mine work and other coal-mining investigations, except the coal waste inquiry for the United States Coal Commission, which work will be handled directly by Mr. Paul.

M. van Sielen, assistant to the chief mining engineer, will continue in that position and act as executive officer for the mining division, consulting on technical matters with the acting chief mining engineer. He will also act in the capacity of district mining supervisor in leasing matters, except petroleum on Indian lands, and will maintain contact with the commissioner on Indian affairs on all Indian mineral leasing matters, consulting with H. I. Smith on coal-leasing technical matters.

H. I. Smith will continue as mining supervisor and will report through the assistant to the chief mining engineer on administrative matters, consulting with the acting chief mining engineer on technical matters.

S. P. Howell, after July 1, will be detailed to the field investigation of liquid oxygen explosives under the new appropriation. J. E. Crawshaw will continue to serve as acting head of the explosives section and report through the superintendent of the Pittsburgh Station to the office of the chief mining engineer.

FOREIGN MEMBERS OF THE WASHINGTON ACADEMY OF SCIENCES

The board of managers of the Washington Academy of Sciences has elected the following scientific men to honorary foreign membership in recognition of their prominence in their respective fields and their intimate connection with scientific work in Washington:

Professor Leon Manouvrier, Ecole d'Anthropologie, Paris, in recognition of his life-long work in anthropology.

Dr. Carl Frederik Albert Christensen, director of Universitets Botaniske Museum, Copenhagen, in recognition of his services to systematic botany, particularly his monographic studies of tropical American ferns.

Dr. Paul Marchal, Ministry of Agriculture of France, in recognition of his investigations in biological problems and their relation to agriculture, especially for work in polyembryony.

Mr. Edward Clayton Andrews, government geologist of New South Wales, in recognition of his work in geology, particularly in the fields of origin of coral reefs, physiography, origin of the Australian flora, mountain formation and origin of metalliferous deposits.

Sir Ernest Rutherford, director of the Cavendish Laboratory, University of Cambridge, in recognition of his work in physics.

F. Omori, professor of seismology, University of Tokyo, in recognition of his work in the field of seismology.

Professor Guiseppi Stefanini, Instituto di Studi Superiori, Pizza San Marco, Florence, in recognition of his investigations in paleontology and stratigraphy, especially the tertiary formations of Italy and echinoids in general.

Professor Max Weber, University of Amsterdam, in recognition of his work in zoology.

SCIENTIFIC NOTES AND NEWS

ARTHUR GORDON WEBSTER, since 1892 professor of physics in Clark University, died by suicide on May 15, at the age of fifty-nine years.

Mr. ALVA JOHNSTON has received the \$1,000 Pulitzer prize of the School of Journalism of Columbia University for the best example of a reporter's work during the year for his reports of the meeting of the American Association for the Advancement of Science, published in the New York *Times* from December 27 to 30.

DR. FREDERICK P. GAY, professor of bacteriology in the University of California and at present chairman of the Division of Medical Sciences of the National Research Council, has received from the Belgian Ambassador, on behalf of King Albert, the decoration of Commander of the Order of the Crown in recognition of his scientific work.

Dr. Emmanuel de Margerie, French exchange professor to the United States, was given a farewell luncheon by the American engineering profession at the Harvard Club on May 18, at which several hundred engineers were present. Dr. Albert R. Ledoux, past president of the American Institute of Mining and Metallurgical Engineers, presided.

At the annual meeting of the Association of American Physicians at Atlantic City, N. J., May 1-3, the following officers were elected: President, Dr. Charles F. Martin, Montreal; vice-president, Dr. Lewis A. Conner, New York; secretary, Dr. Thomas McCrae, Philadelphia, and treasurer, Dr. Joseph A. Capps, Chicago.

Ar the annual congress of the Ophthalmological Society of the United Kingdom, held

in London at the headquarters of the Royal Society of Medicine, April 26 to 28, Dr. George E. de Schweinitz, president of the American Medical Association, delivered the Bowman Lecture on "Certain ocular aspects of pituitary body disorders." Dr. de Schweinitz was elected an honorary member of the society.

Professor Arthur H. Blanchard, head of the highway engineering department of the University of Michigan, was re-elected president of the National Highway Traffic Association at the final session of the annual convention on May 10.

Dr. Frederick F. Russell, formerly director of the International Health Board's public health laboratory service, has been appointed general director of the International Health Board to succeed Dr. Wickliffe Rose, who resigned to accept the presidency of the newly incorporated International Education Board, and of the General Education Board. The latter office became vacant by the retirement of Dr. Wallace Buttrick, who became chairman of the General Education Board.

