on their minds day and night; unfortunately perhaps, I am not so constituted.

The matter of materials for the completion of my work presents a still more serious difficulty, because palæontology differs substantially from many other branches of zoology. We have here the finest palæontological collection in existence, as the result of sixteen years of exploration and purchase, a staff of over twenty highly trained assistants, preparators, field workers and artists, all harmoniously working toward a common end. The opportunity could not be recreated in Washington because it is in a branch of pure science which least of all bears upon human welfare and happiness and is, moreover, extremely expensive. As secretary of the Smithsonian I could not conscientiously recommend the annual appropriation of \$25,000 to \$30,000, to this branch, and I know I should not have the support of Congress for other more vital subjects if I did. In other words, a change of residence would cut me off from my materials of research.

In brief, I have finally and for many reasons very regretfully reached the conclusion that the secretaryship would mean a change of career, just at the moment when I feel that without selfishness I am on the point of bringing out the results of many years' labor. I trust that these results are really important, that they will tend to advance American science, and that they will inspire younger men to broad and thorough standards and to strive for absolute truth rather than for brilliant and short-lived generalizations.

I hope I have been able in this long letter to win you over to the point of view which I have reached after most conscientious reconsideration of this matter, and that I shall retain the confidence and esteem which prompted you to vote for me, which I value far more highly than I can possibly express. May I beg also that you will make it generally understood that I am clearly unable to reach any other decision.

PRELIMINARY PROGRAM OF THE NEW YORK MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCE-MENT OF SCIENCE AND THE AFFILIATED SCIENTIFIC SOCIETIES.

Wednesday, December 26.

Registration.—Hotel Belmont, opposite the Grand Central Station, W. 42d Street.

<sup>1</sup>This program contains only certain of the main features of the meeting. Members should

Executive committee of the council of the American Association. Hotel Belmont, noon.

Smokers. Hotel Belmont and Murray Hill Hotel, 8:30 P.M.

## Thursday, December 27.

Registration. Earl Hall, Columbia University (Broadway, Amsterdam Avenue and 116th St.). To be reached by subway express trains on Broadway from the hotel headquarters and railway terminals.

Council of the American Association. Trustees Room, Library, Columbia University, 9 A.M. General session. Introduction of the president of the meeting, Dr. William H. Welch, Johns Hopkins University, by the retiring president, Dr. C. M. Woodward, Washington University. Welcome by President Butler, Columbia University. Announcements. Earl Hall, 10 A.M.

Organization of Sections.—Addresses of Vicepresident F. W. McNair in mechanical science and engineering; Vice-president George Grant Mac-Curdy on 'Some Phases of Prehistoric Archeology.' Programs of Sections.—The sections will meet as follows: Mathematics and Astronomy, 506 Fayerweather Hall; Physics, 301 Fayerweather; Chemistry, 309 Havemyer; Mechanical Science and Engineering, 302 Engineering; Geology and Geography, 305 Schermerhorn; Zoology, Schermerhorn; Botany, 502 Schermerhorn; Anthropology, 306 Mines; Social and Economic Science, 301 Engineering; Physiology and Experimental Medicine, College of Physicians and Surgeons, West 59th Street. These meetings will be held at 11 o'clock, following the adjournment of the general session.

Luncheon. University Commons, Columbia University—table d'hote, 30 cents, à la carte, 5 cents and upwards, 12 to 2 P.M.

Address of Vice-president W. S. Eichelberger, of the U.S. Naval Observatory, before the Section of Mathematics and Astronomy. Vice-president C. F. Mabery, Case School of Applied Science, on 'The Education of the Professional Chemist.' Vice-president William North Rice, Wesleyan University, on 'The Contributions of America to Geology.' Vice-president Henry B. Ward, University of Nebraska, on 'The Influence of Parasitism on the Host.' Vice-president Wm. T. Sedgwick on 'The Expansion of Physiology.' These addresses will be given at 2:30 P.M. secure the program of the American Association, which will be distributed at Earl Hall on December 27, and the programs of the special

societies in which they are interested.

Programs of the sections and societies in their respective rooms, in the main as given above, 2 or 2:30 P.M.

Section of Physiology and Experimental Medicine. Discussion on 'Protozoa as Factors in the Diseases of Animals and Plants.' College of Physicians and Surgeons, 3:30 P.M.

