The discovery of the great deposits of Nebraskan, Aftonian and Loveland is especially important. A more complete discussion of these deposits will soon appear.

B. SHIMEK

Iowa City, Iowa, December 2, 1909

THE BOSTON MEETING OF THE AMERICAN
ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

REPORT OF THE GENERAL SECRETARY

THE sixty-first meeting of the American Association for the Advancement of Science was held in Boston, during convocation week, 1909-10; the first general session was called to order in Huntington Hall at ten o'clock on the morning of Monday, December 27, 1909, by the retiring president, Professor T. C. Chamberlin, who introduced the president of the meeting, President David Starr Jordan. Addresses of welcome were made, on behalf of Massachusetts Institute of Technology by President Richard C. Maclaurin and on behalf of Harvard University by Dean Wallace C. Sabine. President Jordan replied briefly on behalf of the American Association. Announcements were made by the permanent secretary, the general secretary and the local secretary, after which the general session adjourned.

The various sections and the affiliated societies met in their respective halls, according to the published program, the Massachusetts Institute of Technology and Harvard University having placed their lecture halls and laboratories freely at the disposal of the association.

The address of the retiring president of the association, Professor T. C. Chamberlin, was given in Sanders Theater of Harvard University, on the evening of Monday, December 27, the subject being, "A Geologic Forecast of the Future Opportunities of our Race." This address was preceded by an address of welcome to Harvard University by Professor F. W. Putnam, and was followed by a reception given by the corporation of Harvard University to the members of the association and the affiliated societies and their accompanying ladies, in Memorial Hall.

The registered attendance of members of the association was 1,140, the largest in the history of the association. The registration by sections was as follows: A, 106; B, 124; C, 200; D, 36; E, 166; F, 218; G, 132; H, 92; I, 12; K, 50; L, 104. The registration of members of affiliated societies at the association headquarters was only

166. This conveys no meaning with regard to the attendance of affiliated members, as one instance will show; the registration at the headquarters of the American Chemical Society was 558, while only 200 registered as belonging to Section C of the association. No doubt the attendance of other affiliated members was large, and no registration was secured. It seems, therefore, that the attendance of scientific men may have exceeded 2,000.

### GENERAL EVENTS

On Tuesday evening, December 28, a public lecture complimentary to the citizens of Boston, was given by Dr. C. W. Stiles, on "The Hookworm Problem in this Country in Reference to Public Health."

On Thursday evening, December 30, under the auspices of the Entomological Society of America, a lecture was given by Dr. John B. Smith on "Insects and Entomologists: Their Relation to the Community at Large."

A reception by the president and corporation of Massachusetts Institute of Technology to the members of the association and affiliated societies and their accompanying ladies was given on the afternoon of Wednesday, December 29.

A reception by President and Mrs. Maclaurin was given to the visiting physicists and their ladies, at their home on the afternoon of Thursday, December 30.

On the afternoon of Friday, December 31, a lecture was given by Dr. Percival Lowell on "The Canali Novæ of Mars."

The business meeting and banquet of the Society of the Sigma Xi were held on the afternoon and evening of Wednesday, December 29.

There were many dinners arranged for groups of members, such as mathematicians and astronomers, physicists, chemists, geologists, zoologists and entomologists, anatomists and physiologists; there were many less formal but very pleasant "smokers" and other gatherings at various hotels and club houses.

# ITEMS OF GENERAL INTEREST FROM THE PROCEEDINGS OF THE COUNCIL

The council met at nine o'clock in the morning, on Monday, Tuesday, Wednesday, Thursday and Friday, December 27 to 31.

At these meetings 57 new members were elected. A much larger number had been elected quite recently, and should be considered as being elected at the Boston meeting. The membership is now more than 8,000.

The council elected 229 fellows from those proposed by the various sections.

The following were elected foreign associates for the Boston meeting: Dr. Hans Hallier, of Leyden; Mr. J. J. Taudin-Chabot, of Holland; Professor Franz Weidenreich, of Strassburg; Professor C. Runge, of Göttingen.

The council was authorized to elect to membership scientific men of Central and South America.

The resignation of Mr. R. S. Woodward as chairman of the committee on policy was accepted, and Professor E. L. Nichols was elected to fill the vacancy in the committee on policy.

The resignation of Mr. R. S. Woodward from the committee on organization and membership was accepted, and Dr. W. H. Welch was appointed to the committee as chairman.

It was decided that at this Boston meeting the program be given to members of the association only at the time of registration, and that persons not members be charged 25 cents for each copy.

The committee on the relation of plants to climate reported progress.

It was resolved that the inquiry regarding the cost of publication, distribution and use of publications of American scientific societies should be extended.

Grants of \$75 each were made to the Concilium Bibliographicum Zoologicum, Dr. W. P. White, Professor G. J. Peirce and Professor T. D. A. Cockerell.

It was resolved that each recipient of a grant be asked for an itemized statement of expenditures.

It was resolved that the American Association for the Advancement of Science gives its approval to the general plan of the George Washington Memorial Association to collect funds for the purpose of erecting a building in the city of Washington adapted for a meeting place for national and other scientific societies, and other organizations, and that a committee of five be appointed to assist in the effort.

It was resolved, that with a view to the proper conduct of such investigations as will aid in lessening the waste of life and resources which now characterizes the mining industry of the United States, the American Association for the Advancement of Science respectfully urges the Congress of the United States to establish, during its present session, a national bureau of mines. Resolved, that copies of this resolution be sent to the Speaker of the House of Representatives, the

President of the Senate and the President of the United States.

