

is maintained by annual subscriptions of fifty dollars each. For the year 1906-7 the following colleges, associations and individuals are contributors: Association of Collegiate Alumnae, Barnard College, Bryn Mawr College, University of Chicago, Mass. Institute of Technology, Mount Holyoke College, Radcliffe College, Smith College, University of Pennsylvania, Vassar College, Wellesley College, Western Reserve University, Women's College in Brown University, Women's Advisory Committee of the Johns Hopkins Medical School, Woman's College of Baltimore, Miss Helen Collamore, Mrs. Alice Upton Pearmain, Mrs. J. M. Arms Sheldon, Mrs. Elizabeth A. Shepard, Mrs. Mary Thaw Thompson.

The year of the association begins in April, and all applications for the year 1907-8 should be sent to the secretary on or before March 1st, 1907. The appointments are made by the executive committee.

A prize of \$1,000 has been offered periodically by the association for the best thesis written by a woman, on a scientific subject, embodying new observations and new conclusions based on an independent laboratory research in biological, chemical or physical science. The fourth prize will be awarded in April, 1909.

Application blanks, information in regard to the advantages at Naples for research and collection of material and circulars giving the conditions of the award of the prize will be furnished by the secretary.

Executive Committee: Florence M. Cushing, 8 Walnut Street, Boston, Mass., chairman; Mary E. Woolley, President of Mount Holyoke College; Ellen H. Richards, Massachusetts Institute of Technology; Alice Upton Pearmain, 388 Beacon Street, Boston, Mass.; Marion Talbot, Dean of Women, Chicago University; Elizabeth L. Clarke (Mrs. S. F.), Williamstown, Mass., treasurer; Ada Wing Mead (Mrs. A. D.), 283 Wayland Ave., Providence, R. I., secretary.

**THE ROCKEFELLER INSTITUTE FOR
MEDICAL RESEARCH**

THE Rockefeller Institute for Medical Research purposes to award for the year 1907-8

a limited number of scholarships and fellowships for work to be carried on in the laboratories of the institute in New York City, under the following conditions:

The scholarships and fellowships will be granted to assist investigations in experimental pathology, bacteriology, medical zoology, physiology and pharmacology and physiological and pathological chemistry.

They are open to men and women who are properly qualified to undertake research work in any of the above-mentioned subjects and are granted for one year.

The value of these scholarships and fellowships ranges from eight hundred to twelve hundred dollars each.

It is expected that holders of the scholarships and fellowships will devote their entire time to research.

Applications accompanied by proper credentials should be in the hands of the secretary of the Rockefeller Institute not later than April 1, 1907. The announcement of the appointments is made about May 15. The term of service begins preferably on October 1, but, by special arrangement, may be begun at another time.

L. EMMETT HOLT,
Secretary

14 WEST 55TH STREET,
NEW YORK CITY

SCIENTIFIC NOTES AND NEWS

THE Rumford medal of the American Academy of Arts and Sciences 'for discoveries in light and heat,' has been awarded to Professor E. F. Nichols, of Columbia University.

THE Berlin Academy of Sciences has conferred its Helmholtz medal on M. Henri Becquerel, Paris.

DR. EDUARD ZELLER, the eminent student of the history of philosophy, has celebrated his ninety-third birthday.

DR. H. H. HILDEBRANDSSON, professor of meteorology and director of the Meteorological Institute of the University of Upsala, and Professor Knut Joh. Ångström, professor of physics, have been elected honorary members of the Royal Institution, London.

DR. T. W. RICHARDS, professor of chemistry at Harvard University, has received a fifth grant of \$2,500 from the Carnegie Institution of Washington.

MR. A. F. BURGESS, secretary of the Association of Economic Entomologists, has tendered his resignation as state inspector of orchards and nurseries for Ohio, to go to Massachusetts to experiment with insecticides for the destruction of gypsy and brown-tail moths.

PROFESSOR HENRY F. OSBORN is expected to return about April 1 from Egypt, where, with the assistance of Messrs. Walter Granger and George Olsen, he has been making paleontological explorations in the Fayoum desert on behalf of the American Museum of Natural History.

PROFESSOR HAROLD HEATH, of Stanford University, has been given leave of absence for the second half year, and will go first to Naples. He will return by way of Japan and the Malay Archipelago.

WE learn from the New York *Evening Post* that an archeological expedition, under the direction of Professor John R. S. Sterrett, will start on March 9 for Asia Minor. Professor Sterrett has previously spent several years in exploration and excavation in the east. He will be accompanied by B. B. Charles, instructor in Semitics, A. T. Olmstead, formerly fellow in the American School at Jerusalem and now at Athens, C. O. Harris, late instructor in Latin, now in the American School at Athens, and J. E. Wrench, late fellow at the University of Wisconsin.

