

Resolved, That, on the occasion of the removal of its offices from the Smithsonian Institution to its new building, the National Academy of Sciences gratefully expresses its obligations to the Secretary and the Board of Regents of the Smithsonian Institution for the courtesies extended for over half a century through the housing and care of the academy records and library, through its cooperation in the conduct of academy business, and through its effective aid in promoting the objects of the academy; and

Resolved, That, the academy expressly acknowledges its high esteem and thanks to the secretary of the Smithsonian Institution, Charles Doolittle Walcott, for his personal interest in the welfare of the academy, his unfailing interest in and attention to the work of the academy in the advancement of science, and his distinguished services as treasurer, vice-president, acting president, president and member of the council and committees, both official and unofficial, in its behalf.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM F. DURAND, professor of mechanical engineering at Stanford University, has been nominated for president of the American Society of Mechanical Engineers.

FARLEY OSGOOD has been elected president of the American Institute of Electrical Engineers.

DR. L. R. JONES, professor of plant pathology of the University of Wisconsin, has been chosen an honorary member of the British Association of Economic Biologists.

PROFESSOR ROBERT A. MILLIKAN, director of the Norman Bridge Laboratory of the California Institute of Technology, arrived on May 25 at Stockholm, where he went to deliver the lecture in connection with the award of the Nobel prize in physics.

THE University of Arizona conferred the degree of doctor of science on Dr. J. McKeen Cattell after he made the commencement address at Tucson on May 28.

PROFESSOR HANS OSCAR JUEL (Upsala), Dr. Hans Spemann (Freiburg) and Dr. Johannes Schmidt (Copenhagen) have been elected foreign members of the Linnean Society of London.

DR. LUDWIG BIEBERBACH, professor of mathematics at the University of Berlin, has been elected a member of the Prussian Academy of Sciences.

THE council of the British Institution of Civil Engineers has made the following awards in respect of papers read and discussed at the ordinary meetings during the session 1923-24: A Telford Gold Medal to Professor C. E. Inglis (Cambridge), Watt Gold Medals to Mr. H. N. Allott (Manchester) and Mr. S. L. Pearce (Manchester), Telford premiums to Mr. A. J. Martin (London), Dr. H. E. Hurst (Cairo) and Mr. D.

A. F. Watt (Cairo), Dr. H. Remfrey (Calcutta) and William Burnside (Glasgow); a Crampton Prize to Mr. T. R. Nolan, B.E. (Chittagong), and a Manby Premium to Mr. H. T. Tudsbury (London) and Mr. A. R. Gibbs (London).

PROFESSOR E. MELLANBY, professor of pharmacology in the University of Sheffield, has been awarded the Stewart Prize of the British Medical Association for his discoveries on the relation between rickets and dietetic deficiency.

THE Austrian Anti-Cancer Society has awarded its 1923 prize to Dr. Lipschütz for research into the origin of experimental tar cancer of the mouse, and to Dr. Nather, of the surgical clinic in Vienna, for research into the pathology and therapy of carcinomatous diseases.

A COMMITTEE is collecting funds to publish the monographs of Professor E. Pinerúa, who retires from the chair of chemistry at the University of Madrid this month, having reached the age limit.

DR. C. D. PERRINE, director of the Argentine National Observatory at Cordoba, has been appointed delegate of the Argentine Government to the third Pan-American Scientific Congress which convenes in Lima on November 16.

DR. NILS H. HEITMAN, chief tuberculosis officer of the Norwegian government, and Dr. Germund Wirgin, professor of hygiene, University of Upsala, Sweden, recently arrived in the United States, at the invitation of the Rockefeller Foundation, to study public health work in various cities.

PROFESSOR REGAUD, of the Radium Institute of the University of Paris and of the Curie Foundation, will be the guest of honor with Drs. Howard A. Kelly, Baltimore, and James Ewing, New York, at the banquet of the American Radium Association on June 9.

DR. GILBERT WALKER is retiring from the director-generalship of Observatories of the Indian Meteorological Department, which he has held for twenty years. He will be succeeded by Mr. J. H. Field.

PROFESSOR DIETRICH, of the University of Berlin, has been appointed director of the medical department of the Prussian Ministry of Public Welfare.

THE Committee on Scientific Research of the American Medical Association has awarded a grant of \$200 to Dr. Reynold A. Spaeth, associate professor of physiology at the School of Hygiene and Public Health of the Johns Hopkins University, to further his investigation of the relation between physical condition and natural resistance to infection.

