ports as an argument for the exactness of chemical science. As a rule, however, the disagreements relate not so much to the observations as to their interpretation. Of course it is useless to expect investigators to agree upon the question as to whether or not formaldehyde is present in the plant, until they first can agree in regard to the tests for formaldehyde which shall be considered as conclusive. Again while this general subject is primarily a chemical one, yet many of the investigators have been men trained rather in other fields of work. It would seem that the chemist, or better, perhaps, the chemist and the botanist working conjointly, ought to be able to make surer progress in such in-The problem is an exceedvestigations. ingly complex one. Its solution involves many reactions at present but little understood—such as the nature of catalytic and enzymic action and the formation of asymmetric compounds. It is probable also that other forces not yet investigated may enter into the reactions by which these compounds are formed. Stewart⁵⁷ has even suggested that it is "not improbable that the rotation of the earth or terrestrial magnetism or the motion of the earth around the sun may have some effect." There is no doubt, however, but that progress is being made. It is also undoubtedly true that many of the researches now being carried on in our laboratories will be found to have a more or less direct bearing upon the general question; and it has been partly my object in discussing this topic to emphasize this fact in order that the results of our investigations, whenever applicable, may be directed towards the solution of this problem.

WILLIAM McPHERSON

OHIO STATE UNIVERSITY

57 "Stereochemistry," London, 1907, p. 535.

THE AMERICAN MUSEUM OF NATURAL HISTORY

Dr. Hermon C. Bumpus has resigned the directorship of the American Museum of Natural History and has accepted the position of business manager to the University of Wisconsin. This announcement was made on January 20 by Mr. Seth Low, chairman of a special committee of the trustees appointed to consider the administration of the museum. He gave out the following statement:

Director Bumpus notified the trustees of the American Museum of Natural History at a special meeting held yesterday afternoon that he had accepted an appointment as business manager for the University of Wisconsin. Accordingly he presented his resignation as director, which was accepted. The administrative difficulty in the museum is thus terminated.

The questions raised as to the respective duty and authority of various officers in the museum seemed to the board important enough to be referred to a special committee, which was appointed on November 30, 1910, to give a hearing to the director and to consider his criticisms. The committee, which consisted of Anson W. Hard, Adrian Iselin, Jr., Percy R. Pyne, Felix M. Warburg and Seth Low (chairman), went into every criticism very thoroughly. They found nothing to justify the sweeping statements which had been made, and the specific criticisms of President Osborn, when sifted, were found to be either unimportant or not sustained. The committee and the board believes that the administration of President Osborn has been wise, efficient, far-sighted and public-spirited, and that the financial management has been sound and constructive.

THE CARNEGIE INSTITUTION OF WASHINGTON

It was announced on January 20 that Mr. Andrew Carnegie had added \$10,000,000 to the endowment fund of the Carnegie Institution of Washington. The institution was established in 1902 with a gift of \$10,000,000, and Mr. Carnegie recently added \$2,000,000. These gifts consist of preferred bonds of the Steel Corporation bearing five per cent. interest and their market value is considerably above their par value. Mr. Carnegie's gifts to

public purposes now amount to about \$200,-000,000.

SCIENTIFIC NOTES AND NEWS

AT its last meeting the Rumford Committee of the American Academy of Arts and Sciences made the following grants: To Professor Joel Stebbins, of the University of Illinois, \$200, in further aid of his researches on the selenium photometer. To Professor M. A. Rosanoff, of Clark University, \$300, in further aid of his investigation on the fractional distillation of binary mixtures.

THE Society of American Bacteriologists will meet in Washington, D. C., the last week in December of this year. The officers are: *President*, F. P. Gorham, Brown University; *Secretary*, Charles E. Marshall, Michigan Agricultural College.

At the annual meeting of the New York Pathological Society, held at the Academy of Medicine, on January 11, the following officers were elected: President, Dr. William G. MacCallum; Vice-president, Dr. John H. Larkin; Secretary and Editor, Dr. A. M. Pappenheimer; Treasurer, Dr. Francis C. Wood. Dr. T. M. Prudden and Dr. E. K. Dunham were reelected trustees of the society to serve for a term of three years. The next meeting will be held in conjunction with the Philadelphia Pathological Society in Philadelphia on February 9.

Mr. S. P. Jones, formerly assistant state geologist of Georgia, is with the New Jersey Geological Survey.

Mr. C. E. Bradley has resigned as chemist of the Agricultural Experiment Station at Corvallis, Oregon, to accept the position of research chemist with the Rubber Regenerating Company, of Mishawaka, Indiana.

The program of the Section of Astronomy, Physics and Chemistry of the New York Academy of Sciences on January 27 included the following papers on Aviation: "Experiences in Aviation," Mr. Clifford B. Harmon; "Practical Utility of Flying Machines," Mr. Hudson Maxim; "The Aeroplane" (illustrated by lantern slides), Lieutenant Phillip Wilcox, U. S. A. R.; "Taking the First

Photographs of the Flights of the Wright Brothers at Kitty Hawk, North Carolina" (illustrated by lantern slides), Mr. James H. Hare.

Professor W. P. Mason, of Rensselaer Polytechnic Institute, delivered a lecture before the Williams College Natural Science Club on "Water and Disease," on January 19:

THE Smithsonian Institution is about to come into possession of a bequest by the recent death of George W. Poore, Esq., of Lowell, Mass. His will provides, after certain minor legacies, that the residue of his estate be given to the Smithsonian Institution to form the Lucy T. and George W. Poore Fund, the income of which is to be used for the purposes for which the institution was founded. The will further requires that this fund shall be kept separate from all other funds and the income to be added to the principal until it shall have reached the sum of \$250,000. Mr. Poore explains in his will that he makes this bequest in the hope that "it will form an example for other Americans to follow by supporting and encouraging so wise and beneficent an institution as I believe the Smithsonian Institution to be."

Mr. Alcan Hirsh, a graduate student in electro-chemistry at the University of Wisconsin, has succeeded in producing about half a pound of metallic cerium, one of the rare elements which heretofore has been isolated only in small quantities.

SIR ERNEST SHACKLETON hopes in the course of next year to undertake an expedition to Spitzbergen, spending two and a half or three months in the islands. His party will probably consist of six, including Mr. J. Murray, the biologist, and other members of the *Nim-rod* expedition.

Hon. Charles H. Sherrill, United States Minister to Argentine Republic, will give an address on February 16 to the officers and students of Columbia University on the opportunities for American engineers in public works and other fields in Argentine.

Dr. H. W. WILEY, chief of the division of chemistry of the Department of Agriculture,