Edison State Park Commission of New Jersey, the Association of Edison Illuminating Companies and the Edison family.

Detailed plans will not be announced until after the incorporation has been completed, but it is intended to designate the week of October 14 as Edison Memorial Week and to have a campaign at that time to raise an endowment fund for the foundation.

Mr. Barstow was reelected president of the Edison Pioneers. Other officers named were: Vice-presidents, Charles Edison, Frederick D. Potter, Arthur Walsh and Ludwig F. Ott; historian, William H. Meadow-croft; treasurer, Frederick A. Scheffler, and secretary, Frank A. Wardlaw.

FELLOWSHIPS OF THE AMERICAN ASSO-CIATION OF UNIVERSITY WOMEN

The American Association of University Women has announced the award of ten research fellowships to women for the coming year. Five of the fellowships will be used for scientific research. The awards were made by a committee of which Dr. Emilie J. Hutchinson, associate professor of economics at Barnard College, is chairman.

Dr. Jenny E. Rosenthal, research physicist at Columbia University, who received the Sarah Berliner research fellowship, has been working for a year in the laboratory of Professor H. C. Urey, winner of the 1934 Nobel Prize in chemistry for his work with heavy water, and will continue her work there.

The Latin-American fellowship was given to Dr. Perlina Winocur, physician on the staff of the University of Buenos Aires Medical School. The award is offered annually by the association to give a qualified woman of Latin America a year of study in the United States. Dr. Winocur has devoted several years to a study of infant mortality in Argentina. She will continue her studies on hemolytic anemia next year at the Harriet Lane Home for Children, the Johns Hopkins Hospital, where she has been working during the past winter.

The Mary Pemberton Nourse memorial fellowship was given to Lucy S. Morgan, health education specialist in the Tennessee State Health Department, who will study the science of public health at Yale University, after which she plans to resume her work in Tennessee.

Mary S. Pease, a student in archeology and recipient of the Alice Freeman Palmer memorial fellowship, plans to write a monograph on Corinthian imitations of Attic pottery. Dr. Pease has spent three years with the American School of Classical Studies at Athens, working on excavations in Athens and Corinth.

The award to a university woman of some foreign country was given to Dr. Gertrud Kornfeld, a German refugee and former lecturer of University College, Nottingham, England, who has won recognition for her research in photochemistry. She will hold her fellowship at the University of Vienna.

SCIENTIFIC NOTES AND NEWS

Dr. Isaiah Bowman, director of the American Geographical Society and chairman of the National Research Council, has been elected the fifth president of the Johns Hopkins University. The announcement was made by Daniel Willard, president of the board of trustees, at the fifty-ninth commemoration day exercises of the university on February 22. Dr. Bowman will succeed Dr. Joseph S. Ames, who will retire on June 30 after having been connected with the university for fifty-two years.

Dr. William H. Wright, astronomer at the Lick Observatory, was appointed director of the observatory on February 24 by the board of regents of the University of California. Dr. Wright, who has been a member of the staff of the university for thirty-eight years, will begin his duties as director on July 1. He succeeds Dr. Robert Grant Aitken, a member of the observatory staff for forty years and director since 1930, who is retiring from active duty.

Dr. George R. Wieland, research associate in paleobotany at Yale University, has received notification from Dr. Birbal Sahni, of Lucknow University,

of his election as an honorary member of the Indian Botanical Society.

Dr. Harry Plotz, formerly research chief of the Pasteur Institute and member of the Pierre Curie Institute of Paris, has been promoted from chevalier to officer of the Legion of Honor. Dr. Plotz, discoverer of the typhus fever germ and leader of the group which fought the typhus fever epidemic in Serbia during the world war, was the first American to be appointed a member of the permanent staff of the Pasteur Institute.

At the quarterly meeting of the council of the British College of Obstetricians and Gynaecologists it was decided to confer the honorary fellowship upon Nagiub Mahfouz Bey, of Cairo.

The Cameron Prize of the University of Edinburgh for 1935 has been awarded to Professor Julius Wagner-Jauregg, emeritus professor of psychiatry and neuropathology in the University of Vienna, in recognition of his discoveries regarding the malarial treatment of general paralysis.

MAJOR WILLIAM E. KEPNER, Captain A. W. Stevens, Captain O. A. Anderson and Mrs. Jeanette Piccard received certificates of award on February 19 from the National Aeronautic Association for their stratosphere flights.

