

EXPLORING AND COLLECTING EXPEDITIONS

APROPOS of Dr. Cockerell's very timely and appropriate remarks on expeditions in the October 27th number of *SCIENCE*, I should like to call attention to the wonderful opportunities for the increase of our knowledge of Cryptogamic plants, especially fungi, in the regions visited by various exploring and collecting expeditions. Unfortunately, these opportunities for some reason are usually neglected. Our present knowledge of this group of Cryptogams is very scanty and incomplete, and no very satisfactory monographic work can be done until much more material is available from the many little-known regions of the world. Very rarely do we find an experienced mycological collector included in the personnel of an expedition. Sometimes a botanist is added, but he is usually interested primarily in the flowering plants, and though he may desire to include the fungi and

other lower plants, it is impossible to cover such a broad field in a satisfactory manner. A single person devoting all his time to the collection of fungi would find more than he could do in most regions, and the addition of a mycologist to a collecting expedition, even though it were a purely botanical one, would add greatly to our collection and to our knowledge of the distribution of the fungi. This should be done in the interests of economy and efficiency, as the addition of a mycologist to the personnel of an expedition would add comparatively little to the expense and would contribute much toward the advancement of our knowledge of the fungi of the world. It is to be hoped that in the interests of the advancement of this branch of science the organizers of exploring or collecting expeditions will give serious consideration to this matter.

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THE EIGHTH GENERAL CONFERENCE ON WEIGHTS AND MEASURES

ON October 3, 1933, at the Quai d'Orsay, Paris, in the historic "Clock Chamber," there assembled, under the presidency of the Minister of Commerce and Industry of the French Republic (substituting for the Minister of Foreign Affairs, who was detained at Geneva), 48 delegates representing 29 of the nations taking part in the Metric Convention (Convention du Mètre), this being the inaugural session of the Eighth General Conference of Weights and Measures.

These general conferences have always been presented with a lengthy and diversified program. They are remarkable assemblages of diplomats and savants, exceptionally open-minded both to the necessities of international organizations and to the most complex questions of pure science. They settle these questions either by accepting or rejecting proposals submitted to them. Acceptance is sometimes made conditional, but the conferences can not give detailed study to technical questions.

On this occasion, the general conference, after having received the report of the International Committee upon the work accomplished at the International Bureau since the last session, gave its sanction to the values of all the national prototype meters whose first periodic verification has just been completed. It also approved the values of three prototype kilograms. The record of exchange of geodetic tapes between the International Bureau and various national laboratories was presented, as well as researches upon materials suitable for the formation of new standards of

mass. The conference also received a statement of the studies made upon luminous radiations, but when requested to give its approval to the principle of substituting a luminous wave-length for the platinum meter bar prototype, it very prudently only consented to submit this question to the study of the international committee, in view of the complexity and controversial nature of the proposal.

A few distinct errors and editorial ambiguities, which existed in the text on international scale of temperatures, voted by the preceding conferences, were carefully rectified.

Electrical units have recently entered into the province of the bureau, which has prepared a report on their first comparisons. These have led to the expression of a mean value for the ohm and the volt with relation to the various national standards.

The conference approved an important report recommended to it by the Advisory Committee on Electricity; namely to substitute in the near future electrical units derived from the absolute CGS units in place of the "international units." In order to meet the views of the International Commission on Illumination, the conference created, in connection with the international committee¹ an Advisory Committee on

¹ The present membership of the International Committee of Weights and Measures is the following: Messrs. Volterra (Italy), *president*; Cabrera (Spain), *secretary*; Chatelain (U. R. S. S.); Guillaume (International Bureau); Isaachsen (Norway); Janet (France); Johansen (Denmark); Kargatchin (Yugoslavia); Kennelly (United States); Kösters (Germany); MacLennan (Canada); Nagaoka (Japan); Posejpal (Czechoslovakia); Ros (Switzerland); Sears (Great Britain); Statescu (Roumania); Zeeman (Netherlands).

Photometry independent of the Advisory Committee on Electricity, and comprising a considerable number of members of the special committee of the Illumination Commission. It approved the opinion that the unit of light should be based upon the radiation of a "black body," but it decided to leave to the future advisory committee the task of determining all the specifications of the same.

A request for the formation of a new advisory committee for practical metrology received favorable consideration and will be further studied.

Finally, if the reports concerning the entry of the Netherlands and Turkey into the Meter Convention (Convention du Mètre) are taken into account, the progress of the metric system in the legislative enactments of various countries will reveal the steady growth of the metric system throughout the world.

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THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE SECRETARIES' CONFERENCE AND THE ACADEMY CONFERENCE

THE democratic scheme of representation by means of which the American Association embraces the wide spread of scientific activity in this country is based on the council, which is the association's governing body. The various fields of science are represented in the council in two ways: Each of the fifteen section chairmen and each of the fifteen section secretaries is a council member, and each of the seventy-four national independent affiliated societies is represented in the council. Also, geographic regions are represented; each of the twenty-seven affiliated local organizations of the academy group has a representative in the council. There are thus generally at least three ways in which any individual may have council representation: (1) Through his association section; (2) through each of the special research societies in which he is enrolled; (3) through one or more of the affiliated national organizations that are devoted to science in general (such as the Society of Sigma Xi or the United Chapters of Phi Beta Kappa), and (4) through the affiliated local organization of which he is a member (such as a state academy of science). So the association really represents many thousands of science workers and friends of science who, although not association members, are members of one or more affiliated organizations.

The association council is large and its membership is increased with each new society affiliation. Many council members are unable to attend the council sessions. These sessions are confined to the periods of the meetings and usually provide time for but little discussion. Consequently, it has come about that most questions brought before the council are not fully discussed by that body; the council depends largely on recommendations from its executive committee and it usually follows those recommendations. With only eleven members, most of whom usually at-

tend its sessions, and with much more time than is available to the council, the committee devotes much study to questions of policy and procedure. But additional opportunity for study and discussion has been provided, in recent years, through the organization of the Secretaries' Conference and the Academy Conference.

These are really standing committees, with *ex-officio* membership, that act in an advisory capacity, aiding the executive committee and the council to reach satisfactory conclusions concerning association affairs. Each of the two conferences has a chairman and a secretary, and each holds an annual session at the time of the winter meeting of the association. Each conference secretary receives questions, suggestions and notes from his constituents and circulates these throughout his conference, by means of mimeographed "conference communications," which are sent out from time to time, under the general editorship of the general secretary of the association. With the aid of these communications and the responses thereto, the conference secretaries arrange the programs for discussion at their respective sessions. The conferences sometimes make very valuable recommendations to the council, but their greatest contributions to the welfare of the association and of the affiliated organizations are informal. They serve to crystallize opinion on many questions. Above all, they promote intercourse and exchange of thought among their members, and they facilitate cooperation among their affiliated organizations as well as between those organizations and the association. Informal contacts among conference members is further promoted, in each case, through the complimentary conference dinner (or luncheon), which is provided by the association in connection with each annual conference session.

The Secretaries' Conference includes, as *ex-officio* members: (1) The seventy-four secretaries of the regularly affiliated national scientific societies, (2) the fifteen secretaries of the association sections and (3)