

including \$200,000 for cooperation with states in fire suppression on state and privately owned timberlands, under the terms of the Clarke-McNary reforestation act. For effectively meeting the menace to the southern fruit industry presented by the occurrence of the Mexican fruit worm in Texas, the budget includes \$34,100 for researches on this insect and \$100,000 for control operations. An increase of \$68,220 is included for developing and extending the agricultural outlook work, including researches on the fundamental economic principles underlying production and marketing, with a view to adjusting production to probable demand for farm products. For further developing the cooperative marketing work of the department an increase of \$39,560 is provided. To further carry out the provisions of the act of March 3, 1927, authorizing the collection of statistics of the grade and staple length of cotton, an increase of \$335,000 is included. An additional \$34,820 is recommended for strengthening the port and border inspection in connection with the plant quarantine act, and \$50,000 is provided for the control of pink bollworm of cotton in Arizona and New Mexico. For enforcing the milk import act of February 15, 1927, and the caustic poison act of March 4, 1927, \$50,000 and \$25,000, respectively, are recommended.

The budget recommends the creation of a unit in the department to be known as the plant quarantine and control administration, and the consolidation thereunder of all the regulatory and control activities affecting plants and plant products now conducted under the Federal Horticultural Board, the Bureau of Entomology and, to a slight extent, the Bureau of Plant Industry. The Bureau of Entomology, thus relieved from regulatory and control duties, will confine its activities to insect research projects, which present many pressing problems requiring attention, the solution of which, it is believed, will be materially advanced under the new arrangement.

SCIENTIFIC NOTES AND NEWS

THE great Dutch mathematical physicist, Hendrik Antoon Lorentz, born in 1853 and appointed professor in the University of Leyden in 1878, died, according to a cablegram from Holland, on February 5. The death of Professor Lorentz was reported by cable to the newspapers as the issue of *SCIENCE* for last week was going to press and unfortunate errors in the notice were reproduced, the proof not having been read by the editor.

THE American Society of Swedish Engineers has presented to Dr. E. F. W. Alexanderson, consulting engineer of the General Electric Company, the John Ericsson Medal for achievement in electrical engineer-

ing. The presentation was made at a dinner in Brooklyn on February 11.

PROFESSOR WILLIAM BERRYMAN SCOTT, oldest active professor in Princeton University, celebrated his seventieth birthday on February 12. In recognition of Dr. Scott's service to education and particularly to geological research, a dinner was given to him at the Nassau Club. Dr. Henry Fairfield Osborn, a former associate of Professor Scott at Princeton, was chairman of the committee which arranged for the dinner.

PROFESSOR WHEELER P. DAVEY, vice-dean of the school of chemistry and physics at the Pennsylvania State College, has been elected a fellow of the Institute of Physics of London.

THE Cameron Prize, awarded by the University of Edinburgh to a person who, in the course of the five years immediately preceding, has made any highly important and valuable addition to practical therapeutics, has been awarded to Professor C. Levaditi, of the Pasteur Institute, Paris, for his work on the chemotherapy of syphilis and his other contributions to our knowledge of microbiology.

THE Reale Accademia dei Lincei has elected Professor Giovanni Giorgi, of the University of Cagliari, a correspondent in the section of mechanics, and Professor N. E. Nörlund, of the University of Copenhagen, a foreign member in the section of mathematics.

At the recent quarterly meeting of the council of the Royal College of Veterinary Surgeons, the diploma of honorary associate was conferred on Sir John McFadyen, late principal and dean of the Royal Veterinary College, London.

A GOLD medal has been awarded by the school of industrial art of the Pennsylvania Museum to Nicola D'Ascenzo, worker in stained glass. The presentation was made on the fiftieth anniversary of the founding of the school. This is the first year that the medal has been offered.

PREVIOUS to his recent return to the United States from China, Dr. Henry S. Houghton, dean of the State University of Iowa College of Medicine, was decorated with the Order of Chia Ho Chang for outstanding service in medical work in China. Dr. Houghton was presented at this time with a silver bowl inscribed with the names of the staff of the Peking Union Medical College, with which he had been connected for about nine years.

PROFESSOR ROSWELL C. GIBBS, professor of physics at Cornell University, has been elected president of Phi Kappa Phi, national honorary scholastic society.

DR. BASHFORD DEAN, professor of zoology in Columbia University and professor of fine arts in New York University, has resigned his curatorship of the department of arms and armor of the Metropolitan Museum of Art and has been elected a trustee to fill the vacancy caused by the death of Harry Payne Whitney.

DR. GEORGE R. MINOT, professor of clinical medicine at Harvard University, has been chosen to succeed the late Dr. Francis W. Peabody as director of the Thorndike Research Laboratory of the Boston City Hospital.

EDMUND HELLER, formerly on the staff of the Field Museum of Natural History, of Chicago, has been appointed director of the Milwaukee Zoological Park.

CARL RICHTER has been appointed curator of zoology at the Chamberlain Memorial Museum, Three Oaks, Michigan.

GEORGE A. OLSON, agricultural director of The Gypsum Industries, Chicago, has resigned. Previous to going to Chicago, Mr. Olson was in charge of chemistry at the Washington Agricultural Experiment Station.

ARTHUR W. GRAY has resigned as physicist of the Calco Chemical Company to become vice-president and director of research of Dielectric Products, Inc.

