

from some approved college. On the second day of the meeting President Van Hise, of the University of Wisconsin, discussed "The Appointment and Tenure of University Professors."

At the annual election, the University of Virginia was chosen president of the association, the University of Illinois vice-president and the University of Missouri a member of the executive committee. Harvard remains secretary and Columbia was reelected a member of the executive committee. Chicago was chosen as the next place of meeting. The work closed with a conference of deans, the most notable matter of discussion being the entrance requirements for graduate schools.

The delegates were: Dean Barrows, of California; Professor Bolling, of the Catholic University of America; President Judson and Dean Salisbury, of Chicago; Professor Sanford, of Clark; Professors Carpenter and Thomas, of Columbia; Dean Merritt and Professor Thilly, of Cornell; President Lowell, Dean Haskins and Secretary Little, of Harvard; Director Davenport, of Illinois; President Bryan and Dean Hoffman, of Indiana, Deans Wilcox and Seashore, of Iowa; Professor Ames, of Johns Hopkins; Deans Blackmer, of Kansas; Reed, of Michigan, and Downey, of Minnesota; President Hill, of Missouri; Deans Sherman, of Nebraska, and Ames and Fisher, of Pennsylvania; Dean West and Professor Conklin, of Princeton; President Jordan, of Leland Stanford Junior; President Van Hise, of Wisconsin; Dean Jones and Director Chittenden, of Yale, and President Alderman, Deans Page, Thornton, Lile, Dabney and Whitehead and Professors Tuttle, Kent, Wilson, Fitz-Hugh, Payne, Kastle and Faulkner, of Virginia.

THE SALARIES OF PROFESSORS OF YALE UNIVERSITY

ATTENTION has already been called in SCIENCE to increases in the salaries of professors at Yale University. The official announcement of the action taken by the corporation is as follows:

Owing to the generosity of the alumni, a sum of about \$50,000 contributed by the Alumni Fund Association, was available for this purpose (professorial salary increases). Of this \$10,000 was set apart last spring for salary increases. Of the remainder, one third is now appropriated to increase the salaries of assistant professors and two thirds to increase the salaries of full professors. The new salary scale put into force continues instructors at from \$1,000 to \$1,600, increases assistant professors on the first term of appointment from \$1,800 to \$2,000, sets \$2,500 as the normal scale for the second appointment of the assistant professors' grade and reduces the period of the second appointment from five years to three years, making \$3,000 the normal salary for an assistant professor after the expiration of his second term.

All of the assistant professors of the first grade in the two undergraduate departments had their salaries raised to the new scale for the coming year.

It is believed that the new salary scale avoids the danger of an absolutely fixed scale on the one hand and of haphazard determination of individual salaries on the other. In the case of assistant professors the normal salary plan of the past is continued and strengthened, although the corporation reserves the right to withhold salary increases where the work is unsatisfactory.

In the case of professors, normal grades of \$4,000, \$4,500, and \$5,000 are adopted—with length of service, university responsibility and individual distinction as a scholar or teacher forming the criteria on which the president and dean of a department base their recommendations for advance to the corporation. On this plan twelve professors in the university were placed on the maximum salary of \$5,000 and a slightly larger number on the \$4,500 basis.

SCIENTIFIC NOTES AND NEWS

DR. EDGAR F. SMITH, for twenty-two years professor of chemistry in the University of Pennsylvania and for twelve years vice-provost, has been elected provost in succession to Dr. C. C. Harrison.

WE have not been able to obtain an authorized statement of the degrees conferred at the celebration of the centenary of the University of Berlin, but it appears that three honorary degrees were conferred on American men of science—the degree of doctor of philosophy on

Dr. George E. Hale, director of the Mount Wilson Solar Observatory, and on Dr. Bailey Willis, of the U. S. Geological Survey, and the degree of doctor of medicine and surgery on Dr. Theodore W. Richards, professor of chemistry in Harvard University.

It is reported that the Nobel prize for physics will be awarded to Professor J. D. van der Waals, of Amsterdam, for his work on gases and liquids.

PROFESSOR EDWARD B. POULTON, Professor T. H. Morgan and Dr. L. O. Howard have been elected correspondents of the Academy of Natural Sciences of Philadelphia.

THE Royal Society of Edinburgh has elected honorary fellows as follows: *British*—Professor J. G. Frazer, Sir Joseph Larmor, F.R.S., Dr. Alfred Russel Wallace, O.M., F.R.S.; *foreign*—Professor Hugo de Vries, Amsterdam; Mr. F. A. Forel, Morges; Professor Karl F. von Goebel, Munich; Professor J. C. Kepteyn, Gröningen; Professor Elie Metchnikoff, Paris; Professor A. A. Michelson, F.R.S., Chicago; Professor W. Ostwald, Leipzig; Professor F. W. Putnam, Harvard University, and Professor A. F. L. Weismann, Freiburg.

