

in which Messrs. Williston, McGregor, Osborn and others will participate. Titles of papers should be sent to Dr. O. P. Hay, secretary, American Museum of Natural History, New York.

THE AMERICAN SOCIETY OF NATURALISTS.

THE twenty-third annual meeting of the American Society of Naturalists will be held at Philadelphia on Tuesday, December 27, and Wednesday, December 28. The following program is announced: Tuesday, 8:00 P.M., illustrated lecture by Professor Henry F. Osborn, 'Recent Discoveries of Extinct Animals in the Rocky Mountain Region and their Bearings on Present Problems of Evolution,' at the lecture hall of the Academy of Natural Sciences, Nineteenth and Race Streets; 9:00 P.M., smoker of the Affiliated Scientific Societies, University Club, Fifteenth and Walnut Streets. On Wednesday a business meeting will be held at 2 P.M. in the Laboratory of Physiology and Pathology at the University of Pennsylvania, and in the same place at 3 P.M. the annual discussion will take place. The topic, 'The Mutation Theory of Organic Evolution,' will be discussed from the following standpoints: Plant breeding, by Dr. D. T. MacDougal, of the New York Botanical Garden; animal breeding, by Professor W. E. Castle, of Harvard University; cytology, by Professor E. G. Conklin, of the University of Pennsylvania; paleontology, by Professor W. B. Scott, of Princeton University; anatomy, by Professor Thomas Dwight, of the Harvard Medical School; taxonomy, by Professor Liberty H. Bailey, of Cornell University; and ethology, by Dr. W. M. Wheeler, of the American Museum of Natural History. Each speaker is limited to fifteen minutes. At 6:45 a business meeting for the election of officers will be held at the Hotel Walton, while at 7:00 P. M. the dinner of the Naturalists, in which members of the affiliated societies may participate, will be held. At the dinner the president of the society, Professor E. L. Mark, of Harvard University, will give his address. Hotel headquarters of the society are to be at the Colonnade Hotel, Fifteenth and Chestnut Streets.

SCIENTIFIC NOTES AND NEWS.

THE trustees of the Carnegie Institution will meet at Washington on December 13, when it is expected that a president will be elected to fill the vacancy caused by the resignation of Dr. D. C. Gilman.

THE former students of Professor Charles E. Bessey who are connected with the Office of Vegetable Pathological and Physiological Investigations, Department of Agriculture, have had an enlarged copy of his photograph framed and presented to the office. The portrait, which had been covered with an American flag, was unveiled by Professor Bessey's son, Dr. E. A. Bessey. The picture was hung at a gathering of the office force on November 28. Miss Carrie Harrison presented the picture, and appropriate remarks were made by Mr. A. F. Woods, chief pathologist and physiologist, who spoke especially of Professor Bessey's work in promoting the establishment of the pathological and physiological work of the department and of his constant interest in its progress and welfare. Dr. H. J. Webber, physiologist in charge of plant breeding, spoke of the important part that Professor Bessey had taken in introducing laboratory methods of teaching botany in this country and of his great success as a teacher. Mr. C. L. Shear, pathologist, spoke briefly of his students, referring especially to those who are now holding important positions as professors of botany in various universities and colleges. All testified to the intimate and friendly relation which existed between Professor Bessey and his students and to their great admiration and affection for him.

The seventieth birthday of Dr. George H. Howison, Mills professor of philosophy in the University of California, was celebrated on November 29. A *Festschrift* has been issued by the university press containing contributions by his former pupils.

AT the last meeting of the Rumford Committee of the American Academy of Arts and Sciences the following grants for research were made: To Professor R. W. Wood, of Johns Hopkins University, \$350, in aid of a research on the optical and physical properties of so-

dium vapor. To Professor N. A. Kent, of Wabash College, \$100, additional, in aid of a research on the circuit conditions influencing electric spark lines. To Professor A. L. Clark, of Bates College, \$150, additional, in aid of a research in the molecular properties of vapors in the neighborhood of the critical point.

DR. J. STEINDACHNER, director of the Natural History Museum at Vienna, celebrated on November 11 his seventieth birthday.

A CHAPTER of the Scientific Society of the Sigma Xi has recently been organized at the University of Indiana with Dr. W. L. Bryan as president.

MR. DAVID HALE NEWLAND has recently been appointed assistant state geologist of New York, as the result of civil service examinations. Mr. Newland, who will have special charge of inorganic and economic geology, graduated from Hamilton College about ten years ago, subsequently studied two years in Germany, was fellow in geology at Columbia University, assistant on the New York State Geological Survey, and for several years past has been on the editorial staff of the *Engineering and Mining Journal*.

