

Tuesday and Wednesday, December 31 and January 1. Joint sessions with Sections F and G, A. A. A. S., on dates to be announced. Secretary, Professor T. W. Galloway, James Millikin University, Decatur, Ill.

*American Society of Naturalists.*—Meets on Thursday, January 2. Will hold symposium on "Adaptation." Secretary, Dr. A. L. Treadwell, Vassar College, Poughkeepsie, N. Y.

*American Nature-Study Society.*—Meets on Monday and Tuesday, December 30 and 31. Will probably hold joint session with School Garden Association of America on date to be announced. Secretary, Professor Elliot R. Downing, University of Chicago, Chicago, Ill.

*Society for Pharmacology and Experimental Therapeutics.*—Meets on Monday and Tuesday, December 30 and 31. Secretary, Dr. John Auer, Rockefeller Institute for Medical Research, New York City.

*American Physical Society.*—Meets in joint sessions in charge of Section B, A. A. A. S., on dates to be announced. Secretary, Dr. Ernest Merritt, Cornell University, Ithaca, N. Y.

*American Physiological Society.*—Meets on Monday, Tuesday and Wednesday, December 30 to January 1, in physiological laboratory, Western Reserve Medical School. Joint session with Section K, A. A. A. S., on Wednesday, January 1. Secretary, Dr. A. J. Carlson, University of Chicago, Chicago, Ill.

*American Psychological Association.*—Meets on Monday, Tuesday and Wednesday, December 30 to January 1. Joint sessions with Sections F and L, A. A. A. S., on dates to be announced. Secretary, Professor W. V. Bingham, Dartmouth College, Hanover, N. H.

*American Phytopathological Association.*—Meets on Tuesday, Wednesday, Thursday and Friday, December 31 to January 3. Will hold joint sessions with Section G, A. A. A. S., and with the Botanical Society of America on dates to be announced. Secretary, Dr. C. L. Shear, U. S. Department of Agriculture, Washington, D. C.

*School Garden Association of America.*—Will hold joint session with American Nature-Study Society on date to be announced. Secretary, Dick J. Crosby, U. S. Department of Agriculture, Washington, D. C.

*Association of Official Seed Analysts.*—Will hold meetings on Thursday, January 2. Secretary, Edgar Brown, U. S. Department of Agriculture, Washington, D. C.

*American Society of Zoologists.*—Joint meeting of Eastern and Central Branches, on Monday, Tuesday and Wednesday, December 30 to January 1. Joint session with Section F, A. A. A. S., on date to be announced. Joint meeting with American Society of Naturalists on Thursday, January 2. Secretary in charge, Dr. Winterton C. Curtis, University of Missouri, Columbia, Mo. Secretary (Eastern Branch), Dr. John H. Gerould, Dartmouth College, Hanover, N. H.

*Gamma Alpha Graduate Scientific Fraternity.*—Will hold annual convention, council meeting and banquet on Tuesday, December 31, 1912. H. E. Howe, recorder, Ashland, Va.

*Sigma Xi.*—Will hold annual convention with banquet on date to be announced. H. T. Eddy, president, University of Minnesota, Minneapolis, Minn.

#### SCIENTIFIC NOTES AND NEWS

It is announced from Stockholm that the Nobel prize for chemistry has been divided between M. Grignard, of Nancy, and M. Sabatier, of Toulouse, and the prize in physics to Mr. Gustaf Dalen, head of the Stockholm Gas Company. The prize in literature has been awarded to Dr. Gerhart Hauptmann, of Berlin.

DR. ALEXIS CARREL, of the Rockefeller Institute for Medical Research, who has been awarded the Nobel prize in medicine, was given a reception at the College of the City of New York, on November 16. Among those who made addresses in appreciation of his work were President Taft and M. Jusserand, the French ambassador.

PROFESSOR CHARLES S. MINOT, of Harvard University, and Professor William M. Sloane, of Columbia University, gave their inaugural lectures at the University of Berlin, on October 31. The German emperor and the empress were present at the ceremony.

A BANQUET will be tendered to Dr. Theodore N. Gill, associate of the Smithsonian Institution, professor emeritus of George Washington University, and a founder of the Cosmos Club, at the Cosmos Club on December 13, as a token of esteem, in affectionate commemoration of the completion of the seventy-fifth year of his age and fifty-sixth year of publication of his contributions to knowledge.

THE secretary of the interior has announced the appointment of Mr. David White as chief geologist of the United States Geological Survey to succeed Mr. Waldemar Lindgren, who leaves Washington to become Rogers professor of geology and head of the geological department of the Massachusetts Institute of Technology. Dr. F. L. Ransome succeeds Mr. Lindgren as chief of the section of economic geology of metalliferous deposits. Mr. Lindgren retains his position as one of the geologists of the survey. He will probably take up for the survey next summer the study of the Homestake mine, South Dakota, and has in view also some reconnaissance work in southwestern Arizona.

THE General Education Board of 17 Battery Place, New York City, announces that Mr. Abraham Flexner has become a member of its staff. Mr. Flexner is the author of "The American College" (1908), and of the "Bulletins on Medical Education in the United States and Canada" (1910) and "Medical Education in Europe" (1912), issued by the Carnegie Foundation for the Advancement of Teaching.