It was resolved that the American Association for the Advancement of Science approves the appointment of an eminent astronomer in charge of the Naval Observatory.

The permanent secretary was authorized to issue the volumes for the Baltimore and Boston meetings under one cover, with separate titles and indexes, but with only one list of members.

## SECTIONAL MEETINGS

The meetings of the various sections, many in joint session with affiliated societies, were perhaps the most successful in the history of the association, as measured by the number of members attending, by the number and quality of the papers presented and by the interest with which the papers were heard and discussed. The number of papers presented before each section and its affiliated societies are approximately as follows: A, 37; B, 54; C, 254; D, 17; E, 141; F, 124; G, 122; H, 63; I, 17; K, 166; L, 30; total, 1,025.

It has been impossible to obtain a general report from every section, hence specific reports are not made here; the secretaries of the several sections will publish detailed reports.

#### GENERAL COMMITTEE

The general committee met at Hotel Brunswick, at 9:30 o'clock on the evening of Thursday, December 30. It was decided to hold the next meeting at Minneapolis, beginning, on the evening of Tuesday, December 27, 1910, with a general session of welcome, and the address of the retiring president. It was recommended that the meeting of 1911-12 be held in Washington, D. C.

The following officers were elected for the Minneapolis meeting:

President—Professor A. A. Michelson, University of Chicago.

Vice-Presidents and Chairmen of Sections:

Section A—Mathematics and Astronomy—Professor E. H. Moore, University of Chicago.

Section B—Physics—Dr. E. B. Rosa, Bureau of Standards, Washington, D. C.

Section C—Chemistry—Professor G. B. Frankforter, University of Minnesota.

Section D—Mechanical Science and Engineering—Professor A. L. Rotch, Blue Hill Meteorological Observatory.

Section E—Geology and Geography—Dr. John M. Clarke, state geologist of New York, Albany, N. Y. Section F-Zoology-Professor Jacob Reighard, University of Michigan.

Section G—Botany—Professor R. A. Harper, University of Wisconsin.

Section H—Anthropology and Psychology—Professor Roland B. Dixon, Harvard University.

Section I—Social and Economic Science—The Hon. T. E. Burton, Cleveland, Ohio.

Section K—Physiology and Experimental Medicine—Professor F. G. Novy, University of Michigan.

Section L—Education—President A. Ross Hill, University of Missouri.

Permanent Secretary (for five years)—Dr. L. O. Howard, Washington, D. C.

General Secretary—Professor Frederic E. Clements, University of Minnesota.

Secretary of the Council—Professor John Zeleny, University of Minnesota.

Secretary of the Section of Social and Economic Science—Fred C. Croxton, Washington, D. C.

Treasurer—The selection of a treasurer, to succeed President R. S. Woodward, was referred to the council, with power.

#### CLOSING GENERAL SESSION

The closing general session was held in Huntington Hall at 10 o'clock on the morning of Friday, December 31, 1909; President Jordan presided.

An amendment to article 23 of the constitution, introduced by Mr. Gulliver at the Baltimore meeting, and approved by the council, was adopted. The amended portion of the article reads as follows:

Article 23. Immediately on the organization of a section, there shall be a member or fellow elected by ballot, after open nomination, who, with the vice-president and secretary and the preceding vice-president and secretary and the presidents and secretaries of those affiliated societies which shall be designated by the council and the members or fellows elected by ballot at the four preceding meetings, shall form its sectional committee.

Reports were read by the permanent secretary, the general secretary and the local secretary.

By resolution of the council the president expressed the thanks of the association for the great hospitality, courtesy and privileges extended to the members of the American Association, in connection with the Winnipeg meeting and the western excursion of the British Association for the Advancement of Science.

It was resolved that the association express its hearty thanks to the many institutions and individuals of Boston and Cambridge and vicinity who have contributed to make the meetings so successful and enjoyable. The following were mentioned:

The corporation of Massachusetts Institute of of Technology.

The corporation of Harvard University.

The Museum of Fine Arts.

The Boston Society of Natural History.

Simmons College.

Boston University.

The local committee, Professor Charles S. Minot, honorary chairman; Professor H. W. Tyler, chairman of the executive committee. Ginn and Company, donors of the Guide Books. Boston Elevated Railway, for special cars. The ladies' committee.

The citizens, for receptions, teas, musicales, dinners to restricted groups of members, too numerous for individual mention, but none the less sincerely thanked for the most generous hospitality shown throughout the meetings.

Dayton C. Miller,

General Secretary

#### SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE fifty-eighth regular meeting of the society was held at the Dewey Hotel, December 18, 1909, at eight o'clock P.M., Vice-president W. J. Spillman presiding. The following papers were read: Peridermium strobi, an Importation from Europe:

Dr. Perley Spaulding, U. S. Bureau of Plant Industry.

The European currant rust has two stages: one as a peridermium on the white pine, the other upon leaves of Ribes. The fungus is native in eastern Europe upon Pinus cembra, upon which it usually does little damage. Since about 1860 it has attacked Pinus strobus, P. monticola and P. lambertiana, all American species of pines. At present it is distributed throughout Europe, and is causing great damage to white pines in certain sections. In the spring of 1909 it was imported into the United States upon about two and one half million young white pine trees, being distributed in the states of New York, Vermont, New Hampshire, Massachusetts, Connecticut and Pennsylvania. Lots of trees from the same nursery are also known to have been imported into Ontario and Minnesota. During the past summer a special effort was made to remove the Ribes