At the meeting of the trustees of the Carnegie Foundation for the Advancement of Teaching, held in New York City last week, President A. Lawrence Lowell, of Harvard University; President W. L. Bryan, of Indiana University, and President J. M. Taylor, of Vassar College, were elected trustees to fill vacancies caused by the retirement of Dr. Woodrow Wilson, formerly president of Princeton University; Dr. C. C. Harrison, retiring provost of the University of Pennsylvania, and Dr. L. Clarke Seelye, formerly president of Smith College. No other information in regard to the action of the trustees appears to have been made public.

THE Royal Society's medals will this year be awarded as follows: The Copley medal to Sir Francis Galton, F.R.S., for his researches on heredity; the Rumford medal to Professor Heinrich Rubens, for his researches on radiation, especially of long wave-length; a Royal

medal to Professor Frederick O. Bower, F.R.S., for his treatise on the origin of a land flora; a Royal medal to Professor John Joly, F.R.S., for his researches in physics and geology; the Davy medal to Professor Theodore W. Richards, for his researches on the determination of atomic weights; the Darwin medal to Mr. Roland Trimen, F.R.S., for his South African bionomic researches, in large part undertaken as the outcome of correspondence with Charles Darwin; the Sylvester medal to Dr. Henry F. Baker, F.R.S., for his researches in the theory of Abelian functions and for his edition of Sylvester's "Collected Works"; the Hughes medal to Professor John A. Fleming, F.R.S., for his researches in electricity and electrical measurements.

OFFICERS of the Royal Society have been nominated by the council as follows: *President*, Sir Archibald Geikie, K.C.B.; *treasurer*, Mr. Alfred Bray Kempe; *secretaries*, Sir Joseph Larmor and Dr. John Rose Bradford; *foreign secretary*, Sir William Crookes; *other members of the council*, Mr. L. Fletcher, Dr. W. H. Gaskell, Sir David Gill, K.C.B., Dr. E. H. Griffiths, Professor W. M. Hicks, Professor F. S. Kipping, Major P. A. MacMahon, Mr. H. R. A. Mallock, Dr. C. J. Martin, the Duke of Northumberland, K.G., Professor W. J. Pope, Professor J. H. Poynting, Professor E. Rutherford, Mr. A. E. Shipley, Mr. M. R. Oldfield Thomas and Mr. Harold W. T. Wager.

PROFESSOR JOSEPH BAKER DAVIS, who has been a member of the faculty of the engineering department of the University of Michigan since 1872, resigned at the October meeting of the regents. In recognition of his services to the university he has been made professor emeritus.

THE studentship on the foundation of the late Professor Tyndall for scientific research on subjects tending to improve the conditions to which miners are subject has been awarded for the ensuing year to Dr. T. L. Llewellyn, of Bargoed, Wales, for research regarding the cause and cure of the disease in miners known as nystagmus.

MR. THEODORE ROOSEVELT has taken advantage of a recent stay in Washington to inspect the collections made by the Smithsonian African Expedition during 1909-10.

MR. A. S. HITCHCOCK, systematic agrostologist, U. S. Department of Agriculture, has returned from a four months' trip to Mexico. He brought back a collection of grasses, consisting of 2,703 numbers, about 20,000 specimens, made in forty localities from nearly all the states north of the Isthmus of Tehuantepec. He was accompanied by his son, Frank Hitchcock, as assistant.

PROFESSOR FREDERICK STARR, of the University of Chicago, will leave the United States on December 22 for Korea, where he will make a study of the inhabitants. Mr. Manuel Gonzales, his companion on previous trips of this kind, will accompany him.

MR. PRIESTLY, who accompanied Sir Ernest Shackleton, as geologist, on his Antarctic expedition, is going with Captain Scott in the place of Mr. Thompson, who is ill.

A LARGE shipment of pure rare earths, worth several thousand dollars, has been received by Professor Victor Lenher, of the chemistry department of the University of Wisconsin. Several graduate students will also make use of the material in their investigations.

FOR the past three years advanced lecture and seminary courses in physics, chemistry and mathematics have been maintained at the Bureau of Standards by the members of the staff, primarily in the interests of those of the younger men who have not yet received the doctorate. For the current year such courses are being given by Drs. E. B. Rosa and A. S. McDaniel, of the bureau, and Drs. J. A. Anderson and A. H. Pfund, of Johns Hopkins University. Over thirty men are enrolled in the courses.

DR. L. H. BOLLEY, botanist at the North Dakota Experiment Station, addressed the department of plant morphology of the New York State College of Agriculture on Friday evening, November 11. The subject of his remarks was, "The Relation of Fungous Diseases to Soil Sanitation and Crop Rotation."

THE annual Huxley memorial lecture of the Royal Anthropological Institute was given on November 22 by Professor W. Boyd Dawkins, F.R.S., whose subject was "The Arrival of Man in Britain in the Pleistocene Age."

DR. HENRY WURTZ, formerly chemical examiner in the U. S. Patent Office, has died at his home in Brooklyn, in his eighty-third year.