Dr. Lewis W. Hackett, associate regional director of the International Health Board, Rockefeller Foundation, has been transferred from Brazil to Italy, with headquarters in Rome. He will sail for Europe in December.

Dr. August Hund has been appointed electrical engineer in the radio section of the Bureau of Standards. He is a graduate of the Technische Hochschule, Karlsruhe, and has been working in the graduate department of the University of California.

MERRILL A. Youtz, formerly of the Research Laboratory of Applied Chemistry, Massachusetts Institute of Technology, Cambridge, Mass., has accepted a position in the research laboratory of the Standard Oil Co., Whiting, Ind.

G. F. Moulton has resigned his position at the Bureau of Standards to accept a place as chemist in the research department of F. C. Huyck & Sons, Albany, N. Y.

Dr. Paul M. Giesy has been made director of the Brooklyn Research Laboratories of E. R. Squibb and Sons, manufacturers of chemicals and medicinal products.

The Biological Survey of the United States Department of Agriculture has arranged with the Navy Department for transportation for a party of scientific men who will make a general survey during the spring and summer of the plant and animal life of the chain of islands extending from Niihau in the Hawaiian group to Midway and Wake. Dr. Alexander Wetmore, of the Biological Survey, will have general direction of the scientific activities of the expedition, which will be carried on in part by members of the staff of the Bishop Museum, Honolulu. Donald R. Dickey of Pasadena will accompany the party to secure moving pictures of the colonies of sea birds on Laysan Island.

Dr. Ellinor H. Behre, assistant professor of zoology at the Louisiana State University, has returned from a three months' trip across the northern end of Panama. She devoted herself largely to the study of fishes, collecting live specimens of the poecilidaes for breeding experiments and a series of specimens to indicate the nature of the fauna.

Dr. John W. Harshberger, of the botanical department of the University of Pennsylvania, will sail for Europe early in June to carry on research work in botany. He will join the International Phytogeographic Excursion through the Swiss Alps in July and August.

Dr. A. S. HITCHCOCK, accompanied by his wife, left in May for South America, where he will make botanical collections. Three months will be spent in Ecuador, the work being a continuation of the cooperation between the United States Department of Agriculture, the Gray Herbarium and the New York Botanical Garden in studying the botany of northern South America. About three months will be spent in Peru and Bolivia studying grasses for the Department of Agriculture.

DR. E. P. Felt, New York state entomologist, has been given a year's leave of absence for special work for the State Conservation Commission in connection with the campaign against the European corn borer.

PROFESSOR HORACE G. BYERS, head of the Department of Chemistry, Cooper Union, and president of The American Institute of Chemistry, sailed May 8 for a three to four months'

trip to Belgium, Germany and France. The greater part of Dr. Byers's time will be spent on investigating the status of the chemical industry in Belgium and France.

Dr. Frederick L. Hoffman, consulting statistician of the Prudential Insurance Company, expects to participate in the meetings of the American Medical Association and the efforts which are being made by the American Society for the Control of Cancer to arouse more public interest in the question of cancer control on the Pacific Coast. Dr. Hoffman on his return will revisit the Navaho and Zuni Reservations of New Mexico and Arizona to continue his investigations which include the measurement of some 1,600 Indians and mixed bloods.

THE May meetings of the University of Pennsylvania Chapter of Sigma Xi was held on the sixteenth of the month at The Wistar Institute of Anatomy and Biology. Professor H. H. Donaldson outlined the work of the institute; Professor Helen D. King spoke on "Domestication," and Professor F. S. Hammett on "Sensitivity and adaptability of the albino rat."

DR. EDWARD L. NICHOLS, professor emeritus of physics in Cornell University, lectured before the Sigma Xi Club and the Scientific Society of West Virginia University on May 10. His subject was "Incandescent oxides."

THE Pennsylvania State College Branch of the American Association for the Advancement of Science held a dinner meeting at the University Club on May 24. Following the dinner Dr. Herman L. Fairchild, emeritus professor of geology at the University of Rochester, spoke on the subject "Glacial history of the Susquehanna Valley."

Dr. S. J. Holmes, professor of zoology in the University of California, gave the annual Phi Beta Kappa address before the California Chapter on May 15.

Professor T. Wingate Todd, of Western Reserve University, delivered on April 28 an address before The Royal Canadian Institute on "Royal mummies."