THE Boston Society of Natural History has this year awarded its annual Walker prizes in natural history as follows: a first prize of \$100 to Miss Maxy Alice Pope, of the department of botany of the University of Colorado, for her essay on "Pollen morphology as an index of relationship"; and a second prize of \$50 to Dr. J. P. Kelly, of the department of botany of the Pennsylvania State College, for his essay entitled, "Variable dominance in phlox."

FRANK D. KERN, dean of the graduate school and professor of botany in the Pennsylvania State College, has been granted leave of absence to accept an invitation from the Porto Rican government to study and collect fungi in their domain during the coming summer.

VILHJALMUR STEFANSSON arrived in Sydney, New South Wales, on May 27. He was welcomed by delegates of the Royal Society. Mr. Stefansson plans to explore uncultivated regions of Australia to ascertain the possibility of their development.

ROY CHAPMAN ANDREWS, of the American Museum of Natural History, sailed for Peking on May 25, to spend the year in organizing an expedition to the interior of Mongolia and Central Asia to search for prehistoric remains.

NEIL M. JUDD, head of the expedition of the National Geographic Society to Pueblo Bonito, New Mexico, left Washington on June 4 to begin the fourth year of exploration. More than 300 of the 800 rooms of the ruins have been cleared and many kivas, or circular ceremonial chambers, have been brought to light.

DR. FRANK R. LILLIE, of the University of Chicago, gave two lectures on the biology of sex, at the Kansas State Agricultural College, on May 16 and 17, and at a luncheon attended by the workers in biology he described the fellowships in biology of the National Research Council as they are administered by the committee of which he is chairman.

DR. CHARLES H. MAYO, of Rochester, Minn., gave the address at the opening of the first Municipal Cancer Clinic by the Department of Public Welfare, of New York City, on May 26.

At the meeting of the National Tuberculosis Association held at Atlanta, Georgia, Dr. William Snow Miller, of the University of Wisconsin, opened the symposium on "Endothelium." For the past three years Dr. Miller has been engaged in special research for the association, the results of which were reported at the meeting.

THE Linacre Lecture was delivered by Sir Charles Sherrington, P. R. S., professor of physiology at the University of Oxford, on May 6. The title of the lecture was "Problems of muscular receptivity."

PROFESSOR D. M. S. WATSON delivered the Croonian Lecture of the Royal Society on May 29, taking as his subject "The structure, evolution and origin of the Amphibia."

A COURSE of four free public lectures on the "Astronomers of four centuries"—Tycho Brahe, Edmund Halley, William Herschel and Edward Emerson Barnard—was recently delivered by Mr. A. R. Hinks, at Gresham College, London.

PROFESSOR V. BJERKUES, of Bergen, opened a discussion before the Royal Meteorological Society in London on "The formation of cyclones" on May 12.

DURING the course of lectures by Professor Ehrenfest at the California Institute of Technology, the meetings of the Astronomy and Physics Club of Pasadena were suspended except on February 15, when Dr. Harry F. Reid, professor of geophysics at the Johns Hopkins University, spoke on "The planetesimal hypothesis." The regular sessions were resumed on April 18 when Dr. Henry N. Russell gave a lecture on "The structure of complicated spectra," followed by Dr. R. C. Johnan, on April 25, on "Weak quantization"; by Dr. P. W. Merrill, on May 2, on "The position of red stars in the stellar sequence"; by Dr. N. W. Cummings, on May 9, on "The effect of radiation, wind and humidity on evaporation from water surfaces"; by Dr. H. L. Vanderlinden, on May 16, "Einstein's and DeSitter's cosmological worlds," and by Dr. John A. Anderson, on May 23, on "The torsional seismograph."

THE Alexander Dyer MacGillivray collection of Tenthredinoidea has been purchased by the University of Illinois. The collection includes more than 400 types and about 1,000 species.

A MEMORIAL seat to Gilbert White, erected by the Gilbert White Fellowship, was unveiled at Selborne, Hampshire, by Lady Prain, on May 10. The event was made the occasion of a pilgrimage to Selborne.

IN memory of Emil Zuckerkandl, the anatomist, who for years was a leading member of the Vienna medical faculty, a statue was recently unveiled in the hall of the university. It represents him in the act of explaining to his audience the function of a human joint.

DR. WILLIAM JAMES BEAL, for forty years professor of botany in the Michigan Agricultural College, died on May 12, aged ninety-one years.

PROFESSOR S. G. SHATTOCK, F.R.S., professor of morbid anatomy in the University of London, and pathological curator of the Royal College of Surgeons, died on May 11, aged seventy-one years.