Dr. Harold H. Plough, Rufus Tyler Lincoln professor of biology at Amherst College, has been granted a sabbatic leave for the current semester. Dr. Plough will spend a part of his time at the Bass Biological Laboratory in Englewood, Fla., in the study of marine fauna, followed by four months in the laboratory of the California Institute of Technology at Pasadena, where he will devote himself to genetics, particularly experiments with the heredity of the fruit-fly. Before returning to Amherst in the autumn, he expects to continue his research at the Marine Biological Laboratory in Woods Hole.

Paul G. Redington, formerly chief of the bureau of biological survey of the U. S. Department of Agriculture, has been appointed forest supervisor of the Shoshone National Forest, Wyoming.

Dr. Roderick Macdonald, assistant professor of zoology at Harvard University, was appointed director of the Philadelphia Zoological Gardens on February 13.

Dr. R. Binford has retired from the presidency of Guilford College, North Carolina, and has resumed the professorship of biology.

Dr. Matthew A. Hunter, professor of electrochemistry at Rensselaer Polytechnic Institute, has been appointed head of the newly created department of metallurgical engineering.

Dr. P. R. White, for the past two years fellow of the Rockefeller Institute for Medical Research, has been appointed a member of the staff in the department of animal pathology of the Rockefeller Institute at Princeton, N. J.

Dr. EUGENE E. GILL, associate professor of chemistry at the Armour Institute of Technology, has retired.

Dr. W. W. Coblentz, chief of the division of radiology of the U. S. Bureau of Standards, is spending part of the winter at the School of Tropical Medicine in Puerto Rico, measuring the ultra-violet intensity of the sun and standardizing the equipment to be used in the study of tropical physiology. Dr. Coblentz gave a lecture before the staff of the school on "The Problem of Evaluating Ultra-violet for Use in Medicine."

Dr. WILLIAM W. STIFLER, professor of physics at Amherst College, has been granted leave of absence for the second semester of 1934–35. He has planned visits to physics laboratories in France, Italy, Switzer-

land, and possibly Germany, with a three-months stay in England, where he will read and attend lectures at the University of Cambridge.

MELBOURNE A. CARRIKER, Jr., in charge of Central and South American ornithology at the Academy of Natural Sciences in Philadelphia, returned on February 20 from a seven months' expedition into the jungles of Bolivia, where he collected 2,200 bird skins. The collection includes more than 600 species, of which 150 have never before been recorded.

Dr. C. A. Edwards, metallurgist and principal of University College at Swansea, South Wales, recently arrived in the United States. He will lecture at the Carnegie Institute of Technology, Yale University, the Franklin Institute and the U. S. Bureau of Standards.

DR. GARY N. CALKINS, professor of protozoology at Columbia University, is conducting a protozoological survey of the mammals of Puerto Rico during his visit at the School of Tropical Medicine. He lectured recently on "Protoplasmic Longevity with Special Reference to Protozoa" before the staff of the school.

A SERIES of four weekly lectures on the racial origins and composition of the principal nations of the world was delivered during February by Dr. Aleš Hrdlička at the U. S. Navy Medical School, Washington, D. C.

DR. WILLIAM P. MURPHY, of the Harvard Medical School and co-winner of the Nobel prize in physiology and medicine, spoke on February 8 before the Greater New York Dietetic Association on his work with pernicious anemia.

REV. James B. Macelwane, professor and director of the department of geophysics at St. Louis University, delivered his third Lowell Institute lecture in Boston on February 8. His subject was "Some Old Seismological Problems and Recent Solutions."

Dr. Harlan T. Stetson, research associate of the institute of geographical exploration at Harvard University, will give the Sigma Xi address at the University of Virginia on March 11 and at Duke University on March 12. His subject for both lectures will be "The Sun's Effects on Human Affairs."

The ninth annual Priestley lectures will be given at the chemistry amphitheater at the Pennsylvania State College each evening from April 29 to May 3, inclusive. These lectures constitute a memorial to Joseph Priestley, whose old home at Northumberland, Pa., is now owned and maintained by the alumni of the college. A museum, containing all the Priestley relics which could be gathered together, now stands near the house. This annual series of lectures was inaugurated by the faculty in 1926. In 1931, Phi

Lambda Upsilon, honorary chemical society, undertook the financial support of the Priestley lectures. Each year the lectures deal with the borderline between physical chemistry and chemical physics and some other branch of knowledge. This year's Priestley lectures deal with the borderline between physical chemistry and electrometallurgy. They will be given by Matthew A. Hunter, D.Sc., professor of electrochemistry and head of the department of physics and electrical engineering at the Rensselaer Polytechnic Institute. The subjects of his five lectures are as follows: April 29, "Reactions in the Liquid State"; April 30, "Reactions in the Solid State"; May 1, "Physical Properties of Alloy Systems"; May 2, "Physical Properties"; May 3, "Special Applications."

