and preserved by them as a text-book long after the exhibition has been closed.

As a foreword to the handbook shows, this exhibit was organized, at the request of the government and out of funds provided through the Department of Overseas Trade, by the Royal Society. The council of that body appointed a British Empire Exhibition Committee, under the chairmanship of Sir Richard Glazebrook, to carry out the task. In the majority of cases the exhibits are shown by the scientific men actually engaged in the work, supplemented by instruments lent by some of the leading firms of scientific instrument makers. Arrangements have been made, wherever possible, to demonstrate the use of the instruments and apparatus in the methods in which they have been employed by the authors whose work is illustrated. Demonstration benches, fitted with gas, water and electricity, are provided, and a staff of scientific assistants is in attendance. Owing to the limited space available it has been necessary to arrange for the rotation of certain of the exhibits, particularly those shown on the demonstration benches.

The handbook is arranged in two parts. The first is a series of articles by well-known authors, intended to give some indication of the state of science at the time of the opening of the exhibition, while the second is a descriptive catalogue. In certain cases the Royal Society has been instrumental in arranging exhibits which are shown in the scientific section of the chemical hall in the palace of industry. Descriptions of these exhibits are given in the catalogue, but the fact that they are shown elsewhere is indicated. The following is a list of the articles in the handbook, together with the names of the contributors:

"The genesis of the Royal Society," Dr. Irvine Masson; "The electron," Sir Joseph Thomson, O.M.; "X-rays and crystal structure," Sir William Bragg; "Electricity and matter," Sir Ernest Rutherford; "Atoms and isotopes," Dr. F. W. Aston; "Verification of the theory of relativity," Sir Frank Dyson; "The interior of a star," Professor A. S. Eddington; "The origins of wireless," Sir Richard Glazebrook; "Thermionic valves," Professor J. A. Fleming; "The origin of spectra," Professor H. Fowler; "Helium gas and its uses," Professor J. C. McLennan; "The principles of fine measurement," Dr. J. E. Sears; "The circulation of the atmosphere," Sir Napier Shaw; "The water in the atmosphere," Dr. G. C. Simpson; "Weather forecasting," Lieutenant-Colonel E. Gold; "Atmospheric electricity," Dr. C. Chree; "The origin of man," Dr. A. Smith Woodhead; "The circulation of the blood," Professor E. H. Starling; "The biological action of light," Professor D. T. Harris; "Muscular work," Professor A. V. Hill and Professor E. P. Cathcart; "Insect mimicry and the Darwinian theory of natural selection," Professor E. B. Poulton; and "The origin of the seed plants," Dr. D. H. Scott. Sir Richard Glazebrook (physics), Sir Napier Shaw (geophysics), and Mr. Tate Regan (zoology and botany) have written in the descriptive catalogue of exhibits.

FRENCH UNIVERSITY MISSION TO MOROCCO

WITH the purpose of stimulating interest in the French undertakings in Morocco and spreading a true knowledge of the country, the administration of the Protectorate arranged for a French University Mission to visit the country in October, 1923. According to the British *Journal of Geography* the mission was not confined solely to geographers, but numbered among its members geologists, jurists and historians. An entire number of *Annales de Géographie* (May 15, 1924) is given up to an account of the tour, and to articles both by members of the mission and by government officials. From October 9 to 26, a considerable area was covered, partly by motor, partly by varying local means of transport. Landing at Casablanca, the party visited Marrakesh, Rabat, Meknes and Fez, besides other places further from the beaten track, and reembarked at Oran. The first article in the *Annales,* by J. Célérier, gives a detailed account of the country traversed, with particular attention to the physical features and regions and the position of the towns: its geology is detailed separately by J. Savornin. Proofs of the desiccation of a portion of Morocco are advanced by E. de Martonne and others in the course of a morphological study of the Rehamna massif. Here the change in the hydrographic *régime* has been related to deforestation. The present condition of the vegetation of Morocco is detailed by M. Sorre, who, by constructing a provisional vegetation map, has shown its close relation to the rainfall, particularly in the coincidence of the "Mediterranean" area of the Atlantic coast with that of heavy rains. The native population of Morocco is analyzed by MM. A. Bernard and P. Moussard, who correct the impression that it may be divided upon a language basis into Arabs and Berbers, for a great part of the Arab-speaking people are racially Berbers. The distribution of the Berber-speaking population follows very closely the physical relief of the country. As would be expected, the Berbers inhabit the mountains, the Arabs the plateaux and plains, with intermediate bi-lingual areas. As to the French civil population, it appears from a note by G. Jacqueton on "La colonisation français au Maroc," that at present it numbers about 55,000. A census, taken in March, 1921, showed that of the total civil population of 49,000, 41,000 were living in the towns, notably Casablanca and Rabat. After deducting officials, artisans, and business men from the remainder, the number of agricultural colonists and their families would seem to be little more than 3,000. To improve this state

of affairs, the government have initiated a scheme under which, between 1918 and 1923, 449 lots, amounting altogether to 71,496 hectares, have been settled.