Dr. R. M. WILSON, superintendent of the Kwangjer Leper Hospital, Korea, spoke at Washington University School of Medicine on May 9 on the development of the hospital from a few mud huts to its present well-equipped and organized state. Practically all this work has been done by the leper patients. Dr. Wilson has been treating the lepers with Chaulmoogra Oil, recently discovered to be of benefit in this condition. He reports that he has been able to discharge a considerable number of patients as cured, and many others have been greatly benefitted.

A TABLET to Alexander Wilson, American ornithologist, was unveiled at the Academy of Natural Sciences, Philadelphia, May 17. It was designed by Dr. R. Tait McKenzie and presented to the academy by the St. Andrews Society of Philadelphia, through the generosity of the late Dr. F. Lawson Cameron. Alexander Wilson was born in Paisley, Scotland, July 6, 1766, and died in Philadelphia, August 23, 1813.

Louis Derr, professor of physics at the Massachusetts Institute of Technology, has died in Boston at the age of fifty-one years.

The Ohio State Archeological Museum has been made the recipient of the entire collection of Dr. G. Frederick Wright, glacial geologist, which has been gathered from all parts of the world. Dr. Wright was president of the Ohio Archeological and Historical Society for 10 years and president emeritus for two years until his death, in 1921.

The Steward Observatory of the University of Arizona was dedicated on April 23 on the day of the inauguration of Dr. C. F. Marvin as president of the university. The program included addresses by Dr. Vesto Melvin Slipher, director of the Lowell Observatory; Dr. Robert Grant Aitken, of the Lick Observatory, and Dr. Andrew Elliott Douglass, director of the Steward Observatory.

THE results of the efforts to raise \$250,000 among the members of the New York Academy of Medicine for the purchase of a site for a new building were announced by Dr. George David Stewart at the stated meeting of the Academy on May 3. The total amount subscribed up to that time by fellows and associate members was \$317,711. The total percentage of resident active fellows subscribing

is 90 per cent., the total percentage of all classes of members who have contributed is 82 per cent. The success of the academy in securing this fund assures it of the contingent fund of \$1,000,000 from the Rockefeller Foundation and a similar amount from the Carnegie Foundation for the building and for endowment.

The Astronomer Royal of Great Britain, Sir Frank Watson Dyson, has informed the Harvard College Observatory by cablegram of the discovery of a nova, or new star, on May 8 by Anderson. The initials of the discoverer are not given in the cablegram, but it is presumed that he is the Rev. T. D. Anderson, an English clergyman and amateur astronomer. The new star was situated in the constellation Cygnus, and was of the fifth magnitude, or in other words just about bright enough to be seen with the naked eye under very favorable conditions. The cablegram was relayed to Harvard by the Bureau of Astronomical Telegrams at Copenhagen, Denmark.

The attention of entomologists throughout the world is called to the fact that, beginning with the volume for 1922, the preparation of the "Insecta" part of the Zoological Record is being undertaken by the Imperial Bureau of Entomology. In order that the Record may be as complete as it is possible to make it, all authors of entomological papers, especially of systematic ones, are requested to send separata of their papers to the bureau. These are particularly desired in cases where the original journal is one that is not primarily devoted to entomology. All separata should be addressed to the assistant director, Imperial Bureau of Entomology, 41 Queen's Gate, London, S. W. 7, England.

THE secretary of the General Post Office of Great Britain announces that for the purpose of carrying out the scheme by which, in conjunction with the Air Ministry, daily weather reports are to be distributed all over the country by means of the telephone exchanges, England, Scotland and Wales have been divided into some forty districts. Each exchange will thus have available for subscribers information that will be appropriate to the area in which the exchange is situated. It will only be necessary for telephone subscribers to ring

up the operator at the local exchange at or after 5 p. m. to obtain the forecast for the following day. No charge will be made beyond the local call fee, and in the case of rural party lines subscribers no fee is payable. The forecast may be obtained also by ringing up from public call offices upon payment of the ordinary local call office fee.

STATISTICS published in the Journal Officiel show that the number of births in France in 1922 was 759,846 and the number of deaths 689,267, being an excess of births over deaths of 70,579. The excess of births in 1921 was 117,023 and in 1920 159,790, but the figures for the last year compare favorably with those of 1913, when the number of births was 790,355 and the number of deaths 731,441, being an excess of births over deaths of only 58,914. The number of marriages in 1922 was 383,220, against 456,221 in 1921, 623,869 in 1920, and 312,036 in 1913.

