ond Toronto meeting and to take part in the deliberations of the council.

It was voted that the fourth Boston meeting of the Association (for the fiscal year 1922-23) shall occur from December 26 to 30, 1922, inclusive.

It was voted that the annual meeting for 1923-24 shall occur at Cincinnati, and that the annual meeting for 1924-25 shall occur at Washington.

The council asked the general secretary to take up with the Pacific Division the question of a joint meeting of that division and the association in the summer of 1922, and this question was referred to the executive committee with power.

The report of the secretary of the Committee on Grants, showing a complete history of the work of this committee, was accepted and ordered to be printed in SCIENCE. This report will be published later.

On recommendation of the secretary of the Commitee on Grants the council voted that the records of the Committee on Grants shall hereafter be kept in the permanent secretary's office.

Seven resolutions bearing on the general welfare were adopted, and these are published in the present issue of SCIENCE.

The council elected the president and the vice-presidents for the sections, for 1922. These elections have already been reported in SCIENCE (Vol. 55, p. 15-16, Jan. 6, 1922.).

The council elected three council members and two members of the Executive Committee; and the president appointed, on recommendation of the council, three members of the Commitee on Grants. The names of these officers are published in SCIENCE.

On vote of the council, the president was to appoint a committee to consider the general question of convocation week (the week in which New Year's Day falls) as the time for the annual meetings of the Association, this committee to consist of: J. McKeen Cattell, *Chairman*; E. H. Moore; and three others.

On vote by the council, the president appointed the following committee to consider the subject of reciprocity between the United States and Canada, as this concerns scientific work: E. L. Nichols, *chairman*; F. D. Adams; T. C. Chamberlin; J. C. Fields; J. C. Merriam.

The report of the Committee on An International Auxiliary Language was accepted, and the resolutions at the end of this report were adopted by the council. These are published in this issue of SCIENCE.

The general secretary was directed to transmit a vote of thanks to the institutions that have acted as hosts for the Toronto meeting.

The council passed a vote of thanks to President E. H. Moore, in appreciation of his tactful and efficient service as chairman of the council during the Toronto sessions.

The executive committee of the council voted that no specially printed program for any section (aside from those included in the general program) can be paid for from the Permanent Secretary's funds without special authorization beforehand.

The executive committee approved the plan of having the assistant secretary go to the meeting place before the meeting, in time to care for the publication of the general program, etc.

The executive committee voted that the chairman of the Committee on the History of Science shall act as vice-president for Section L for 1922, and that the secretary of that committee shall act as secretary of Section L for 1922. It was also voted that the Committee on the History of Science shall act as the Section Committee for Section L for 1922.

BURTON E. LIVINGSTON,
Permanent Secretary.

RESOLUTIONS ADOPTED BY THE COUNCIL

Seven resolutions bearing on the general welfare of American peoples were adopted by the Council of the American Association for the Advancement of Science at the Second Toronto Meeting, December 27-31, 1921. These resolutions follow:

A resolution on the desirability of the duty-free importation of scientific materials and apparatus by educational and research institutions in the United States, adopted by the Ex-

ecutive Committee of the Council of the American Association for the Advancement of Science at the regular spring meeting of the committee, April 24, 1921, and approved and officially adopted by the Council at the Toronto meeting, December 29, 1921.

[The text of this resolution was published in SCIENCE for May 27, 1921.]

A Resolution Bearing on the U. S. Forest Service and the U. S. National Forests.

WHEREAS, The transfer of the U. S. Forest Service and National Forests from the Department of Agriculture to the Department of the Interior has been proposed in connection with the reorganization of the U. S. government departments, and is embodied in certain bills before Congress (S2740, and S2382, S2203);

WHEREAS, This proposed transfer ignores the connection between forestry and agriculture, and the essential dependence of the Forest Service upon the various activities of the Department of Agriculture, such as the work on soils, and on the control of plant diseases and insect pests, as well as plant and animal investigations, and so forth;

WHEREAS, The scientific and administrative functions of the Forest Service are so interdependent that a splitting up of the Forest Service would seriously impair its efficiency;

WHEREAS, A large proportion of the forest land of the U. S. is on farms, and would require the attention of the Department of Agriculture in any case, and thus the proposed transfer would give rise to a duplication in the government departments such that the main purpose of the transfer would be defeated;

WHEREAS, The rapidly diminishing timber resources of the country make strong leadership in forestry, such as that provided by the Forest Service, a matter of vital public concern;

WHEREAS, The National Forests were placed under the Department of Agriculture by President Roosevelt to insure their development along sound lines, and have since been managed by the Forest Service with an exceptionally high degree of efficiency in the best interests of the local communities and of the country as a whole; and

WHEREAS, The proposed transfer would be a distinct backward step in a matter affecting the general welfare;

THEREFORE, BE IT RESOLVED, That the American Association for the Advancement of Science strongly disapproves and vigorously opposes any action by which the Forest Service or the National Forests of the United States or of Alaska, in whole or in part, would be removed from the jurisdiction of the United States Department of Agriculture.