THE Society for Horticultural Science, of which Professor L. H. Bailey, of Cornell University, is president, and the American Pomological Society, of which L. A. Goodman, Kansas City, is president, will meet on the grounds of the Jamestown Exposition on September 25 and 26.

PROFESSOR ERNEST RUTHERFORD gave a lecture at Clark University on February 15 on 'Radium and Radioactive Substances.'

PROFESSOR W. T. COUNCILMAN, of the Harvard Medical School, delivered an address on January 23, before the Harvard Club of Worcester, on 'The New Medical School in its Relation to the University.' He also gave the opening address at the Tuberculosis Exhibit at Taunton on January 31. His subject was 'Tuberculosis: the nature of the disease and the modes of relief.'

THE annual address before the Society of the Sigma Xi was given at the University of Nebraska on February 15 by Dr. Charles Sedgwick Minot, of Harvard University, on 'The Biological Interpretation of Life.'

MR. W. BATESON gave, on February 11 and 15, two lectures on 'Mendelian Heredity and its Application to Man,' in the medical schools of Cambridge University.

THE Boston *Transcript* states that the fund which a special committee has been instrumental in assembling to be used for a memorial to the late Professor Shaler, of Harvard University, has been completed, and amounts to \$30,000. The committee, of which Edward W. Atkinson is chairman, will meet to decide upon the exact form the memorial will take.

THE Paris Municipal Council has appropriated the sum of about \$800 for a monument in honor of Pierre Curie, to be erected in the School of Physics and Industrial Chemistry.

THE Botanical Seminar of the University of Nebraska is to celebrate the two hundredth anniversary of the birth of Carl von Linne on the eleventh of May next, the day before the exact anniversary. Addresses are to be made by Dr. Clements, Dr. Pound and Dr. Bessey, in connection with the commemorative exercises.

DR. J. PÖSCHL, professor of physics at the Technological Institute at Graz, has died at the age of seventy-nine years.

THE deaths are also announced of Professor le Roux, formerly professor of physics at the Paris School of Pharmacy, and of Dr. Lyon, docent for analytical chemistry at Geneva.

THERE will be a civil service examination on March 20 and 21 for the position of scien-

tific assistant in veterinary zoology in the Bureau of Animal Industry at a salary of \$840.

THE zoological and ethnical collections made recently in East Africa by Mr. Richard Tjäder have been acquired by the American Museum of Natural History.

WE learn from English journals that the pearl oyster fisheries of the Mergui Archipelago, lying off the province of Tenasserim, Lower Burmah, are to be the object of an investigation on behalf of the Indian government, and for this purpose Mr. R. N. Rudmose Brown and Mr. J. J. Simpson left early last month for Rangoon. It is extremely probable that an examination of the ground may result in the discovery of new pearl banks, or at least the possibility of such banks being started. It is expected that the investigation, at least on its economic side, will be completed before the commencement of the southwest monsoon season in May.

THE lichen collection of Dr. H. E. Hasse, of California, consisting of about 3,000 species and many duplicates, has been recently presented to the New York Botanical Garden by Mr. John I. Kane.

THE New York Aquarium, situated in Battery Park, and conducted by the New York Zoological Society, with Dr. C. H. Townsend as director, is open free, every day in the year. It is closed on Monday forenoons except to school teachers with their classes, and to members of the New York Zoological Society. When a holiday occurs on Monday the public is admitted as on other days. The attendance for the ten years ending December 31, 1906, amounted to 17,103,328—an average of 4,685 visitors a day. The attendance for the year 1906 was 2,106,569—an average of 5,771 a day.

FIVE free lectures on popular scientific subjects, illustrated with lantern views, and open to the public, are being given in the Geological Lecture Room, University Museum, Harvard University, at 3:30 o'clock on Sunday afternoons, February 3 and 17, March 3, 17 and 31, 1907. The subjects treated in the

lectures are related to exhibits in different parts of the Museum.

February 3—'Meteorites, their Fall from the Sky, their Composition and their Relation to the Rocks of the Earth's Interior,' Professor J. E. Wolff.

February 17—'The Ruins and the Ancient People of Yucatan, Mexico,' Dr. A. M. Tozzer.

March 3—'Why the Earth is believed to be Millions of Years Old,' Professor W. M. Davis.

March 17—'Tropical Plants,' illustrated by Museum Specimens and Pictures, Professor G. L. Goodale.