THE Royal Academy of Sciences of Amsterdam has recently prepared a series of papers (in English) summarizing the development of various fields of science in the East Indies, one of which is "A review of chemical investigations in the Dutch East Indies." This is a brief and comprehensive digest of the contributions which have been made by Dutch chemists of the East Indies upon problems of pharmaceutical, agricultural and industrial chemistry of that region. Special mention is made of cinchona cultivation, the sugar industry, rubber, tea, coffee and tobacco cultivation, the production of essential oils and phytochemical investigations. A supply of these papers has been sent to the National Research Council. Copies may be obtained (without charge) by addressing Dr. E. W. Washburn, chairman, Division of Chemistry and Chemical Technology, National Research Council, 1,701 Massachusetts Avenue, Washington, D. C.

Additions have been made to the zoological museums of the University of Iowa through the courtesy of two alumni, Alfred H. Bailey, curator of birds and mammals in the Colorado Museum of Natural History, Denver, Col., and Clarence J. Albrecht, curator of zoological exhibits at the University of Washington. Numerous birds and some animal skins comprise the new collections which were presented first

to Professor Homer R. Dill, director of the vertebrate museum at the University of Iowa, who in turn presented them to the university.

THE British Medical Research Council has undertaken to organize an investigation into dogs' distemper, towards which funds will be provided by the Field Distemper Council. Researches will be conducted by members of the Medical Research Council's staff, partly at the National Institute for Medical Research, Hampstead, but more particularly at the new farm laboratory, for which a site near London has recently been acquired. As opportunities arise and suitable assistance can be secured, inquiries coordinated with these will be promoted at other centers of work. These investigations will also be brought into relation with other studies in human and animal pathology. The Medical Research Council has appointed the following scientific committee to advise on the subject and to direct the investigations: Sir William B. Leishman, K.C.M.G., C.B., F.R.S., director of pathology, War Office, and a member of the Medical Research Council (chairman); Mr. J. B. Buxton; Captain S. R. Douglas, F.R.S., National Institute for Medical Research; Professor F. Hobday, and Dr. C. J. Martin, F.R.S., director of the Lister Institute.

It is reported that the appropriation bill for the Pennsylvania State College covering the years 1924 and 1925 now before the Pennsylvania legislature allows only \$1,360,000 for general college operation, a sum over half a million below what is now required for maintenance. It is said that the college can not stand this cut and perform the work it is now doing. In part, a reduction on this scale would mean that: There would have to be a thirty per cent. reduction in a student body of 3,300 men and women; practically no new students could be admitted for two years; the college would face a possible disruption of organization through the loss of valued faculty members; no new research demanded by the people of the commonwealth could be undertaken and present investigations might have to be abandoned entirely; no expansion of work could be considered. Farmers have but recently asked for a new department of agricultural economics at State College, but this could not be established with the maintenance figure proposed.

UNIVERSITY AND EDUCATIONAL NOTES

The State Legislature of Kansas has appropriated \$2,215,288, exclusive of the Smith-Lever offset funds, for the support of the college and station during the biennium beginning July 1. This amount is about \$500,000 less than the appropriation made in 1921, the reduction resulting chiefly from the diminished requests by the college for new buildings. The appropriations for salaries and maintenance, from which most of the state funds for the support of the main station are allotted, were slightly increased. The funds for the four substations were increased from \$66,000 to \$95,288.

A COMPETITIVE scholarship of \$1,000 has been offered by the Harvard Engineering School for the year 1923-24, to be open to seniors graduating next month from colleges or departments of liberal arts throughout the country. No student now in Harvard will be eligible for the competitions nor any student registered in any engineering or technical school. Award of the scholarship will be based on the complete academic record of the applicant, together with the result of a special three-hour written examination including mathematics and physics.

Dr. Leonard B. Loeb has been appointed assistant professor of physics in the University of California. Dr. Loeb was assistant to Sir Ernest Rutherford in the University of Manchester in 1919, and for the past four years has been national research fellow in physics. During that period he has worked at the University of Chicago and has published a number of papers on ionization in gases.

AT Harvard University Dr. Esper S. Larsen, Jr., of the U. S. Geological Survey, has been appointed professor of petrography to fill the vacancy caused by the retirement of Professor John Eliot Wolff. Dr. Kirtley Fletcher Mather, now head of the geological department of Denison University, Granville, Ohio, has been appointed professor of geology for