The fifth lecture of the Harvey Society was given by Dr. E. C. Dodds, director of the Courthauld biochemical laboratory of the Middlesex Hospital, London, on "Specificity in Relation to Hormone and Other Biological Reactions" at the New York Academy of Medicine on February 21. The sixth lecture on March 21 will be given by Professor G. V. Anrep, professor of physiology, Egyptian University, on "The Relation of the Circulation in Voluntary and Plain Muscle to Activity."

The annual meeting of the Kentucky Academy of Science will be held on May 3 and 4 at the University of Kentucky. Titles for papers to be read at the meeting should be sent to the secretary, A. R. Middleton, Experiment Station, Lexington, Ky., not later than April 10.

ATTENTION of investigators is called to the fact that, owing to the decreased resources at the disposal of the committee on grants-in-aid of the National Research Council (see Science for January 18, 1935), the committee will hold but one meeting this year, about the middle of May. Applications to be considered at this meeting must be in the hands of the secretary of the committee, Dr. C. J. West, 2101 Constitution Avenue, Washington, D. C., on or before April 1. Applications received after the first of April can not be considered until the spring of 1936.

THE liquid air and chemical demonstrations which were exhibited in the Hall of Science, at the Century of Progress Exposition, will be demonstrated by Dr. Alden G. Greene, at a meeting of the American Institute on March 4 at the American Museum of Natural History, New York.

It was announced on February 14 that a congress of physicians will be held on the steamship *Columbia* of the Panama Pacific Line from July 18 to August 28 under the auspices of the Pan American Medical Association. The itinerary calls for a 12,000 mile cruise, during which scientific meetings in all branches

of medicine will be held. Stops will be made at Havana, Curaçoa, Rio de Janeiro, Santos, Trinidad, Santo Domingo and Kingston. A five-day scientific congress will be held at Rio de Janeiro and a three-day session at Sao Paulo. The officers of the organization are as follows: Dr. Chevalier Jackson, president of the association; Dr. Joseph Jordon Eller, director general; Dr. Charles H. Mayo, president of the section on general surgery; Dr. Harlow Brooks, general medicine; Dr. Charles Dennie, dermatology and syphilology; Dr. P. J. Flagg, gas therapy.

The Belgian government has by royal decree officially recognized the International Office for the Protection of Nature, and has appointed the following delegates as its representatives to the general council: for Belgium, Baron E. de Cartier de Marchienne, Belgian ambassador in London, and Count Henry Carton de Wiart, formerly prime minister; for the Belgian Congo and the mandated territory of Ruanda-Urundi, P. Charles, minister of colonies, and Dr. V. Van Straelen, director of the Royal Belgian Museum of Natural History and president of the institute for national parks in the Belgian Congo.

A United Press dispatch reports that on December 18 the National Geographic Society announced plans for another stratosphere balloon flight from the Dakota Black Hills for next June. Captain Albert W. Stevens, scientific observer and aerial photographer, will be in command of the balloon, piloted by Captain Orvil A. Anderson. Both officers participated in the ill-fated ascent of the Explorer last July when it attained a height of 113 miles only to tear. All three occupants parachuted to a safe landing. Major William E. Kepner, who commanded this year's flight, will be unable to take part because of Army air corps duties. His place probably will be taken by Lieutenant Randolph P. Williams, Langley Field, Va. The National Geographic Society will assume the major portion of the expense while the Army Air Corps, with the approval of the War Department, will supply the officers. Dr. Gilbert Grosvenor, president of the society, is reported to have said that the objects of the flight would be fourfold: To check and test stratosphere data already obtained; to make additional photographic studies; to bring back samples of stratosphere air, and to make certain other new scientific studies.

