of conifers there is but slight evidence in the more recent history of the study of fossil conifers to show that stem anatomy or strobilar morphology furnish any easier read or more definite criteria than vegetative habit, and from the nature of the remains we can not hope to have all of the criteria in individual cases. Even the older students in dealing with foliar impressions were not guilty of more pretentious absurdities than have been put forward under the banner of

anatomy during the past decade. The present volume contains 190 illustrations which on the whole appear rather uniformly better than those of volume III. although it is difficult for the reviewer to understand why paper and presswork were wasted on such illustrations as that forming the frontispiece of the present volume. The bibliography which has a certain air of completeness really contains not more than about twenty per cent. of the literature, but perhaps this should not be criticized since it avowedly contains only "papers and works referred to in the text."

On the whole it seems to the reviewer that Professor Seward has performed a difficult task about as well as could be expected, and despite their obvious shortcomings, which have been freely criticized, these four volumes are a mine of information for the student interested in the floras of the past.

Edward W. Berry

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## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE REPORT OF THE ST. LOUIS MEETING

THE seventy-second meeting of the American Association for the Advancement of Science and the affiliated national scientific societies was held in St. Louis, December 29, 1919, to January 3, 1920, under the presidency of Dr. Simon Flexner.

In spite of the adverse ruling of the United States Railroad Administration on the granting of reduced fares and other difficulties attending travel, the attendance was most satisfactory. All sections held sessions except Section C, and twenty-two affiliated societies presented attractive, programs. The experiment of holding all meetings under one roof, namely the Soldan High School, is believed to have been a success, for the advantages of this concentration, including registration headquarter and luncheon facilities, more than offset certain minor difficulties.

The formal opening of the meetings of the association took place in the spacious auditorium of the Soldan High School on Monday evening, December 29, Chancellor Hall of Washington University delivering the address of welcome. President Flexner responded fittingly, after which he introduced the retiring president, Professor John M. Coulter who then delivered the address on "The Evolution of Botanical Research," which was printed in the issue of SCIENCE for January 2.

At the conclusion of his address the revised constitution was read and unanimously adopted. The following changes were made in the copy of the revised constitution as it appeared in the November 21 issue of SCIENCE.

Article II. Increasing the annual dues from \$4 to \$5 and the fee for life membership from \$75 to \$100.

Article V. Changing the title of Section H from Anthropology and Archeology to Anthropology and that of Section I from Psychology and Philosophy to Psychology. That the proposed Section J be designated as Section K and that the letters assigned to sections following be dropped back one letter alphabetically in the order given.

The Committee on Policy submitted an amendment to the Constitution to be acted upon at the next meeting providing for a section R, Conservation of National Resources.

The new constitution was declared in effect at the end of the present Convocation.

A reception was tendered to the members of the association at the close of this meeting.

On Tuesday evening at the Soldan High School an address complimentary to the members of the association and affiliated societies and the citizens of St. Louis was delivered by President Flexner. His subject was "Present Problems in Medical Research." Throughout the meetings the usual number of vice-presidential and other addresses were delivered covering a wide range of subjects. Many of these dealt with scientific problems of present day interest and attracted wide attention. Since the names of the speakers and their subjects have already appeared in the preliminary announcement printed in SCIENCE and on the final program there is no need of repeating the list here.

Smokers and dinners provided by the various affiliated societies were held and entertainment for visiting ladies in numerous private functions contributed to the social success of the meetings.

Matters of general interest to members eminating chiefly from the committee on policy acted upon favorably by the council were:

1. That the amount to be paid per member to the management of SCIENCE be \$3 and that it be requested to fix the subscription price of SCIENCE for non-members at \$6.

2. That approval be given of certain measures under consideration with the Carnegie Endowment for International Peace as set forth in a letter addressed to Dr. North, but embodying substantially the following recommendation; that the British, French and Italian equivalents of the American Association for the Advancement of Science be invited to send delegates to the meeting to be held a year hence in Chicago.

3. That the American Meteorological Society be admitted as an affiliated society and that entrance fees be remitted in the case of those of its members who join the association during the coming year. The council further declared itself as looking with favor on the affiliation of any national society which is interested primarily in scientific research.

4. That the president be authorized to appoint a committee on international auxiliary languages to cooperate with a corresponding committee of the International Research Council.

5. That Dr. George H. Perkins and Dr. C. J. S. Bethune be made emeritus life members under the Jane N. Smith fund.

6. That pursuant to certain resolutions advocated by the National Physical Education Service, the American Association for the Advancement of Science will be pleased to cooperate with the National Physical Education Service in promoting physical education.

