

books and apparatus and afford advanced instruction to qualified students.

"The following officers of the Board of Trustees were elected:

Chairman—John S. Billings, New York; Vice-Chairman—Elihu Root, secretary of war; Secretary—Charles D. Walcott, director of the geological survey.

Vacancies on the board were filled by the election of John Cadwalader of New York to succeed Abram S. Hewitt, deceased; Cleveland E. Dodge, New York, to succeed William E. Dodge, deceased, and Judge William Wirt Howe, New Orleans, to succeed Justice Edward D. White, resigned.

Secretary of State John Hay was chosen as a member of the executive committee in the class of 1905 to succeed Mr. Hewitt and Dr. S. Weir Mitchell and Carroll D. Wright were reelected for three years as members of the executive committee.

"President D. C. Gilman will resign his office one year hence. For some time rumors have been current that Dr. Gilman would retire during the present meeting, and when it was known that he and Mr. Carnegie had had a long private conference it was assumed that the matter was settled. A letter from Dr. Gilman to the trustees, however, showed that he did not intend to make any sudden move. His letter reminded his colleagues that the fixed term of the presidency of the institution was five years, of which he had now served two; that his increasing age made the labors of an executive at the head of so great an establishment very onerous, and that he did not feel that he could continue to bear the burdens beyond the next year, when he should expect the acceptance of his resignation."

HENRY CARRINGTON BOLTON.

At a meeting called by the Washington Chemical Society, held in Columbian University, on Monday evening, November 25, in honor of the memory of the late Henry Carrington Bolton, addresses were made by the president of the society, Dr. F. K. Cameron, Dr. Chas. E. Munroe, Dr. H. W. Wiley, Dr. F. W. Clarke, Dr. Marcus Benjamin and Professor R. B. Warder. A committee consisting of Drs. Munroe, Clarke and Wiley was appointed with power to formally express the sorrow of the members of the society for the bereavement which they had suffered. Fol-

lowing is the memorial prepared by the committee:

"Death has suddenly removed from earth our friend and coworker, Dr. Henry Carrington Bolton. In his death chemistry has lost a disciple, who gave to her service the enthusiasm of his youth, the strength of his manhood and the wise council of his riper years.

"Our section has lost a member who through his experimental researches and especially by his notable additions to bibliography has contributed much to the advancement of the science which it is the purpose of this society to promote. These distinguished services to science have placed all who are interested in chemistry under lasting obligations.

"The student of chemistry has lost a friend who was always ready to extend the right hand of fellowship and to contribute freely from his rare store of knowledge and extended experience.

"The community has lost a man who by his genial qualities, his high ideals, his faithfulness to the duties he undertook, his catholicity of views and of interests and his tolerance of the opinions of others endeared him to all who knew him.

"His life was a benefaction, his presence always a blessing and his career one of usefulness to man.

"We ask that this tribute to his memory be spread upon the minutes of the society; that it be printed in the proceedings and in *SCIENCE* and that an engrossed copy be presented to Mrs. Bolton.

"On behalf of the society,

"CHAS. E. MUNROE,

"F. W. CLARKE,

"H. W. WILEY."

SCIENTIFIC NOTES AND NEWS.

THE Royal Society held its anniversary meeting on November 30, when the officers were elected whose names have already been printed in this journal. A contest took place for the post of general secretary, vacant by the resignation of Sir Michael Foster, for which Sir Archibald Geikie was nominated by

the council and Professor W. D. Halliburton by a considerable number of independent fellows, and the former was elected by a large majority. The president, Sir William Huggins, gave the usual address reviewing the activities of the society during the past year. At the banquet in the evening addresses were made by the president, Lord Robertson, Professor Curie, Lord Alverstone, Sir Arthur Rücker, Sir Michael Foster and Sir Archibald Geikie.

PROFESSOR KUNO FISCHER, now in his eightieth year, has retired from active duty as professor of philosophy in the University of Heidelberg.

PROFESSOR H. E. GREGORY, of Yale University, has begun work on a geological map of Connecticut, as provided for in a recent act of the state legislature.

PROFESSOR W. B. SCOTT, of Princeton University, lectured before the Teachers' Institute of Cooper Union on Tuesday evening, December 8, the subject being 'The Topography of Sedimentary Rocks.'

PROFESSOR SEELEY'S course of eight lectures on 'The Fossil Reptiles of South Africa' is now being given in the Geological Laboratory, King's College, on alternate Tuesdays at 4:30 P.M.

A NEW division, that of Forest Products, has been organized in the Bureau of Forestry with Dr. H. von Schrenck in charge.

MR. J. MORGAN CLEMENTS has resigned his position at the University of Wisconsin and the U. S. Geological Survey to engage in professional work in New York City.

A PRESENTATION and banquet were given on November 21 to Dr. Cunningham by his Dublin colleagues and friends, to mark their regret for his departure to Edinburgh and their appreciation of his work while professor of anatomy in Dublin University. His successor, Professor A. F. Dixon, presided.

THE American Scenic and Historic Preservation Society held, on December 9, a meeting in memory of the late Andrew H. Green at the American Museum of Natural History.