Meeting of the council of the American Chemical Society, 3:30 P.M.

Address of the retiring president of the American Association, Dr. C. M. Woodward, on 'Science in Education,' Horace Mann Hall, Teachers College, Columbia University (Broadway and 120th Street), 8 P.M.

Reception by the president of Columbia University. Earl Hall, 9 to 11 P.M.

Smoker. Faculty Club, Columbia University, 9.30 P.M.

Friday, December 28.

Registration, validation of railway tickets, etc. Earl Hall.

Council of the American Association. Trustees room, 9 A.M.

Meetings of the sections and societies in their respective rooms, 10 A.M. and earlier.

Joint meeting of the Section of Mathematics and Astronomy, the American Mathematical Society, the Astronomical and Astrophysical Society of America. Room 405, Schermerhorn Hall, 10 A.M.

Joint meeting of the Section of Physiology and Experimental Medicine and the American Bacteriological Society. Rockefeller Institute for Experimental Medicine (66th Street and Avenue A), 10 A.M.

Geological Society of America. American Museum of Natural History, 10 A.M.

Luncheon, 12 to 2 P.M.

Luncheon. The Schultz Mineral Water Company (440 First Avenue), for the American Chemical Society and Section C, followed by excursions.

Address of Vice-president Henry Crew, Northwestern University, on 'Fact and theory in Spectroscopy.' Vice-president Erwin F. Smith, U. S. Department of Agriculture, on 'Problems of Plant Physiology.' Vice-president Irving Fisher, Yale University, before the Section of Social and Economic Science, 2:30 P.M.

The sections and societies will meet at 2 or 2:30 P.M. in their respective rooms.

Meeting of the American Society of Naturalists. 305 Schermerhorn Hall, 2:30 P.M., followed by a discussion at 3:30 on 'The Biological Significance and Control of Sex,' by Dr. A. F. Blakeslee, Harvard University; Professor F. R. Lillie, University of Chicago; W. T. Swingle, U. S. Depart-

ment of Agriculture; Professor E. B. Wilson, Columbia University; Professor R. A. Harper, University of Wisconsin; Professor T. H. Morgan, Columbia University; J. B. Nichols, Washington.

Address by President William James before the American Philosophical Association on 'Surplus Stores of Energy.'

Dinners. The American Society of Naturalists. University Commons, Columbia University. The American Chemical Society, the American Geological Society of America and other societies and groups, places to be designated, 6:30 or later.

Address of Vice-president Davenport, on 'Cooperation in Science,' before the American Society of Naturalists. 8 P.M.

Smoker of the American Society of Naturalists. Faculty Club, 9 P.M. Other smokers and informal meetings have also been arranged.

Saturday, December 29.

Registration, etc. Earl Hall.

Council of the American Association. Trustees room, 9 A.M.

Meetings of the societies and sections. 10 A.M. and earlier.

Botanical Society of America. Botanical Garden, morning and afternoon.

Addresses. Professor C. F. Chandler, Columbia University, on 'The Electrical Industries of Niagara Falls.' Dr. John M. Clarke, of the Science Division, New York State Educational Department, on 'The Effort to Save Niagara.' Townsend Harris Hall, City College (138th Street and Amsterdam Avenue), 12 o'clock, followed by a complimentary luncheon in the gymnasium and an inspection of the new buildings.

Unveiling of ten marble busts of American men of science with addresses. American Museum of Natural History, 3 P.M.

Reception by the trustees of the American Museum of Natural History and the council of the New York Academy of Sciences; exhibit of scientific progress by the New York Academy of Sciences with demonstrations and short addresses. American Museum of Natural History, 8 P.M. The exhibit will also be open on Friday afternoon and evening and on Saturday afternoon.

Address of the president of the American Chemical Society, Dr. W. F. Hillebrand, U. S. Geological Survey, on 'The Present and Future of the American Chemical Society,' Chemists Club (108 West 55th Street), 8 P.M.

Smoker. Chemists Club, 9 P.M.

Monday, December 31.

Registration, etc. Earl Hall.

Council of the American Association. Trustees room, Columbia University, 9 A.M.

Meetings of the sections and societies, 10 A.M. or earlier; 2:30 P.M. or earlier.

Luncheon, 12 to 2 P.M.