March 31—'Quartz, its Varieties, Origin, Characteristics and Uses,' Professor Charles Palache.

WE learn from the *American Museum Journal* that the American Bison Society held its annual meeting at the Museum on Thursday, January 10. This society has for its object not only the prevention of the extermination of the bison, but also the encouragement of the raising of the animal as a commercial proposition. A generation ago the bison, or American buffalo, roamed over the western plains in vast herds, estimated to contain more than ten million individuals, while to-day, on account of the merciless and wanton slaughter practised in the early eighties, scarcely two thousand are known to be in existence. The society proposes to encourage the establishment of bison reservations in each state where climate and other conditions are favorable for the maintenance and increase of herds. For New York the proposition is that, as a beginning, the state set aside nine square miles in one of the reserved areas of the Adirondack region and appropriate \$15,000 for the purchase and maintenance of a herd of fifteen bison. Dr. William T. Hornaday, director of the New York Zoological Park, is the president of the society.

WE learn from the *London Times* that Mr. Francis Galton, F. R. S., has given a further sum of £1,000, which has enabled London University to revise and extend the scheme for the study of national eugenics founded under his previous benefaction, and will provide for the carrying on of the work of the eugenics laboratory for the next three years. Mr.

David Heron, M.A., has been appointed Galton research fellow in national eugenics, in succession to Mr. Edgar Schuster, M.A., resigned; Miss E. M. Elderton has been appointed Galton research scholar, and Miss Amy Barrington (mathematical tripos, Cambridge) computer. The work in this subject will be carried on under the supervision of Professor Karl Pearson, F.R.S., in consultation with Mr. Francis Galton. It is the intention of the founder that the laboratory shall act (1) as a storehouse for statistical material bearing on the mental and physical conditions in man and the relation of these conditions to inheritance and environment, (2) as a center for the publication or other form of distribution of information concerning national eugenics. Provision is made in association with the biometric laboratory at University College for training in statistical method and for assisting research workers in special eugenic problems. Short courses of instruction will be provided for those engaged in social, anthropometric or medical work and desirous of applying modern methods of analysis to the reduction of their observations. The laboratory, which is in connection with University College, is temporarily established at 88, Gower-street, W.C.

WE learn from the London *Times* that the highways committee of the London County Council has presented a report to the council with reference to the Greenwich Electricity Generating Station and the Royal Observatory. Last year the admiralty appointed a special committee to inquire into the working of the station. The special committee, which consisted of Lord Rosse, representing the Royal Observatory, Professor J. A. Ewing, representing the admiralty, and Sir Benjamin Baker, representing the council, have now issued their report, and the conclusions arrived at are contained in the following recommendations, in which are suggested certain modifications in the arrangements at the generating station, and as to the manner and times at which the first portion of this station shall be worked, so as to avoid any possible interference with the work of the observatory:

(a) The question, both as regards effects of vibration and obstruction through chimneys or discharge from chimneys, to be further reviewed after, say, two years, by which time experience should be obtained with the second portion of the station at work. (b) The generating plant for the second portion to be turbines, which, as well as the dynamos, must be of a perfectly balanced type, such as has been proved by trial not to cause vibration. (c) An undertaking to be obtained that when the plant in the second portion is available for use, the reciprocating engines of the first portion shall not in ordinary circumstances be used after 10 P.M., and their use shall be restricted as far as possible after 8:30 P.M. (d) The two chimneys of the second portion; at present incomplete, to be not higher than 204 feet above Ordnance datum. (e) The discharge of gases both from these and from the existing chimneys not to be materially hotter than the discharge is now from the existing chimneys—namely, about 250 degrees F. (f) No further extension of the station to be made beyond the 20,000 kilowatts now contemplated in the equipment of the second portion.

UNIVERSITY AND EDUCATIONAL NEWS

By the will of the late John A. Creighton, the sum of \$900,000 is bequeathed to educational and charitable institutions, including \$500,000 to Creighton University. The residue of the estate which is said to amount to more than \$5,000,000 is to be distributed *pro rata* to the same institutions, whence it appears that Creighton University will receive in all the sum of about \$2,500,000.

TEACHERS COLLEGE, Columbia University, has received from a source not stated, a gift of \$400,000 for a building for its school of domestic economy.

THE Johns Hopkins University has received \$150,000 from the estate of the late Charles L. Marburg, \$100,000, of which goes to the hospital and \$50,000 to the university.

AN unnamed donor has presented a new gymnasium to Syracuse University.

TEN research fellowships of the annual value of \$500 each have been established in