THE twelfth annual meeting of the Eugenics Re-

search Association will be held at Cold Spring Harbor, Long Island, on June 14. The Honorable Albert Johnson, chairman of the Committee on Immigration and Naturalization of the House of Representatives, will deliver the presidential address on "The national immigration policy."

THE Pi Mu Epsilon mathematical fraternity celebrated the decennial anniversary of its founding by installing a chapter at the University of Illinois on May 24, 1924. Professor E. D. Roe, of Syracuse University, was present. This fraternity has now seven chapters.

THE Paris Society of Biology and affiliated societies throughout France opened in Paris on June 5.

THE International Tropical Health Conference will be held in Kingston, Jamaica, during the month of July, under the auspices of the United Fruit Company. The company has invited a large number of American and foreign guests, most of whom rank as leading authorities on tropical diseases, sanitation and related matters, more than fifty of whom have already accepted. The itinerary provides for a brief stop at Havana, a stay of about ten days in Jamaica, a short visit to Guatemala, including the Cuirrigua Ruins and the city of Guatemala, a short stop at different points in Honduras and a fairly prolonged stay on the Isthmus of Panama.

IN connection with the announcement of the proposal to make the Botanic Garden of Harvard University a testing ground for all the hardy herbs suitable for culture in that region with such greenhouse materials as the range can accommodate, invitations to a private view of the garden have been sent out to those interested in horticulture, for the afternoon of June 11, from 3:30 to 7 P. M. The working force of the Botanic Garden will be on hand to exhibit and explain the collections of growing plants. The director, Mr. Stephen F. Hamblin, with Dr. Benjamin L. Robinson, Asa Gray professor of systematic botany, and Professor Merritt L. Fernald, will also be in attendance to assist in showing the development of the garden and the plan for its future. The Harvard Botanic Garden, covering seven acres, was founded in 1807 and is one of the oldest scientific departments of the university.

PRELIMINARY figures issued by the Bureau of the Census show that the birth rates for 1923 were lower than for 1922 in 21 of the 27 states for which figures for the two years are shown in the following summary. The highest 1923 birth rate (34.8 per 1,000 population) is shown for cities of Wyoming and the lowest (15.6) is for rural districts of Montana. Death rates for 1923 were slightly higher than for 1922 in 25 of the 36 states shown for both years.

Three states, Connecticut, New York and North Carolina, have the same rates for 1923 as for 1922, and eight states, Colorado, Idaho, Montana, Nebraska, Oregon, South Carolina, Utah and Washington, have lower rates in 1923. The highest 1923 death rate (20.3 per 1,000 population) is shown for cities of Mississippi and the lowest (6.5) for the rural districts of Idaho. Infant mortality rates for 1923 are generally higher than those for 1922, as 17 of the 27 states show higher rates in 1923. The highest 1923 infant mortality rate (117) appears for cities of South Carolina and the lowest (51) for the rural districts of Utah and the cities of Washington. Infant mortality rates are shown for both years for 45 cities of 100,000 population or more in 1920. For 25 of these cities the 1923 infant mortality rates are lower than those of the previous year. The highest 1923 rate (110) is for Richmond and the lowest (48) for Spokane.

WE learn from the *British Medical Journal* that the Royal College of Physicians of London has determined to take a step which changes in the practice of the secondary schools must sooner or later have rendered inevitable. The by-laws prescribe that a candidate for the membership shall satisfy the Censors' Board of sufficiency of his or her general education and acquirements in general science and literature. This has hitherto been interpreted to include a working knowledge of Latin, and it has been optional for candidates to submit themselves for examination in Greek, French or German. At a recent meeting of the college it was resolved that in future candidates should be informed that the languages are not compulsory, but that credit will be given to those who show knowledge in these subjects.

THE Wellcome Foundation, Ltd., has recently been registered as a private limited company, with a capital of £1,000,000, to acquire from Mr. Henry S. Wellcome the business of Burroughs, Wellcome and Co., and the various scientific institutions founded and owned by Mr. Wellcome, who will be the governing director during his life. The foundation has been established entirely for private and family reasons, and the business will be conducted on the same lines as heretofore.

WE learn from *Nature* that the British Science Guild has recently inaugurated a science news service, to which a number of lay journals have subscribed. It is intended that the service shall provide a weekly signed article dealing with some subject of special interest and a weekly column of science notes. It will also furnish reports of scientific progress. The guild is asking for correspondents in the various laboratories throughout the country, in order that it may be possible to keep the

public informed of the work that is being done by British men of science.