ACCORDING to a summary given in the *Journal* of the American Medical Association, there were 2,064,944 births in continental United States in 1933, giving a rate of 16.4 per thousand of population, the lowest on record since the federal birth registration area was established in 1915, when it included only ten states and the District of Columbia, according to provisional statistics issued by the Bureau of the Census. This

figure compares with a rate of 17.4 for 1932 for the birth registration area, which at that time did not include Texas. In 1933 the infant mortality rate was 58.2 per thousand live births as compared with 57.6 in 1932. New York with 187,139 births led the states with the greatest number of births; Pennsylvania was second with 157.046; Texas is third with 107.924, and Illinois, 106,861. The states with the highest birth rates per thousand of population, however, are New Mexico, 26.7; North Carolina and Utah, each 22.9; South Carolina, 22.7; Mississippi, 21.6; Alabama, 21.1, and Virginia, 21. All except Utah are southern states and all largely rural. The lowest birth rates are for Oregon, 12.2, and California, 12.4. Infant mortality rates, which are based on the number of deaths of infants under 1 year of age per thousand live births, are excessively high in New Mexico (134.2), and Arizona (111.4), both states with large nomadic Indian and Mexican populations which have little knowledge of infant care. The next highest rate is 78.4 for South Carolina, which has a large Negro population. The lowest rates reported are those for Washington and Oregon, 38.9 and 39.3, respectively. A rate of 3.7 per hundred live births was noted for stillbirths.

Nature states that a new high-voltage laboratory at East London College enables that institution to offer greatly improved facilities for study and research in this branch of electrical engineering. Towards the cost of its erection and equipment the court of the university made a grant of £12,000 and the Drapers' Company gave £5,000 and lent another £5,000 to enable the college to proceed at once with this and other enterprises. The calendar for the present session announces that the equipment will include a 500,000-volt testing transformer, a surge generator with a maximum capacity of a million volts, a direct-current generator of 200,000 volts capacity, a cathode ray oscillograph recording surge voltages up to a million volts, Schering bridge for measurement of dielectric losses, and transformers of 30,000-250,000 volts capacity for experiments. A course in high-voltage technology for degree students is being introduced under the direction of Professor J. T. MacGregor-Morris.

At a recent meeting of the administrative council of the Empire Cotton Growing Corporation it was reported that news was received in July of a serious misfortune at the cotton breeding station at Gatooma, where a considerable quantity of pedigree cotton seed was destroyed in a fire. As a result, it was believed that only about half the quantity that would have been distributed to growers next season was now available. The report noted that a new hybrid cotton, grown in Fiji, which, it had been hoped, might be comparable with Sakel, when tested this year was

found still to lack strength, and it was doubtful therefore if it would find a market at a remunerative price. The executive committee announced a decision to increase the grant made by the corporation to the funds of the Shirley Institute from £1,000 to £3,000 a year for a period of five years. The director, in a comment on the report, said that in Swaziland cotton was now being encouraged by the administration as a native crop. Apart from the cash value of the crop, the inclusion of cotton in a rotation would do much to improve the native system of agriculture, which hitherto had been one of almost continual cereal cropping. The corporation's staff were supervising the work of the native demonstrators who were assisting in the introduction of the crop.

THE London Times reports that an ethnological expedition, headed by M. Marcel Griaule, which proposes to study the religion, customs and life of the inhabitants of the district in the northern loop of the Niger, left Paris, France, on January 17. The expedition, which has been largely financed by Princess George of Greece, will travel in light motor-lorries, and will go by way of Algiers, Colomb-Bechar, Tamanrasset, and Gao to Timbuctoo. The other members of the party are M. Schaeffner, music, M. Larget, topography, M. Lutten, photography and native crafts, the Comtesse de Breteuil, Mme. Hélène Gordon, and Mlle. Paulme and Mlle. Lifszyc. The French Air Force at Gao has been instructed to put an aeroplane at the disposal of the expedition for its topographical work.

New fields of cotton research are to be explored in England as a result of a £30,000 increase in the annual grant for this purpose from the cotton trade, we learn from the Christian Science Monitor. This development was announced at the annual meeting of the British Cotton Industry Research Association in Manchester, when H. R. Butterworth, who presided, said that it had been decided that there must be no cutting down of the service essential to the industry to-day, and no neglect of fundamental research and advised that an expenditure of £82,000 per annum on cotton research will be necessary. The advisory council of the Department of Scientific and Industrial Research, Mr. Butterworth continued, had undertaken to make further grants for five years, dependent on the support given by the trade. Conditional on the annual income of the association from the trade and other approved sources reaching £37,500 per annum for cotton research, the Government would make an annual block grant of £15,000, with further £500 for every £500 in additional trade subscriptions up to a maximum additional grant of £20,000 for each year. This meant a minimum grant of £15,000 and a maximum grant of £35,000 against a maximum grant last year of £10,000.