DR. HENRY MONTGOMERY, for ten years past professor of geology and biology and curator of the museum at Trinity University, has been appointed curator of the museum at the University of Toronto.

AFTER the conclusion of his course of lectures at the Lowell Institute, Boston, on 'Selected Chapters in Physiography,' Professor Albrecht Penck gave three lectures before the Harvard Geological Conference on the 'Alps in the Great Ice Age,' the first considering Climatic Variations of the Ice Age (November 28); the second, Glacial Sculpture of the Alps (November 29), and the third, Man and the Ice Age (November 30). These lectures presented the chief results contained in the monograph 'Die Alpen im Eiszeitalter,' the joint work of Professors Penck and Brückner, now nearing completion. Professor Penck also gave an illustrated lecture before the Section of Geology and Mineralogy of the New York Academy of Sciences, on December 2, on 'The Surface Features of the Alps.'

DR. FRANZ BOAS, of Columbia University and the American Museum of Natural History, lectured at Harvard University on December 2, under the auspices of the Anthropological Society on 'Characteristics of Primitive Culture.'

AT University College, London, Professor W. F. R. Weldon is giving a course of eight lectures on 'Current Theories of the Hereditary Process' and Mr. G. U. Yule is giving a course of six Newmarch lectures on 'The Vital Statistics of England.'

ON November 13 the monument erected to the memory of Professor Ollier, the distinguished French surgeon, by international subscription, was unveiled at Lyons in the presence of M. Chaumié, minister of public instruction.

THE Danish Parliament has voted a pension of about \$1,000 a year to the widow of the late Professor Finsen.

THE portraits of Professor Osborne Reynolds and Professor A. S. Wilkins, by the Hon. John Collier, were formally presented to the Victoria University of Manchester on November 18.

THE death is announced of Dr. W. L. Coleman, of Houston, Texas, known for his work on yellow fever.

THE cornerstone of the central building of the Rockefeller Institute for Medical Research was laid on December 3 by Dr. Simon Flexner, director of the institute. The building, which is at Sixty-fifth Street and Avenue A, will have a frontage of one hundred feet, will be five stories in height and will cost \$345,000.

AT the monthly meeting of the Zoological Society of London it was announced that the total number of visitors to the society's gardens during the months of August, September and October had been 256,630, showing an increase of 7,236 as compared with the corresponding period in 1903.

THE New York *Evening Post* states that preparations are being advanced for the expeditions to be sent by the University of California, through the aid of Mr. William H. Crocker, to observe the next total eclipse of

the sun. Parties will go from the Lick Observatory to Spain, Labrador and Egypt. Professor Svante Arrhenius, of Stockholm, a member of the faculty for the last summer session, and Professor Wilhelm Ostwald, of Leipsic, will join the expedition which will go to Spain under the personal charge of Director W. W. Campbell.

PROFESSOR CHITTENDEN, director of the Sheffield Scientific School, has announced a gift from George J. Brush, late director of the institution and emeritus professor of mineralogy, of his valuable collection of minerals and of his scientific library, chiefly of mineralogical books and journals. In addition is given a fund of ten thousand dollars, the income of which is to be used for the increase and care of the collection and library. The value of the entire donation is estimated at about forty thousand dollars. The Brush collection of minerals, which has been recently placed in Kirtland Hall, is the result of over fifty years of judicious and painstaking selection of choice specimens from nearly all parts of the world. Much of it was collected by the donor himself. It has been formed especially to illustrate the scientific aspects of the subject of mineralogy and for study and investigation. It is particularly rich in the original type specimens of new minerals and in other material which has been investigated and published upon. For this reason it is known to scientists and collectors everywhere as having an especial value, and it is a matter of congratulation among friends of the institution that, through the kindness of the donor, this famous and valuable collection has been secured for the perpetual use of the school. It will be henceforth under the charge of Professor S. L. Penfield, who will act as curator.

THE department of geology of Bryn Mawr College has recently been presented, by Mrs. Charles Stillwell Eldredge, daughter of the late Theodore D. Rand, of Radnor, Pa., with her father's private rock and mineral collections. Mr. Rand, for thirty-one years treasurer of the American Institute of Mining Engineers, was an enthusiastic and discriminating collector of minerals and had secured, at the time of his death, some twenty to thirty

thousand specimens. Among them are many rare minerals seldom found in private collections and many valuable and interesting crystals and mineral pseudomorphs. The rock collection is limited in geographic distribution to the United States and is chiefly illustrative of the crystalline rocks of eastern Pennsylvania. It includes a fine series of polished serpentines and rock-type, to which Mr. Rand had devoted considerable study. Mr. Rand's monograph on 'The Geology of Eastern Pennsylvania' is published in the *Reports of the Second Geological Survey* (Annual Report, 1886, Part IV.) and in the *Proceedings of the Philadelphia Academy of Sciences*.

