shales of Wyoming," Professor E. F. Schramm; "Recent oil developments in California," Robert B. Moran; "Some geological problems in oil and gas recovery in Kentucky," W. R. Jillson; "Probability of oil and gas in Montana," Professor J. P. Rowe. Prior to adjournment a vote of thanks was extended to the retiring president, Dr. I. C. White, and to the Dallas Chamber of Commerce and the Southwestern Geological Society, for courtesies during the convention. Invitations for the next annual meeting have been received from San Francisco, New York, St. Louis and Oklahoma City, and will be considered by the executive committee. The proceedings of the convention will be published as Volume IV, of the bulletin of the association.

The following officers were elected for the coming year: President, Wallace E. Pratt, chief geologist, Humble Oil Company, Fort Worth, Texas; Vice-president, Alex. W. McCoy, consulting geologist, Bartlesville, Oklahoma; Secretary-Treasurer, Charles E. Decker, associate professor, University of Oklahoma, Norman (reelected); Editor, Raymond C. Moore, state geologist of Kansas, University of Kansas, Lawrence, Kansas.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE MINUTES OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

THE meeting was called to order by the president at 5 P.M., on April 26, 1920, in the Board Room of the Cosmos Club, and Dr. Howard was elected chairman for the meeting. The following members were present: Cattell, Fairchild, Howard, Humphreys, Livingston, MacDougal, Osborn and Ward. Mr. Woodward, the treasurer, attended the first part of the meeting.

1. Grants.—A resolution was passed to the effect that appropriations made to the Grants Committee shall be limited to the calendar year for which made. At the end of that year they automatically revert to the Treasury. (The executive committee may, of course, take special action before the end of the year, in cases where reversions would occur. For the year 1920 the amount of one grant made in 1919 and not withdrawn had been added to the 1920 appropriation of the grants committee, making this appropriation \$4,500 instead of \$4,000.)

2. Life Memberships.—A recommendation of the treasurer was adopted, to the effect that the treasurer is to pay to the permanent secretary three dollars each year for each life-membership requir-

ing a subscription to the journal. (This special action was called for by the fact that the income from the fifty-dollar life-memberships is not sufficient to pay for the journal at the present rate.) At the beginning of the treasurer's fiscal year, the permanent secretary is to inform the treasurer in regard to the number of subscriptions to the journal to be thus cared for.

3. Remission of Dues in Arrears.—A resolution was passed to the effect that all members whose accounts show arrearage in dues for the years 1917-1919 (3 years), 1918-1919 (2 years), and 1919 (1 year), be *reinstated* as if back dues had been paid in full, providing they pay the annual dues for 1920 before the end of the present fiscal year. (This action was taken on account of war conditions.)

4. Moratorium for Members Residing in Continental Europe.—A resolution was passed to the effect that members residing in continental Europe may retain membership and receive the journal on account for three years (1920, 1921 and 1922) if specifically requested. (The preceding resolution of course also applies in these cases.)

5. Toronto Meeting (1921-1922).—The permanent secretary was instructed to accept with appreciation the invitation of the University of Toronto and of the Royal Canadian Institute and that he notify the secretaries of sections, of divisions and of affiliated societies to the effect that the annual meeting for 1921-1922 will be held at the Christmas season in Toronto.

The meeting was adjourned at 6 o'clock, to convene again at 7 in the private dining room of the Cosmos Club.

The adjourned meeting was called to order by President Howard. The following members were present: Cattell, Fairchild, Howard, Humphreys, Livingston, MacDougal, Noyes, Osborn and Ward.

6. Science News Service.—Mr. MacDougal presented a report on the organization of the Science News Service, supported by Mr. E. W. Scripps.

7. Representatives for Conference with Science News Service.—At the request of the Science News Service a committee was appointed, which consisted of Messrs. Cattell, Humphreys and George T. Moore, to confer with three representatives of the National Academy and three representatives of the National Research Council, and with representatives of the Science News Service, in the organization and operation of that service.

8. Minutes of Last Meeting.—The minutes of the last meeting were read and approved.

9. Action of Committee during Interim.-Mr.

Cattell reported that the office of permanent secretary had been filled by an arrangement with Mr. Livingston to devote two days a week on the average to this work, dating from February 1, 1920. Arrangement was made by which Mr. Howard would help the new permanent secretary in taking up the work.

10. Permanent Secretary's Report on the Office. —The former assistant secretary resigned and took up a new position on April 1, 1920. Mr. Sam Woodley was appointed to take charge of the office beginning March 15, 1920. The permanent secretary was given authority to employ the title of executive assistant for Mr. Woodley.

The business affairs of the office were stated to be nearly up to date.

The financial statement of April 26, 1920, showed an apparent balance in the bank of \$22,-634.75. (There may be alterations in this to be made when the vouchers of the former permanent secretary become available.)

From the report on membership it appears that there were 2,238 members owing the association for dues for one, two or three years. (These arrearages are to be cancelled according to resolution stated above—No. 3.) There were 8,034 members paid up for 1920.

11. Election of Sectional Officers.—On nomination of the corresponding sectional committees, Dr. Eliot Blackwelder was elected vice-president of Section E (Geology), Dr. Frederick L. Hoffman was elected vice-president of Section K (Social and Economic Sciences), Dr. Edwin W. Allen was elected vice-president of Section O (Agricultural), and Dr. Frank N. Freeman was elected secretary of Section I (Psychology).

12. Spring Meeting of this Committee in Future.—It was decided that, in order to have more time and to avoid conflicts with other meetings, the 1921 spring meeting of this committee will be called for 12 o'clock noon on the Sunday preceding the meeting of the National Academy.