THE widow of the late Professor Virchow

has given about 7,000 volumes from his library to the Berlin Medical Society.

As a matter of record, we note the death of Mr. Herbert Spencer, in his eighty-fourth year, which occurred at Brighton on December 8.

SIR FREDERICK BRAMWELL, the eminent engineer, died in London on November 30, at the age of eighty-five years. He was elected a fellow of the Royal Society in 1873; president of the Institution of Mechanical Engineers in 1874; president of the Institution of Civil Engineers in 1884, and president of the British Association for the Advancement of Science in 1888.

FOR the accommodation of delegates and members of the American Association for the Advancement of Science from New York, Philadelphia, Baltimore, Washington and cities tributary thereto to the meetings to be held in St. Louis from December 26 to January 2, the Baltimore and Ohio Railroad will run a special train composed of Pullman sleepers and dining car, leaving New York at 10:30 A.M., Philadelphia 12:48, Baltimore 3:00 and Washington 4:15 P.M., December 26, arriving at St. Louis at 5:25 P.M., December 27. For full information and seat reservations apply to Lyman McCarty, assistant general passenger agent, Baltimore and Ohio Railroad, 434 Broadway, New York, N. Y.

THE Geographical Society of Philadelphia has in press and will shortly issue Commander Peary's report on arctic explorations conducted under the auspices of the Peary Arctic Club of New York, and covering a period of five years. At the meeting of the society on December 2, an address was delivered by Dr. Frederick A. Cook, of Brooklyn, on his recent researches in the McKinley range of Alaska and the attempted, but not successful, ascent of the loftiest summit of the North American continent. The official report of these researches will also be published by the Philadelphia Society.

THE executive board of the Association for maintaining the American women's table at the Zoological Station at Naples and for promoting scientific research by women an-

nounces that applications for the Naples table for the year 1904 should be sent to the secretary, Miss Cornelia M. Clapp, Mount Holyoke College, South Hadley, Mass. During the past five years eight women have been appointed by the association, seven of whom have received the title of 'scholar.' Through the special kindness of Dr. Dohrn, two may be received at the station at the same time, both having placed at their disposal equal opportunities for work.

THE New York Aquarium will hereafter use for its salt-water tank the closed circulation system, the water being brought from the sea and kept in a reservoir of 100,000 gallons. After the water is used it is filtered and aerated and returned to the reservoir. Hitherto the water has been taken from the bay, where it varies in density and purity.

TRANSIT-ROOM shutters of a new design by Professor D. P. Todd were erected the last week in November at Amherst College Observatory. They were built by the Coburn Trolley Track Company and the Norton Iron Works, with special reference to ease and rapidity of working.

UNIVERSITY AND EDUCATIONAL NEWS.

By the will of William Wyman, of Baltimore, the Johns Hopkins University may expect ultimately to receive the residue of his estate, valued at \$500,000.

By the will of Henry S. Nourse, of Lancaster, Mass., a fund is set aside for Harvard University which will amount to at least \$50,000.

COLUMBIA UNIVERSITY has received a gift of \$5,000 from Mrs. Butler, of New York, to found a scholarship; an anonymous gift of \$10,000 is also announced.

It appears that the will of the late Gordon McKay, leaving a very large sum for scientific work at Harvard University, will be contested by a distant relative.

THE University of Aberdeen has received from the trustees of the late Mr. John Reid, of Shannaburn, a sum that will provide not

less than \$2,000 a year for post-graduate research scholarships.

THE University of Wales has received by the will of the late Mr. Price Davies, of Leeds, the sum of about \$35,000 for scholarships.

SIR WILLIAM MACDONALD has given \$2,000 to McGill University for experimental work in physics.

A SCHOOL in biology will be conducted at Coronado Beach during the Christmas vacation, under the auspices of the University of California. The work will be directed by Professors W. E. Ritter and C. A. Kofoed.

PRINCIPAL PETERSON, of McGill University, after a conference with Sir Thomas Shaughnessy, president of the Canadian Pacific Railway, has announced that a railway department will be created in connection with the university.

At an educational meeting held at the University of Chicago on November 15 and attended by more than two hundred superintendents of high schools and academies of the middle west, it was unanimously resolved that the first two years of college work should be added to the curriculum of high schools and academies.

It is reported that Dr. Charles W. Dabney, president of the University of Tennessee, has been offered the presidency of the University of Cincinnati.

DR. THOMAS HUNT MORGAN, now professor of biology at Bryn Mawr College, has been elected professor of experimental zoology in Columbia University.

PROFESSOR HUGO MÜNSTERBERG, of Harvard University, has been elected non-resident lecturer on psychology at Columbia University, where he will give a special course of lectures in the early spring.

PROFESSOR F. G. WRENN has been elected Walker Professor of Mathematics in Tufts College in the room of the late Benjamin F. Brown.

MR. T. H. HAVELOCK, fifteenth wrangler in 1900, Smith's prizeman in 1901 and Isaac Newton student in 1902, has been elected fellow of St. John's College, Cambridge.