A Resolution bearing on the Introduction of Non-native Plants and Animals into the National Parks of the United States.

WHEREAS, One of the primary duties of the National Park Service is to pass on to future generations for scientific study and education, natural areas on which the native flora and fauna may be found undisturbed by outside agencies; and

WHEREAS, The planting of non-native trees, shrubs or other plants, the stocking of waters with non-native fish, or the liberating of game animals not native to the region, impairs or destroys the natural conditions and native wilderness of the parks;

BE IT RESOLVED, That the American Association for the Advancement of Science strongly opposes the introduction of non-native plants and animals into the national parks and all other unessential interference with natural conditions, and urges the National Park Service to prohibit all such introductions and interference.

A Resolution bearing on Scientific Journals published by the Government of the United States.

WHEREAS, Scientific research and its applications to the public welfare are essential to the nation, as is recognized by our government in its support of scientific work; and

WHEREAS, The publication of scientific work is a necessary part of the work itself to make it of use to agriculture, manufactures and the life of the nation, as has long been recognized by the government in the publication of scientific journals, bulletins and reports;

THEREFORE BE IT RESOLVED, That the American Association for the Advancement of Science, whose members include more than 10,000 of those most actively concerned with scientific work, urgently request that the Congress of the United States take steps to assure the resumption of the publication of journals devoted to research, such as *The Journal of Agricultural Research, The Experiment Station Record* and *The Monthly Weather Review.*

A Resolution on the Question of an International Auxiliary Language.

WHEREAS, All the sciences are alike interested in unifying the fundamental tools of thought, and have been notably successful in so doing, with respect to our system of numbers, the Arabic

numerals, the metric system, the measurement of latitude and longitude, angular divisions, mathematical symbols, chemical formulæ, time and the calendar, notation in music, and other technical usages; and

WHEREAS, There appears to be a generally expressed need for a suitable international auxiliary language for the prompt and world-wide diffusion of scientific data, and for intercommunicating between nations differing in languages;

THEREFORE, BE IT RESOLVED, That the American Association for the Advancement of Science:

(*a*) Recognizes the need and timeliness of fundamental research on the scientific principles which must underlie the formation, standardization, and introduction of an international auxiliary language, and recommends to its members and affiliated societies that they give serious consideration to the general aspects of this problem, as well as direct technical study and help in their own special fields wherever possible;

(*b*) Looks with approval upon the attempt now being made by the National Research Council and the American Council of Learned Societies to focus upon this subject the effort of those scholars in this country best fitted for the task, and to transmit the results to the appropriate international bodies;

(*c*) Indorses the heretofore relatively neglected problem of an international auxiliary language as one deserving of support and encouragement;

(*d*) Continues its Committee on International Auxiliary Language, charging it with the furtherance of the objects above enumerated and reporting progress made to the association at its next meeting.

A Resolution bearing on the Introduction of the Metric System in the United States.

WHEREAS, The metric system of weights and measures has been favorably endorsed by many societies and organizations affiliated with the A. A. A. S.;

WHEREAS, The A. A. A. S. has by resolution of its governing Council already affirmed its belief in the desirability of adopting the metric system by the United States; and

WHEREAS, Legislative bills aiming to bring about the adoption of the metric system have been introduced in Congress;

THEREFORE, BE IT RESOLVED, That the A. A. A. S. urges on Congress the passage of legislation which will go farther than the present legislation (which permits the use of the metric system) and will require the use of the metric system in such branches of trade and commerce as are subject to general direction and regulation by the government of the United States.

A Resolution bearing on the Appointment of the U. S. Commissioner of Fisheries.

WHEREAS, The United States Commissioner of Fisheries has presented his resignation; and

WHEREAS, The position is one demanding, for the proper discharge of its duties, technical knowledge of the scientific work of the fisheries and their utilization for the benefit of the nation, as well as administrative skill and experience;

THEREFORE, BE IT RESOLVED, That the Council of the American Association for the Advancement of Science desires to emphasize, in connection with the selection of a new commissioner, the prime importance of securing a man who possesses both the special experience and scientific knowledge of the field, combined with the necessary administrative ability for discharging the duties of the position; and

BE IT FURTHER RESOLVED, That copies of this resolution be sent to the President of the United States and to the Secretary of Commerce.

RESEARCH IN THE FIELD OF AGRICULTURE

THE one big agricultural lesson which the War has driven home is a realization of the definite relation between the world's increasing population and the amount of food material of all kinds which it is possible to make the civilized and war-free portions of the world produce. Never before have we realized so clearly as now that the population of the world is crowding closely upon its present limits of food production and that some countries in fact for a long time have fallen far short of their needs in their own production of food. In spite of all the recent development in aerial navigation, wireless communication, manufacturing, and extension of transportation facilities and of trade, agricultural productivity, just as much as ever, remains the foundation of our well being. And the significance of all this is that agriculture must be made increasingly intelligent and must lay hold of all that science can offer to meet the ever increasing demand not only for food but for better foods.

There is a broadening opportunity, then,