THE THIRD PAN-AMERICAN SCIENTIFIC CONGRESS

THE opening of the Third Pan-American Scientific Congress, which was due to take place November 16, has been postponed to December 20. The reason for the adjournment is that the congress, if it met in the second fortnight of November, would clash with a period of intense scholastic activity in the universities of Peru and other countries of America. The organization committee has therefore been led to request that the congress be postponed for a few weeks, and the Peruvian government has fixed December 20 as the date of the inauguration.

Desiring to obtain all possible benefits out of this circumstance, the organization committee has furthermore resolved that the period within which papers can be presented, which expired on October 1 of this year, be extended one month more; said papers may therefore be received up to November 1. As provided under the regulations of the congress, in case an author is unable to send in his work in time, he shall at least forward a summary thereof not exceeding 1,500 words. Such summary must be presented with each work, irrespective of the latter itself being sent in in time. The members of the organization committee are confident that this new adjournment of the opening of the congress will allow many American scholars greater latitude in the presentation of their studies and monographs for the congress.

The "Compañía Peruana de Vapores" (Peruvian S. S. Co.), and the Grace Line have decided to allow a 25 per cent. reduction on its fares to members and adherents to the congress; the Peruvian Corporation has agreed to grant them a 50 per cent. rebate on its railway and Lake Titicaca steamboat fares. Negotiations are under way with other steamship companies for similar facilities.

JOSÉ J. BRAVO,
Secretary General

PROGRESS IN STANDARDIZATION

THE increasing interest and activity in industrial standardization is demonstrated by the new Year Book of the American Engineering Standards Committee. The work of the committee is indicative of the growth of the movement as a whole. One hundred and fifty-two projects have been completed, or are under way, and in these various projects two hundred and thirty-five national organizations, technical, industrial, governmental, are officially cooperating through accredited representatives. The number of the individuals serving under various sectional committees of the different projects is nearly 1,100.

Of the projects which have reached an official status, 31 have to do with civil engineering and the building trades; 25 with mechanical engineering; 15 with electrical engineering; four with automotive subjects; 11 with transport; one with ships and their machinery; 14 with ferrous metals; 15 with non-ferrous metals; 12 with chemical subjects; two with textiles; five with mining; five with the wood industry; one with the paper and pulp industry, and 11 projects with topics of a miscellaneous or general character.

Cooperation in joint activities between Mr. Hoover's division of simplified practice and the American Engineering Standards Committee has steadily increased. In general the work of the committee is concentrated upon standardization projects which involve technical considerations, while the division of simplified practice concentrates upon such eliminations as it is possible to carry out from a consideration of statistical production data alone, or as stated in the book on trade association activities issued by the Department of Commerce, "the layman can proceed successfully with a simplification program, while it would be impossible for him to consider seriously standardization problems by himself."

In order to meet the demands made upon it by industry, and to supply the needs of the various working technical standardization committees, the American Engineering Standards Committee has greatly broadened its information services, and has added an engineer translator to its staff for this purpose. In this way, complete information is made available to sustaining members, trade and technical associations and other inquirers on standardization activities in foreign countries, as well as in the United States.

A new development is the appointment of local representatives of the committee in four important industrial centers. These are: K. F. Treschow, secretary, Engineers Society of Western Pennsylvania, Pittsburgh; J. B. Babcock, executive secretary, Affiliated Societies of Boston; Edgar S. Nethercut, secretary, Western Society of Engineers, Chicago; Professor George S. Wilson, Engineering Experiment Station, University of Washington, Seattle.

One of the most striking developments of the standardization movement is the increasingly important rôle which trade associations are playing in it. More than 140 national trade associations are officially participating in standardization projects under the auspices of the American Engineering Standards Committee. That standardization is a legitimate and constructive activity for associations is everywhere recognized, and explicitly so by a recent decree of the U. S. District Court at Columbus, Ohio.

MEETING OF ELECTROCHEMISTS AT DETROIT

THE next meeting of the American Electrochemical Society will be held at the Hotel Tuller, Detroit,