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.

A. PÉRARD

Sous-Directeur of the International Bureau of Weights and Measures

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 attend 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)

the eleven members of the executive committee of the association. It brings together the persons who have most to do with the details of society and association affairs, notably with preparations for the society and association meetings. Of paramount importance is the fact that the executive officers of the association are individual members of this conference. The chairman of the Secretaries' Conference for 1933 is Professor Percy E. Brown, of Iowa State College, who is secretary of Section O. The present secretary of this conference is Dr. Mark H. Ingraham, of the University of Wisconsin, associate secretary of the American Mathematical Society.

Secretaries' communications are regarded as somewhat confidential. They are sent only to members of this conference—excepting the secretary of the Academy Conference, who receives them for his information, and sometimes individuals who are not members but who have been asked to aid the conference in some special study. Invitations to the annual secretaries' dinner are sent, by the permanent secretary of the association, to members of this conference (and sometimes to one or two invited guests) who have intimated that they will attend the conference session to which the dinner is supplementary.

The Academy Conference is similar to the Secretaries' Conference in many respects, but its membership is based on geographical distribution and local organizations rather than on representation of the various fields of science. It includes, as *ex-officio* members: (1) The twenty-seven council representatives of the affiliated organizations of the academy group (one representative from each) and (2) three representatives of the association's executive committee. The present chairman is Dr. Howard E. Enders, of Purdue University, Lafayette, Indiana, who represents the Indiana Academy of Science. The secretary is Dr. S. W. Bilsing, of the A. and M. College of Texas, College Station, Texas, who represents the Texas Academy of Science.

Academy communications are conducted like the secretaries' communications, but they are specially notable for the fact that they generally carry brief items of academy news as well as material pertaining to discussions before the conference. They are sent not only to Academy Conference members (and the secretary of the Secretaries' Conference, for his information, as well as to any specially invited guests of the Academy Conference) but also to the president and secretary of each local organization of the affiliated academy group. The Academy Conference has been especially interested for several years in high-school science clubs and the junior academies of science that have recently been organized in several states. It has done much to bring its constituent organizations closer together and closer to the association.

Each of the two conferences is to hold its annual session at Boston, in convocation week, with important topics for discussion, and the American Association will provide a Boston dinner or luncheon for each conference.

BURTON E. LIVINGSTON,
General Secretary, A. A. A. S.

REPORTS

THE WORK OF THE WEATHER BUREAU[1]

THE United States Weather Bureau through its forecasting service probably touches directly the immediate needs of more of the people of the United States than do all other federal services combined, with the single exception of the postal service. The convenience, health and budget of every family in the country are in greater or less degree dependent upon that family's ability to avoid weather hazards, exposure and loss. There is little general realization either of the extent of the personal interest of the whole population in this service or of the magnitude of the organization and the labor involved in serving this universal individual need. The significance in the life of a city, for example, of a single temperature forecast may be seen from the following: With notice of an approaching cold wave greenhouses are closed and boilers fired. Preparations are made at once by heating and lighting plants, whether gas, electric, steam or hot water, to meet the increased demands that will follow. Fire hydrants, exposed mains and general plumbing are protected. Small householders as well as large stockyards drain their mains. Gasoline engines are drained and automobile water-cooling systems are protected by the use of antifreeze solutions. Work in concrete is stopped. Street-railway companies arrange for more heat in their cars. Natural-gas companies turn a larger amount of gas into their mains to provide for increased consumption. Merchants direct their advertising and attention largely to cold weather articles. Oyster dealers increase their reserve stocks. Coal dealers supply partial orders to all customers needing fuel, instead of furnishing full orders to a few, and thus serve all their patrons. Ice factories reduce their output. The dredging of sand and gravel ceases, and iron ore piled for shipment is placed in

[1] Preliminary report of the Special Committee on the Weather Bureau of the Science Advisory Board. Members of the committee are Isaiah Bowman, Karl T. Compton, Charles D. Reed and Robert A. Millikan.