THE session of the General Council of Red Cross Societies met in Paris during the first week of May. Among the questions dealt with was that of the development of the international course in public health nursing at the Bedford College for Women, London, which had attracted nurses from Red Cross Societies in thirty-four countries. Mlle. Masarykova, on behalf of the Czecho-slovak Red Cross Society, promised a grant of 50,000 francs towards the establishment of a home for nurses who attend this course. Mr. J. B. Payne, for the American Red Cross Society, promised a grant of 500,000 francs for the same purpose and the British delegate stated that his society would also contribute.

THE Experiment Station *Record* states that experiments in sheep breeding conducted for a third of a century by Dr. Alexander Graham Bell on his Nova Scotia estate are to be continued by the station under an arrangement just completed with Dr. Bell's heirs. The agreement will make it possible to combine Dr. Bell's extensive work on Cape Breton Island, continuing from 1890 almost to the time of his death, with the extensive studies in progress for the last fifteen years by the New Hampshire Agricultural Experiment Station. Dr. Bell was particularly interested in developing a more prolific breed of sheep and in increasing the milk yield of the ewes so that they could suckle more lambs. It is estimated that he had expended nearly \$250,000 on this work, and he had attained considerable success in developing a flock with a very high percentage of twin bearers and with from four to six functional nipples instead of two. The station has been investigating sheep breeding as an Adams Aet project, crossing different breeds with a view to determining the closeness with which the characters of hybrids are fixed, in the endeavor to produce a sheep that would combine some of the best features of the wool and mutton types and would be particularly profitable under New England conditions. Under the terms of the agreement the Bell estate will present to the station this fall five ewes and one ram, all of the four to six nipple strain, and all from either a twin or triplet progeny. The animals will be crossed with some of the station sheep, the records of which show a ewe that has produced consecutively five sets of twins and one of triplets, while fifteen additional ewes have produced from two to four twins and no singles. Since the profits in sheep raising come from the lamb crop even more than from the wool, the possibilities in this field are apparent. What has not been generally realized, however, is that the milk yield of the ewes must be developed in order that twin or triplet lambs should not have a stunted growth. This was a firm belief of Dr. Bell and has been emphatically shown by the station experiments.

AN experiment which began in Norfolk recently will, according to the London *Times*, be watched with interest by ornithologists. For 20 years Miss E. L. Turner, F.L.S., has spent each summer on an island in the middle of Hickling Broad, which was previously occupied by E. T. Booth, also widely known as an ornithologist. Mr. Booth, however, relied on his gun for securing specimens; Miss Turner has secured much more wonderful records with a camera. She has photographed the home life of the bittern, the reeve, the bearded titmouse, the great crested grebe and of almost all the Broadland residents, and has visited the Dutch meres and marshes, the Farn Islands and many other famous British breeding stations for birds. In the first week of April Miss Turner began a period of service as bird-watcher on Scolt Head Island for the Norfolk Wild Birds Protection Committee. She is residing in a bungalow, which has been presented by Mr. A. W. Cushion, of Norwich, and erected on a plateau halfway up the highest group of sand dunes. Probably for a considerable part of the season she and a companion will be the only residents on the island. Food, letters and newspapers will be taken daily to the island by boat from Brancaster Staithe, and Miss Turner will be able to devote her time to the observation, recording, photographing and protection of the birds that nest on the island. The protection given last year had very encouraging results, and it is hoped that the number of breeding birds and species will be augmented this year. It is hoped that Miss Turner will be able to observe the autumn migration on the island, as its connection with this great movement is quite unknown.

UNIVERSITY AND EDUCATIONAL NOTES

THE General Education Board has given \$180,000 to the new Medical School and Hospital of the University of Colorado, now under construction in Denver, and Mrs. Verner Z. Reed, of Denver, has contributed \$120,000. The gift from the General Education Board is in addition to its gift of \$700,000 made to the construction fund several years ago.

MRS. ELLEN COBB THORNE has given \$250,000 to Northwestern University for a memorial to her husband, the late George R. Thorne.

NEGOTIATIONS are in progress to effect a merger of Western Reserve University with other institutions of Cleveland, Ohio, to form a University of Cleveland. These include the Case School of Applied Science, the Cleveland School of Education, the Cleveland Museum of Natural History, the Cleveland School of Art, the Cleveland Museum of Art, the Western Reserve Historical Society Museum, the Lakeside Hospital, the Maternity Hospital and the Babies' Hos-