M. ÉMILE BOUTROUX, known for his contributions to philosophy, has been elected a member of the French Academy.

THE gold medal for science of the Prussian government has been conferred on Dr. Walther Nernst, professor of chemistry at Berlin.

THE Swedish Medical Society has conferred the Retzius gold medal on Dr. John Newport Langley, professor of physiology in the University of Cambridge, for his work on the nervous system.

THE Weber-Parkes prize of 150 guineas and a silver medal, founded in 1895 by Sir Hermann Weber in memory of the late Dr. E. A. Parkes, and awarded every third year to the author of the best essay on tuberculosis, has been awarded by the Royal College of Physicians to Mr. J. A. D. Radcliffe, pathologist to the King Edward VII. Sanatorium, Midhurst.

DR. JACQUES HUBER, director of the Goeldi Museum of Natural History and of the Botanical Garden of Pará, Brazil, has been visit-

ing the scientific institutions of the United States.

WALTER SHELDON TOWER, associate professor of geography in the University of Chicago, has returned from a seven months' tour of investigation of the economic, geographic and commercial conditions of Chile, the Argentine Republic, Uruguay and Brazil.

MR. D. W. BERKY, magnetic observer of the department of terrestrial magnetism, Carnegie Institution of Washington, left Biskra, Algeria, on October 29 for a trans-Saharan trip to Timbuktu. Mr. Berky is accompanied by Mr. H. E. Sawyer, magnetic observer of the department, an interpreter and caravan party. The expedition will require from four to five months' time and it is expected much valuable magnetic data will be secured.

J. PAUL GOODE, associate professor of geography in the University of Chicago, has well advanced toward completion a series of wall maps for colleges and universities—an attempt to produce in America maps of as high quality as those of Germany.

PRINCETON UNIVERSITY has inaugurated a course of public lectures by members of the faculty on "Some Aspects of the Renaissance." The lectures include "Philosophy," by Professor Kemp-Smith; "Natural Science," by Professor Trowbridge, and "The Medieval Mind," by Dr. Stewart Paton.

UNDER the auspices of the department of geology of Columbia University an illustrated public lecture was given by Dr. Herman Le Roy Fairchild, professor of geology in the University of Rochester on "Glacial Geology of New York State," on November 12.

PROFESSOR C. F. HODGE, of Clark College, Worcester, Mass., addressed the Science Club of the University of Wisconsin on "Fly Extinction as a Problem in University Biology," on November 6, 1912.

PROFESSOR ROBERT A. MILLIKAN, of the department of physics in the University of Chicago, who recently presented papers before the Deutsche Physikalische Gesellschaft in Berlin and the Dundee meeting of the British Association for the Advancement of Science, is

to give the annual Sigma Xi address at the University of Kansas early in November and also an address before the Kansas State Teachers' Association in Topeka on the subject of "Recent Discoveries in Physics and Chemistry."

At the annual meeting of the Kansas Teachers' Association, held at Topeka, November 7 and 8, Professors David Eugene Smith and Maurice A. Bigelow, of Teachers College, Columbia University, delivered addresses, the former on "Teaching Mathematics," and the latter on "Biology as Applied Science."

THE following non-resident lecturers in highway engineering at Columbia University have been appointed for the 1912-13 session: John A. Benschel, New York state engineer; William H. Connell, chief, Bureau of Highways and Street Cleaning, Philadelphia; Morris L. Cooke, director, Department of Public Works, Philadelphia; C. A. Crane, secretary, the General Contractors Association; W. W. Crosby, chief engineer to the Maryland Geological Survey and consulting engineer, Baltimore; Charles Henry Davis, president, National Highways Association; A. W. Dow, chemical and consulting paving engineer, New York City; Walter H. Fulweiler, engineer, Research Department, United Gas Improvement Company; John M. Goodell, editor-in-chief, *Engineering Record*; D. L. Hough, president, the United Engineering and Contracting Company; Arthur N. Johnson, state highway engineer of Illinois; Nelson P. Lewis, chief engineer, Board of Estimate and Apportionment, New York City; J. C. Nagle, professor of civil engineering and dean of the School of Engineering, Agricultural and Mechanical College of Texas; Harold Parker, first vice-president, Hassam Paving Company; H. B. Pullar, assistant manager and chief chemist, the American Asphaltum and Rubber Company; J. M. F. de Pulligny, ingénieur en chef des ponts et chaussées, et directeur, Mission Française d'Ingénieurs aux Etats-Unis; John R. Rablin, chief engineer, Massachusetts Metropolitan Park Commission; Clifford Richardson, consulting engineer, New York City; Philip P. Sharples, chief chemist, Bar-

rett Manufacturing Company; Francis P. Smith, chemical and consulting paving engineer, New York City; Albert Sommer, consulting chemist, Philadelphia; George W. Tillson, consulting engineer to the president of the Borough of Brooklyn.