Complimentary dinner to the President of the Association by men of science of New York City. University Club, 7:30 P.M.

Banquet of Sigma Xi. Place and time to be designated.

Nominating Committee. Hotel Belmont, 9:30 P.M.

Tuesday, January 1.

Registration, etc. Earl Hall.

Council of the American Association. Trustees room, Columbia University, 9 A.M.

General session. Earl Hall, 10 A.M.

Meetings of the sections and societies, 10 A.M. or earlier; 2:30 P.M., or earlier.

Luncheon. 12 to 2 P.M.

The societies that will meet in New York City in convocation week and their officers are as follows:

American Association for the Advancement of Science.—December 27-January 1. Retiring president, Professor C. M. Woodward, Washington University, St. Louis, Mo.; president-elect, Professor W. H. Welch, The Johns Hopkins University, Baltimore, Md.; permanent secretary, Dr. L. O. Howard, Cosmos Club, Washington, D. C.; general secretary, Dr. John F. Hayford, U. S. Coast and Geodetic Survey, Washington, D. C.; secretary of the council, President F. W. McNair, Houghton, Mich.

Local Executive Committee.—J. J. Stevenson, chairman; C. C. Adams, Charles Baskerville, Franz Boas, N. L. Britton, H. C. Bumpus, Chas. A. Conant, Simon Flexner, Wm. J. Gies, Wm. Hallock, Alex. C. Humphreys, G. S. Huntington, Edward Kasner, Henry F. Osborn, C. L. Poor, Clifford Richardson, E. B. Wilson, Frederick J. E. Woodbridge, J. McKeen Cattell, secretary.

Section A, Mathematics and Astronomy.—Vice-president, Professor Edward Kasner, Columbia University; secretary, Professor L. G. Weld, University of Iowa, Iowa City, Iowa.

Section B, Physics.—Vice-president, Professor W. C. Sabine, Harvard University; secretary, Professor Dayton C. Miller, Case School of Applied Science, Cleveland, Ohio.

Section C, Chemistry.—Vice-president, Mr. Clifford Richardson, New York City; secretary, Professor Charles L. Parsons, New Hampshire College, Durham, N. H.

Section D, Mechanical Science and Engineering.—Vice-president, Mr. W. R. Warner, Cleveland, O.; secretary, Professor Wm. T. Magruder, Ohio State University, Columbus, Ohio.

Section E, Geology and Geography.—Vice-president, Dr. A. C. Lane, Lansing, Mich.; secretary, Dr. Edmund O. Hovey, American Museum of Natural History, New York, N. Y.

Section F, Zoology.—Vice-president, Professor E. G. Conklin, University of Pennsylvania; secretary, Professor C. Judson Herrick, Denison University, Granville, Ohio.

Section G, Botany.—Vice-president, Dr. D. T. MacDougal, Washington, D. C.; secretary, Professor F. E. Lloyd, Desert Botanical Laboratory, Tucson, Arizona.

Section H, Anthropology.—Vice-president, Professor Hugo Münsterberg, Harvard University; secretary, George H. Pepper, American Museum of Natural History.

Section I, Social and Economic Science.—Mr. Chas. A. Conant, New York City; secretary, Dr. J. F. Crowell, Bureau of Statistics, Washington, D. C.

Section K, Physiology and Experimental Medicine.—Vice-president, Dr. Simon Flexner, The Rockefeller Institute for Medical Research; secretary, Dr. Wm. J. Gies, College of Physicians and Surgeons, Columbia University, New York City.

The American Society of Naturalists.—December 28. President, Professor William James, Harvard University; secretary, Professor W. E. Castle, Harvard University.

The Astronomical and Astrophysical Society of America.—December 27. President, Professor E. C. Pickering, Harvard College Observatory; secretary, Professor Geo. C. Comstock, Washburn Observatory, Madison, Wis.

The American Physical Society.—President, Professor Carl Barus, Brown University; secretary, Professor Ernest Merritt, Cornell University, Ithaca, N. Y.

The American Mathematical Society.—December 28, 29. President, Professor W. F. Osgood, Harvard University; secretary, Professor F. N. Cole, Columbia University.

The American Chemical Society.—December 27-January 2. President, Professor W. F. Hillebrand, U. S. Geological Survey; secretary, Dr. William A. Noyes, the Bureau of Standards, Washington, D. C.