MR. THEODORE COOKE, for many years principal of the Poona College of Science, has died at seventy-four years of age.

DR. D. J. B. GERNEZ, member of the Paris Academy of Sciences, associated with Pasteur in his researches, has died at the age of seventy-six years.

As the Chicago Section of the American Mathematical Society will meet at Minneapolis in affiliation with the American Association, all mathematical papers which are to be presented at this meeting should be mailed to Professor H. E. Slaughter, University of Chicago. The papers on astronomy should be mailed to the secretary of Section A. The reading of the latter will begin on Wednesday morning immediately after the organization of the section. The "general-interest session" of Section A will be held on Wednesday afternoon. At this session the retiring vice-president, Professor E. W. Brown, will read his address entitled "The relations between Jupiter and the Asteroids." Several other papers of general mathematical and astronomical interest will be read at this session. On Friday afternoon there will be a joint session of Sections A and D and the Chicago Section of the American Mathematical Society to hear the report of the committee on the teaching of mathematics to engineering students, which was appointed at a similar joint meeting at Chicago in 1907. Dr. G. A. Miller, of the University of Illinois, is secretary of the section.

THE American Phytopathological Society will hold its annual meeting in Minneapolis, Minnesota, in affiliation with the American Association for the Advancement of Science, December 28-30. The society will hold joint sessions with the Botanical Society of Amer-

ica and Section G of the American Association. Dr. F. L. Stevens, of West Raleigh, North Carolina, is the president, and Dr. C. L. Shear, of Washington, D. C., secretary of the society.

THE annual meeting of the Home Economics Association under the presidency of Mrs. Ellen H. Richards, of the Massachusetts Institute of Technology, will be held at St. Louis at the time of the meeting of the American Economic Association and the American Sociological Association, December 27-30. Interest will center in the joint discussions by both associations on the teaching of economics in the high schools. The program of the Home Economic Association meeting may be secured by addressing the secretary, Benjamin R. Andrews, Teachers College, Columbia University.

THE American Museum of Natural History receives \$25,000 by the will of the late Charles E. Tilford, of New York City.

ACCORDING to a cablegram to the daily papers, a ceremony in celebration of the completion of the Vatican observatory under the direction of Father Hagen was held in the papal apartment on November 17. A speech was made by Cardinal Maffi, president of the observatory, to which the pope replied, highly commending the work of Father Hagen.

THE Field Museum of Natural History at Chicago announces its intention of making a study of the fresh-water, brackish and salt-water shore fish of the Canal Zone during the coming dry season. The study will be made before the completion of the canal, in order that the fish may be taken before they have had a chance to cross the divide and undergo the changes incident to a new environment.

LAST June Mr. Jake Gimbel, a merchant of Vincennes, Indiana, made possible the Gimbel expedition to British Guiana for the study of the fish of the family Gymnotidæ. During the summer this expedition was jointly equipped by Mr. Gimbel and Indiana University and on August 24 Mr. Max M. Ellis, A.M. (Indiana), teaching fellow in zoology, with Mr. Wm. Tucker, A.M. (Indiana), as assist-

ant, sailed via Ruebec Line for Georgetown. General collections were made in the Demerara and Essequibo rivers as well as Hubabu and Palmachusia creeks, supplementing those made by Dr. C. H. Eigenmann in 1908. A considerable amount of time was given to experimental work in and about Georgetown. Messrs. Ellis and Tucker returned to the United States on October 29.

THE department of plant pathology of the New York State College of Agriculture announces the establishment of three more industrial fellowships, as follows: The Ten Broeck fellowship, established by Wessel Ten Broeck, for the investigation of the effect of cement dust on the setting of fruit, injury to foliage, etc. The work on this fellowship, during the growing season, is conducted in a field laboratory near a large cement plant at Hudson, N. Y. Mr. P. J. Anderson, holder of the fellowship, is a 1910 graduate of Wabash College. The Byron fellowship, established by the Byron Fruit Growers' Association, of South Byron, N. Y., for the investigation of the diseases of fruit trees. Special attention will be given to the New York apple tree canker. The holder of this fellowship is Mr. Lex R. Hesler. He completes his work at Wabash College January 1, 1911. The Bethany-Batavia fellowship, established by the Bethany-Batavia Fruit Growers' Association near Batavia, N. Y., for the investigation of the diseases and insect pests of orchard crops, especially the diseases of apples. Particular attention will be given to the use of sulphur fungicides for the control of these diseases and pests. This fellowship as well as the Byron fellowship is established jointly in the departments of plant pathology and entomology. It provides for two fellows, one in entomology and the other in plant pathology. The work on this fellowship will begin in the spring of 1911.

UNIVERSITY AND EDUCATIONAL NEWS

It is announced that Mr. Andrew Carnegie has given a further sum of \$1,500,000 for the construction of buildings of the Carnegie Technical Schools at Pittsburgh.