY.

A MEETING of the International Meteorological Committee was held in Rome on April 7-12, at the invitation of Prof. Palazzo, director of the Italian Meteorological Service. The meeting was attended by Dr. W. N. Shaw, president of the committee, Geheimrat Hellmann, the director of the Prussian Meteorological Service, secretary, and the following members, representing the meteorological services of their respective countries:—*France*, M. Angot; *Portugal and Azores*, M. Chaves; *Holland*, M. van Everdingen; *Sweden*, M. Hamberg; *Switzerland*, M. Maurer; *Italy*, M. Palazzo; *Denmark*, M. Ryder; *Russia*, M. Rykatcheff; and *Canada*, Mr. Stupart. There were also present Prof. Hergesell, the president of the International Commission for Scientific Aëronautics, and Prof. Bjerknes, who had made important proposals, at the meeting of this commission held in Vienna in 1912, regarding the form in which meteorological data for the upper air should be published. At the opening meeting letters expressing regret at their inability to attend the meeting were read from Prof. Mohn, *Norway*; Prof. Willis Moore, *United States of America*; Prof. Nakamura, *Japan*; and Dr. G. T. Walker, *India*.

It is the function of the International Committee to deal with questions of organisation in which international cooperation is required. A considerable number of such questions has become ripe for consideration by the committee in the three years which have elapsed since the last meeting, held in Berlin in 1910.

After the conclusion of the formal inaugural business the first meeting was devoted to the consideration of a letter which had been received from the president of the International Institute of Agriculture, asking for the assistance of the committee in furthering questions connected with the influence of the weather in agricultural affairs. Apart from questions connected with weather forecasting, there are many problems connected with the influence of weather on the yield or quality of crops or the suitability of particular climates for particular crops which are capable of advancement by statistical methods, but as yet little progress has been made in this direction. The committee finally appointed a permanent commission to undertake the further working out of these questions. M. Angot was asked to act as president of this commission, and MM. Börnstein Brounow, Louis Dop, Hergesell,