The Geological Society of America.—December 26-29. Acting president, Professor W. M. Davis, Harvard University; secretary, Professor Herman L. Fairchild, Rochester, N. Y.

The Association of American Geographers.— December 31-January 1. President, Cyrus C. Adams, New York City; secretary, Albert P. Brigham, Colgate University.

The American Society of Zoologists.—December 27, 28, 29. President (Eastern Branch), Professor W. E. Castle, Harvard University; secretary, Professor H. S. Pratt, Haverford College. President (Central Branch), Professor C. C. Nutting, University of Iowa; secretary, Professor T. G. See, University of Michigan.

The Association of Economic Entomologists.— December 28, 29. President, A. H. Kirkland, Malden, Mass.; secretary, A. F. Burgess, Columbus, O.

The Society of American Bacteriologists.— President, Dr. E. F. Smith, U. S. Department of Agriculture; secretary, Professor S. C. Prescott, Massachusetts Institute of Technology.

The American Physiological Society.—December 27, 28, 29. President, Professor W. H. Howell, the Johns Hopkins University; secretary, Professor Lafayette B. Mendel, 18 Trumbull St., New Haven, Conn.

The Association of American Anatomists.—December 27, 28, 29. President, Professor Franklin P. Mall; secretary, Professor G. Carl Huber, 333 East Ann St., Ann Arbor, Mich.

The Botanical Society of America.—December 27, 28, 29. President, Dr. F. S. Earle; secretary, Dr. William Trelease, Missouri Botanical Garden, St. Louis, Mo.

The American Psychological Association.—December 27-28. President, Professor James R. Angell, University of Chicago; secretary, Professor Wm. Harper Davis, Lehigh University.

The American Philosophical Association.—December 27-29. President, Professor William James, Harvard University; secretary, Professor John Grier Hibben, Princeton University.

The American Anthropological Association.— December 27-January 3. President, Professor F. W. Putnam, Harvard University; secretary, Dr. Geo. Grant MacCurdy, Yale University, New Haven, Conn.

The American Folk-lore Society.—December 27-January 3. President, Dr. A. L. Kroeber, University of California; secretary, W. W. Newell, Cambridge, Mass.

New York State Science Teachers Association.
—December 26, 27. President, John F. Woodhull, Teachers College, Columbia University.

All railways have granted a rate of one and one third fare for the round trip to those attending the meeting. Certificates should be obtained for the meeting of the American Association for the Advancement of Science.

## SCIENTIFIC NOTES AND NEWS.

DR. WILLIAM H. WELCH, professor of pathology in the Johns Hopkins University, and Dr. Henry S. Pritchett, president of the Carnegie Foundation, have been elected trustees of the Carnegie Institution.

THE New York Academy of Sciences held its annual meeting on December 17. Following the dinner Dr. N. L. Britton, director of the New York Botanical Garden, gave the presidential address. The officers for next year are as follows:

President: Nathaniel L. Britton.

Vice-Presidents: Section of Biology, H. E. Crampton; Section of Geology and Mineralogy, Amadeus W. Grabau; Section of Astronomy, Physics and Chemistry, Charles C. Trowbridge; Section of Anthropology and Psychology, Robert MacDougall.

Corresponding Secretary: Richard E. Dodge. Recording Secretary: Edmund Otis Hovey.

Treasurer: Emerson McMillin.

Librarian: Ralph W. Tower.

Editor: Chas. Lane Poor.

Councilors: To serve three years, William M. Wheeler, Charles Baskerville.

Finance Committee: John H. Caswell, George F. Kunz, Frederic S. Lee.

Professor T. W. RICHARDS has been elected an honorary member of the Royal Institution of Great Britain.

Mr. Alexander Agassiz has chartered the steam yacht *Virginia* for a cruise to the West Indies. The yacht will sail from New York the first week in February to be absent for three months.

Professor Richard E. Dodge, of Teachers College, Columbia University, has been made an honorary member of the Royal Geographical Society of Australasia. He will contribute a paper on 'The Geographer and School Geography' to the twenty-first anniversary meeting, at Queensland.

The Journal of the American Medical Association states that the fact that the Nobel prize this year has been awarded to Cajal and Golgi has roused their compatriots to do them