13. Autumn Meeting of this Committee.—It was decided that the next meeting of this committee will occur on Sunday, October 17, in New York, at a place to be designated later.

14. Report on the Southwestern Division.—Mr. MacDougal reported that the Southwestern Division had been organized. The geographic limits are to include all members of the association resident in the states of Arizona and New Mexico and in Texas west of the Pecos River. At the wish of those involved some members will be transferred from the Pacific to the Southwestern Division. The Constitution and By-Laws of the Western Division are appended.

This report was adopted and the organization of the Southwestern Division was ratified by this committee.

Mr. MacDougal presented the applications of 23 new members, who were duly elected to membership.

Seventy-three names of members of the Southwestern Division were nominated for fellowships and were duly elected.

Mr. MacDougal called attention to the desire of the officers and members of the Southwestern Division to have lectures in their region delivered by scientists from other parts and requested that the permanent secretary notify the secretary of the Southwestern Division whenever it may appear convenient, basing this notification on such information as the permanent secretary may have from time to time. It is understood that the Southwestern Division will pay extra expenses incurred by lecturers.

15. Applications for Affiliation.—The application for the affiliation of the National Geography Teachers was favorably discussed, but final action was deferred until the next annual meeting.

On motion duly made and seconded the Society of Sigma Xi was affiliated with the association.

16. Correction of Published List of Affiliated Societies.—Attention was drawn to the fact that the Wilson Ornithological Club has been listed as an affiliated society, whereas it has never been affiliated. It will remain on the list as an associated society.

17. Books for Promoting Good Citizenship.—A request from the American Library Association asking that the A. A. A. S. aid in a movement aiming to provide suitable literature to help in the Americanization of immigrants was referred to the president and permanent secretary with power to determine whatever action seems to be feasible.

18. Preservation of Natural Conditions.—A request from Dr. Shelford, representing the Ecological Society, asking that the association appropriate funds to be used for the promotion of a project of the society on this subject, was discussed but it was decided that the association was unable at the present time to comply with this request.

19. Collection of Portraits and Letters of Presidents, A. A. A. S.—A proposal that the association purchase at a price of \$300 a collection of 74 portraits and 74 autograph letters of all the presidents of the association to date (which is now in the possession of Dr. Marcus Benjamin) was favorably discussed, but action was deferred until the next annual meeting.

20. Committee on Bibliography of Science.—The permanent secretary read a letter from the chairman of this committee, Dr. C. B. Davenport, in lieu of a formal report. No action was taken.

21. Publication of Proceedings.—Plans for the publication (membership list) were discussed and it was decided to ask all members for the information needed in the preparation of the next membership list, this request to be made at the time the statements for the 1921 dues are sent out. It was decided that members who remit \$1 extra for the *Proceedings* before the book goes to press may receive it at this price. After the book goes to press the price is to be \$1.50. The price to nonmembers is to be \$1.50. It is planned to publish about March or April, 1921.

22. Terms of Office of Members of this Committee.—Attention was drawn to the fact that the terms of elected members of this committee elected at the St. Louis meeting, had not been determined. This matter was taken up and lots were drawn, giving the following terms of office:

For the year 1920: Mr. Osborn and Mr. Mac-Dougal;

For the years 1920 and 1921: Mr. Flexner and Mr. Humphreys;

For the years 1920, 1921 and 1922: Mr. Cattell and Mr. Ward;

For the years 1920, 1921, 1922 and 1923: Mr. Noyes and Mr. Fairchild.

23. Plans for Chicago Meeting.—It was decided that the official period of the Chicago meeting shall be December 27, 1920, to January 1, 1921, inclusive. On motion duly made and seconded, it was decided that the next council meeting shall be called for Tuesday, December 28, at 2. The general session is scheduled for the evening of Tuesday, December 28.

It was emphasized that a strong campaign for new members in the Chicago region should be carried out before the meeting by the local committee.

24. Interpretation of New Fiscal Year.—It was decided that members joining the association may defer the beginning of their membership and the beginning of the subscription to the journal until the beginning of the next year, if they so specify at the time dues are paid. (This action seems desirable on account of the fact that members entering between the time of the annual meeting and the beginning of the next fiscal year.—October 1—do not receive the privileges of any annual meeting if their dues are credited to the current fiscal year.) 25. Election of Members under the New Constitution.—On motion duly made and seconded the permanent secretary was authorized to employ a card method for handling applications for membership without the requirement of two sponsors which has hitherto been in effect. The permanent secretary was authorized to act as a sub-committee on the election of members to the association after proper application and remittances has been received.

26. Election of Fellows.—As stated above (No. 14), 73 fellows were elected from the Southwestern Division. Eighty-one fellows were elected from the American Society of Zoologists.

The procedure to be followed in the election of fellows under the provision of the new By-Laws (Art. II., Sec. 4) was discussed, and it was decided that the secretaries of the sections of the association shall furnish the permanent secretary with a list of nominations for fellowship, at least once each year, the data for this list having been obtained from the secretaries of the affiliated societies concerned.

27. Affiliation of Societies.—The permanent secretary was instructed to prepare a list of scientific societies that presumably should be affiliated with the association, but which are not now affiliated, to the end that the affiliation of these societies may be arranged.

28. Affiliation of Academies.--Mr. Ward presented a report on this subject.

29. Office Equipment.—The permanent secretary was authorized to proceed with the geographic classification of the members and other related projects.

The committee adjourned at 11.07 to meet in New York at 11 o'clock on October 17, 1920.

> BURTON E. LIVINGSTON, Permanent Secretary

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