bia University, New York, N. Y., and which le when filled and accompanied by testimonials in and complete statements of the applicant's P qualifications will be submitted by him to the committee on March 1, 1915. Applications to

must be received by the secretary of Columbia

University before this date. The committee requires that applicants should be qualified by proper geological training and experience to undertake the investigation of some problem in or related to economic geology. Each candidate is expected to submit with his application a definite statement of the problem which he proposes to study. The carrying out of the investigation will be under the oversight of the committee and may be undertaken at any place or institution which may be preferred by the holder of the fellowship and which will meet the approval of the committee. The place and publication of results will be decided by the committee. The committee will require that the holder of the fellowship agree to give his entire time and energies to the problem selected, and further agree to contract no other engagements conflicting with or restricting this work without its consent. No objection will be made to the use of the results as a dissertation for the degree of Ph.D. in an approved university.

THE SAN FRANCISCO MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

At the meeting of the American Association which will be held in San Francisco and vicinity during the week beginning August 2, 1915, the general appointments of the convocation week will be as follows: The opening session at 10:00 A.M., Monday, August 2, the presidential address and the reception to visiting scientists on Monday evening and four addresses before the association as a whole. The first of these addresses will be given on Tuesday evening by Dr. Fridtjof Nansen, of Norway, upon oceanographic research. On Thursday evening, Professor R. A. Daly, of Harvard University, will present an address upon problems of geologic and biologic interest centering in the Pacific Islands. On Friday evening, Professor W. B. Scott, of Princeton University, will present an address upon the paleontologic relations of North and South America. A final address will be provided for Saturday evening, August 7, upon issues concerning the peoples of the Pacific area.

These general addresses will be given in San Francisco. The section and society meetings will be held on Wednesday, August 5, at Stanford University, and on the remaining days of the week at the University of California in Berkeley.

The geological sessions will be in charge of the Geological Society of America and will be devoted to discussions of erosion and deposition in arid climates, diastrophism of the Pacific coast and petrological problems of the Pacific area. The topics of the meetings of the Paleontological Society include a discussion of the fundamental criteria used in determining the time relations of widely separated life assemblages and rock systems, followed by three symposia upon the special problems encountered in correlation of the Triassic, Cretaceous and Miocene of the Pacific coast with horizons referred to these periods in other parts of the world. Special papers on other topics of interest will be presented.

Zoological sessions are being planned for the discussion of general problems of zoology, evolution and development, of regulation, of geographic distribution, of marine biology, the conservation of wild life, and recent advances in the field of protozoology.

The opening session of the botanical meetings will be devoted to the taxonomy, morphology, history and distribution of Gymnosperms. Subjects discussed at other sessions will be the effects of light upon plants, the geographic distribution of plants with especial reference to the possible origin of the California flora, and marine and fresh-water Algæ.

The subjects of the anthropological meetings will be: Races in the Pacific area with reference to the origin of the American Indians; the history of civilization in the Pacific area, with reference to the relations between Asia and the New World: and the social aspects of race factors in the Pacific area.

Two general topics will be considered in the agricultural sessions: The relation of agriculture to the food supply of the country, and problems of agricultural conservation. In the treatment of these topics sessions will be devoted to problems of animal production, nutrition, agronomy, soil analysis, general problems of agricultural chemistry and progress in horticultural science.

Papers upon any of these subjects are cordially invited from all members of the American Association and of societies participating in these meetings. Contributions of important work in any other lines of research will also be welcomed and will be included in the programs in so far as time will permit.

SCIENTIFIC NOTES AND NEWS

THE present number of SCIENCE completes the fortieth volume and the twentieth year of the journal under the present editorship. SCIENCE was established in 1883 by Dr. A. Graham Bell and Gardiner G. Hubbard. The president of the board of directors was D. C. Gilman, the vice-president, Simon Newcomb and the editor S. H. Scudder. In 1900 SCIENCE became the official organ of the American Association for the Advancement of Science, and its membership has since increased from 1,721 to over 8,000. The journal has witnessed and to a certain extent assisted the remarkable advance in scientific research which has taken place in America in the course of the past forty years.

At a joint session of the physiological, biochemical, pharmacological and pathological societies, meeting at St. Louis, on December 28, papers will be presented in memory of S. Weir Mitchell, by Professor Edward T. Reichert, University of Pennsylvania, and of Charles Sedgwick Minot, by Professor Frederic S. Lee, Columbia University.

PROFESSOR EDWARD S. MORSE, director of the Peabody Museum, has been elected president of the Boston Society of Natural History, succeeding the late Professor Charles Sedgwick Minot. PROFESSOR GEORGE QUINCKE, the distinguished physicist of the University of Heidelberg, has celebrated his eightieth birthday.

DR. JAMES WITHYCOMBE, who was director of the Oregon Agricultural College for nearly fourteen years, will soon enter upon his new duties as governor of Oregon, to which office he was recently elected by an unprecedented majority.

At the annual meeting of the trustees of the Carnegie Institution of Washington there were elected as trustees Senator Henry Cabot Lodge, of Massachusetts; Dr. George Wharton Pepper, of Philadelphia, formerly professor of law in the University of Pennsylvania; Dr. Theobold Smith, who has resigned the chair of comparative pathology at Harvard University to become a member of the Rockefeller Institute for Medical Research, and Mr. Charles Payne Fenner, of Louisiana. Dr. Simon Flexner, director of the laboratories of the Rockefeller Institute, has resigned as a trustee of the Carnegie Institution.

THE statement regarding the award of the Hayden Memorial gold medal by the Academy of Natural Sciences of Philadelphia, in SCIENCE for December 18 requires a correction. After the modification of the deed of trust in 1900, the first gold medal was given to Sir Archibald Geikie, in 1902, the second to Dr. Charles Walcott in 1905, the third to Dr. John Mason Clarke in 1908, and the fourth to Dr. John Casper Branner in 1911.

AT its last meeting, the Rumford Committee of the American Academy made the following appropriations: For the purchase of a refrigerating apparatus for the academy, the same to be loaned to Professor C. A. Kraus for his research on solutions in liquid ammonia, \$300. For the purchase of a motor generator for the academy, the same to be loaned to Dr. H. P. Hollnagel for his research on the extreme infra-red portion of the spectrum, \$300.

THE National Society for the Promotion of Industrial Education, at its recent meeting at Richmond, has elected the following officers: *President*, William C. Redfield, secretary of commerce; *Vice-president*, Cheesman A. Herrick, president of Girard College;