THE New York State Museum received the following awards at the St. Louis Exposition: Four grand prizes for general exhibit in the education department, paleontology, salt products, gypsum. Six gold medals for general scientific publications, minerals and building stones, cement, salt, iron ore separator, electrical insulators. Eleven silver medals as follows: Four for salt exhibits; two for sandstone exhibit; one for each of the following collective exhibits: Geological maps, granite, iron ore, clay products. Three bronze medals for exhibits of marble, iron ore and plaster model of iron mine.

St. Louis University, the oldest university in the Louisiana Purchase territory, has been awarded three grand prizes at the St. Louis World's Fair, as follows: (1) for the general exhibit; (2) for original drawings in embryology by Professor A. C. Eycleshymer; (3) for twenty-five charts of topographical anatomy by Professor Peter Potter. Several gold and silver medals were also awarded.

As already announced, the fourth meeting of the American Philosophical Association will be held in Philadelphia, December 28-30, in affiliation with the American Psychological Association, the American Society of Naturalists and other societies convening with the American Association for the Advancement of Science. In accordance with a vote at the last meeting, arrangements have been made, in commemoration of the centenary of

the death of Kant, for a series of papers on 'Kant's present significance.' There will also be a paper in recognition of the bicentenary of the death of Locke. It is hoped that one session may be held conjointly with the Psychological Association. In addition to these special features, a full and varied program is assured by the large number of papers already offered.

THE San Francisco section of the American Mathematical Society holds its meetings alternately at the University of California and Stanford University, in September and February, respectively. The next meeting will be held at Stanford University on February 25. Professor M. V. Haskell is president and Professor G. A. Miller, secretary of the section.

At the recent Princeton meeting of the Association of Teachers of Mathematics of the Middle States and Maryland, officers were elected as follows: *President*, Professor Thomas Scott Fiske, Columbia University; *vice-president*, Dean H. B. Fine, Princeton University; *secretary*, Arthur Schultze, High School of Commerce, New York City; *members of the council*, Professor Edwin S. Crawley, University of Pennsylvania, and Miss Jenny Van Vleck, Girls' High School, Brooklyn.

THE American Society of Mechanical Engineers is meeting in New York this week. Mr. Ambrose Swasey, the retiring president, announced as the subject of his address 'The Achievements of the Engineer with respect to exact Measurements.' Mr. John R. Freeman, of Providence, R. I., has been nominated for president next year.

THE opening meeting of the eighty-sixth session of the British Institution of Civil Engineers took place on November 1. Sir William White, the retiring president, took the chair at the opening of the meeting, and he was supported by Sir Guilford Molesworth, the incoming president, Sir Benjamin Baker, Sir William Preece, Professor Unwin, Colonel Crompton, Sir J. Wolfe Barry, Mr. Alexander Siemens, Dr. Kennedy, Sir Alexander Binnie, Mr. C. Hawksley, Mr. J. C. Hawkshaw, Dr. Elgar, Mr. Yarrow, Sir John Thornycroft,

Sir George Bruce, Mr. R. A. Hadfield and Dr. Tudsbery (secretary).

THE Ben Nevis Meteorological Observatories were closed on October 1, after having been in operation for nearly twenty-one years. The cost of the observatories and improvements was about \$35,000 provided by subscription, and the annual cost of maintenance had been about \$5,000, most of which was privately subscribed.

UNIVERSITY AND EDUCATIONAL NEWS.

THE New York *Evening Post* states that Sir William Macdonald is perfecting his plans for the new agricultural college and experimental farm which, under the supervision of Professor Robertson, late of the Government Experimental Farm at Ottawa, he is to establish at St. Anne de Bellevue, near Montreal. About seven hundred acres of land have been secured by the founder, who declares that the college is a personal affair of his own, and that he does not intend to be bound down to any definite sum of money in the completion of his work. The erection of the buildings will be commenced next spring, and the whole cost is expected to be between one and two million dollars. The institution will be patterned after the agricultural college at Guelph, and the experimental farm at Ottawa.

THE Oxford Congregation by a vote of 200 to 164 has rejected the proposal that in the entrance examinations candidates who are seeking honors in mathematics or natural science may be allowed to substitute French or German for Greek.

At a dinner of the Oxford Colonial Club, held on November 14, Lord Roseberry announced that the Rhodes Trustees, hearing that the university was in some danger, from want of the necessary means, of losing their present teacher of pathology, were prepared to contribute £200 a year for five years.

DR. LEO LOEB has been appointed assistant professor of pathology at University of Pennsylvania.

MR. R. G. D. RICHARDSON has been appointed instructor in mathematics at Yale University.