7. That the general adoption of the metric system by national and state governments be approved.

8. That the executive committee be requested to consider the possibility of paying the mileage of secretaries of sections to and from annual meetings.

9. That sectional officers avoid placing on their programs papers relating to acute political questions on which public opinion is divided.

10. That the association will look with favor on any plan approved by the men of science in the country for the encouragement of research in engineering under the auspices of the government.

11. That the association endorses and "commends the general purposes of The Save the Redwoods League" in its effort to preserve some of the oldest trees in the world.

12. That the Southern Educational Society be admitted to affiliation and that the admission fee be remitted in the case of those members of the Southern Educational Society who join the association during the coming year.

13. That there be authorized the organization of members of the American Association for the Advancement of Science in New Mexico, all or part of Texas and such other territory as may seem advisable into a Southwestern Division of the American Association for the Advancement of Science and that Dr. D. T. MacDougal be the representative of the executive committee for such an organization.

14. That the sum of \$4,500 be made available to the committee as grants for the ensuing year.

15. That the by-laws as printed in SCIENCE, November 21, be adopted, with the following amendment to be added at the end of Article 6, Section 1. "State and city academies affiliated with the association may also be allowed for their expenses, the entrance fees collected through their efforts and an amount for their expenses not to exceed \$1 for each member in good standing."

Under the head of new business Professor John M. Coulter and Professor H. B. Ward presented a verbal report for the committee on affiliation of state and local academies. The report dealt with preliminary steps looking towards the affiliation of state academies in accordance with the following general plan:

1. That state and local academies may be affiliated with the association on a financial basis that will yield the associaton \$4 net per member.

2. Any state or local academy which concludes arrangements for affiliation within the first six months of 1920 may be accepted for the entire year 1920, fees paid to the association before that date to be adjusted in accordance with the detailed plan.

3. Two alternative plans are considered with respect to membership in the academies, namely:

- (a) All members of the academies to become members of the association.
- (b) To establish two grades of membership, of which one will be national, involving membership in both academy and association, the other local, consisting of academy members only.

4. The academies will collect joint dues and transmit the association's share to the treasurer.

It was voted that this report of the committee on affiliation of state and local academies be received and approved.

In accordance with the provision of the new constitution which calls for an executive committee of eight elected members to replace the old council, the following gentlemen were duly elected members of this committee: J. McK. Cattell, H. L. Fairchild, Simon Flexner, W. J. Humphreys, D. T. MacDougal, A. A. Noyes, Herbert Osborn, H. B. Ward.

Under the terms of the revised constitution Dr. H. L. Fairchild and Dr. Franz Boas were duly elected members of the council.

Dr. R. M. Yerkes and Dr. G. T. Moore were elected members of the committee on grants.

The seventy-third meeting of the association

and of the affiliated societies will be held at Chicago, beginning on Monday, December 27, with the first general session on Tuesday evening. It was recommended that the four succeeding meetings be held in Toronto or Buffalo, Boston, Cincinnati and Washington.

Officers were elected as follows:

President: Dr. L. O. Howard, Bureau of Entomology, Washington, D. C.

General Secretary: Professor E. L. Nichols, Cornell University.

Vice-presidents:

Section A, Mathematics: D. B. Curtis, Northwestern University, Evanston, Ill.

Section B, Physics: J. C. McLennan, University of Toronto.

Section C, Chemistry: S. W. Parr, University of Illinois.

Section D, Astronomy: Joel Stebbins, University of Illinois.

Section E, Geology and Geography: Charles Schuchert, Yale University.

Section F, Zoological Sciences: J. S. Kingsley, University of Illinois.

Section G, Botanical Sciences: R. H. True, Bureau of Plant Industry, Washington, D. C.

Section H, Anthropology: G. R. Gordon, American Museum of Natural History, New York.

Section I, Psychology: E. K. Strong, Jr., Carnegie Institute of Technology, Pittsburgh.

Section M, Engineering: C. L. Mees, Rose Polytechnic Institute, Terre Haute, Ind.

Section N, Medicine: J. Erlanger, Washington University, St. Louis.

Section Q, Education: C. H. Judd, University of Chicago.

GEORGE T. MOORE, General Secretary

## SCIENCE

A Weekly Journal devoted to the Advancement of Science, publishing the official notices and proceedings of the American Association for the Advancement of Science

Published every Friday by

THE SCIENCE PRESS LANCASTER, PA. GARRISON, N. Y. NEW YORK, N. Y.

Entered in the post-office at Lancaster, Pa., as second class matter

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