THE following lectures are announced at the Royal College of Physicians, London, during November: the FitzPatrick lectures by Dr. Raymond Crawford on "The History of Medicine" on November 7, 12, 14 and 19, the subject being "Echoes of Pestilence in Literature and Art"; the Horace Dobell lecture by Dr. C. J. Martin, on "Insect Porters of Bacterial Infection," on November 21.

THE eighty-seventh Christmas course of juvenile lectures, founded at the Royal Institution in 1826 by Michael Faraday, will be delivered this year by Professor Sir James Dewar, LL.D., D.Sc., Ph.D., F.R.S., Fullerian professor of chemistry. The lectures will be experimentally illustrated, and the subjects are as follows: "Alchemy," Saturday, December 28; "Atoms," December 31; "Light," January 2; "Clouds," January 4; "Meteorites," January 7; "Frozen Worlds," January 9. The lecture hour is 3 o'clock.

As a memorial to the late Professor Tait it is proposed to establish an additional chair of physics at Edinburgh, for which it is hoped to collect at least £20,000. The chair would be connected with the department of Tait's work in which he achieved especially conspicuous success—namely, the application of mathematics to the solution of physical problems, including those which bear upon engineering and other departments of applied science.

At a meeting held at the Mansion House to establish a memorial to Lord Lister, it was decided to put up a medallion in Westminster Abbey; to erect a monument in a public place in London; and to found an International Lister Memorial Fund for the advancement of surgery.

DR. OLIVER CLINTON WENDELL, assistant professor of astronomy in Harvard University, died at Belmont on the fifth instant, in the sixty-eighth year of his age.

MR. HENRY GROVES, who with his brother, Mr. James Groves, is the author of important contributions to botany, died in London on November 2, aged fifty-seven years.

DR. HEINRICH RITTHAUSEN, formerly professor of agricultural chemistry at Königsberg, has died at the age of eighty-seven years.

#### UNIVERSITY AND EDUCATIONAL NEWS

MR. GEORGE F. BAKER, president of the First National Bank of New York City, has given a large sum, reported in the newspapers to be \$2,000,000, to bring about an alliance between the New York Hospital and the Cornell Medical College.

DR. ARTHUR T. CABOT, a fellow of Harvard University, has bequeathed \$100,000 to the Harvard Medical School and the larger part of his estate, estimated at \$500,000, to Harvard University, after the death of Mrs. Cabot.

ACCORDING to the accounting of the executors of the estate of George Crocker, Columbia University receives \$1,566,635 for the Crocker Cancer Research Fund.

It is announced at the University of Rochester that \$262,510 has been contributed to the endowment fund by alumni living elsewhere. Dr. L. E. Holt, of New York City, gave \$10,000; J. Sloat Fassett, of Elmira, \$5,000, and F. R. Welles, of Paris, \$12,000.

AN annual fund of \$15,000 for the purpose of carrying on research work in medicine at the University of Toronto has been subscribed for five years by a few citizens of Toronto, who have become interested in medical education through the efforts of Professor Alexander McPhedran, head of the department of medicine.

MR. ANDREW CARNEGIE has offered to the University of Paris the last \$20,000 necessary for equipping the new Institute of Chemistry in course of erection in the Rue Pierre Curie.

GRADUATE students in the department of botany at the University of Chicago have received the following appointments from other institutions for the present year: Joseph S. Caldwell, fellow in the department, to be professor of botany at the Alabama Polytechnic Institute; Charles A. Shull, to be assistant

professor of plant physiology at the University of Kansas; Ansel F. Hemenway, to be professor of biology at Transylvania University, Kentucky; Claude W. Allee, to be instructor in plant physiology at the University of Illinois; Norma E. Pfeiffer, to be instructor in botany at the University of North Dakota, and Rachel E. Hoffstadt, to be instructor in charge of biology at Marshall College, West Virginia.

DONALD W. DAVIS, for the past three years a student in the graduate school of arts and sciences of Harvard University, has been appointed assistant professor of zoology in Clark College, Worcester, Mass.

IN consequence of the additional grant made by the London County Council to the University of London, professorships of mathematics and of civil engineering have been established at King's College. To the former Dr. J. W. Nicholson, lecturer at Cambridge, has been appointed, and to the latter Mr. A. H. Jameson, engineer of the Thirlmere aqueduct. A professorship of mathematics has also been established at Bedford College, to which Mr. Harold Hilton, of the college, has been promoted.

DR. P. EHRENFEST, of St. Petersburg, has been appointed professor of physics at Leiden.

#### DISCUSSION AND CORRESPONDENCE

##### A SIMPLE DEMONSTRATION OF THE ACTION OF NATURAL SELECTION

IN a recent presidential address, an eminent biologist referred to "such highly speculative disciplines as natural selection, Neo-Lamarckianism, neo-vitalism, etc." The criticism of natural selection implied by such association would have been quite in place a few years ago. Since it represents a widely prevailing opinion at the present time, it may not be out of order once more<sup>1</sup> to direct attention to the fact that natural selection is no longer neces-

<sup>1</sup> The progress which has recently been made by biometricians in the investigations of the selective death rate—the mortality which is not random but which is a function of the characteristics of the individual—has been reviewed in a paper,