DR. A. W. MILLER, for the last ten years chief of the field-inspection division of the U. S. Bureau of Animal Industry, has been selected by Secretary Jardine to fill the position recently made vacant by the resignation of John T. Caine, 3rd, who was chief of the packers and stockyards division of the bureau.

DR. ETHEL DREVER SIMPSON, of the Cornell Medical College in Ithaca, who has been granted a National Research Fellowship in Medicine, is the daughter of the late Sutherland Simpson, professor of physiology in Cornell University, and is to continue the researches she began with her father under the direction of Dr. John Tait, professor of physiology in McGill University, Montreal.

Nature states that, in consequence of the increased activity in oil-field investigation in Australia, and following the appointment of Dr. W. G. Woolnough as commonwealth geological adviser, the services of Mr. Frederick Chapman, of the British National Museum, have been lent to the commonwealth for a year as government paleontologist.

SIR JAMES COLQUHOUN IRVINE, principal and vice-chancellor of the University of St. Andrews, Scotland, has accepted an invitation to take a leading part in the Institute of Chemistry of the American Chemical Society which meets in Evanston, Illinois, from

July 23 to August 18, 1928. Sir James was the principal European guest at the chemical sessions of the Institute of Politics at Williamstown in 1926, when the idea of an Institute of Chemistry was first conceived.

PROFESSOR CONSTANTIN CARATHÉODORY, of the University of Munich, who is visiting the United States as the first visiting lecturer of the American Mathematical Society, has completed a series of lectures at a number of American universities. Professor Carathéodory is now in residence at Harvard University. Arrangements for additional lectures will be announced later.

DR. PAUL ALEXANDROFF, of Moscow, and Dr. Heinze Hopf, of Berlin, have been granted International Education Board fellowships for 1927-28, for the purpose of becoming acquainted with the work of American mathematicians in the field of analysis situs. They are studying at Princeton and Harvard.

DR. D. C. CARPENTER, associate in research chemistry at the New York State Agricultural Station, has been granted a year's leave of absence for study in the laboratory of Dr. T. Svedberg, at the University of Upsala. Dr. Carpenter is traveling under the auspices of the International Education Board, and will visit laboratories in Copenhagen, Berlin, Leipzig, Halle, Stuttgart, Munich and Vienna.

PROFESSOR THOMAS F. COOKE, of the department of physics of the University of Buffalo, and Mrs. Cooke sailed on January 21 from New York for the Mediterranean. They will spend the remainder of the year in study and travel in Europe.

DR. WM. H. TALIAFERRO, professor of parasitology in the University of Chicago, arrived in San Juan, Porto Rico, on January 9, where he will be the guest of the University of Porto Rico, until his return to the United States about April 1. He will give a course in protozoology at the school of tropical medicine, San Juan, and will carry on immunological studies in malaria and other parasitic diseases.

DR. MARY W. CALKINS, professor of psychology in Wellesley College, during December gave two lectures at Bedford College, University of London, on "Conceptions of Meaning" and "The Nature and Types of Value." Dr. Calkins also read a paper before the British Psychological Society on "Self Psychology."

PROFESSOR PAUL WALDEN, of the University of Rosstock, gave a lecture at Harvard University, February 8, on "The Walden Inversion."

DR. DAYTON C. MILLER, professor of physics in the Case School of Applied Science, addressed the Washington Academy of Sciences, February 16, on "Photographing and Analyzing Sound Waves."

ACCORDING to *Popular Astronomy*, Professor Fred-

erick Slocum, director of the Van Vleck Observatory, has accepted an invitation this year to give the lectures which have become an annual feature for the people in Miami, Florida. The lectures are given under the auspices of the Southern Cross Observatory.

DR. BAILEY WILLIS, president of the Geological Society of America, lectured at Ohio State University on February 3 on the subject "Earthquakes." The lecture was under the joint auspices of the graduate school and the society of the Sigma Xi. In the afternoon Dr. Willis spoke before the seminar of the department of geology on "Some Aspects of the Earth's Dynamics."

DR. JOHN C. HEMMETER, professor of clinical medicine in the Johns Hopkins University, spoke at a meeting of the History of Ideas Club, Baltimore, on February 14 on "The Prerequisites to a Philosophy of History."

L. J. R. HOLST, vice-president of Brock and Weymouth, Inc., Philadelphia, will lecture before the Franklin Institute on February 23 on "Topography from the Air."

DR. HENRY LAURENS, professor of physiology in Tulane University, lectured before the chapters of Sigma Xi at the University of Missouri and the University of Kansas recently on "The Physiological Action of Radiant Energy."

PROFESSOR LAWRENCE J. HENDERSON, of the department of physiology at Harvard University, delivered an address before the Royal Canadian Institute, Toronto, January 28, on the subject "Physical Chemistry of the Blood."

THE presidential address of Dr. Eugene L. Opie, before the Pathological Society of Philadelphia, was given on January 12, on "Experimental Production of Leukemia and Related Conditions."

DR. TOBIAS DANTZIG, professor of mathematics at the University of Maryland, is conducting a course in advanced mathematics for physicists and chemists at the U. S. Bureau of Standards during the present academic year.

DR. ROSS A. GORTNER, head of the department of biochemistry at the University of Minnesota, recently delivered a series of four lectures under the auspices of the graduate school and the plant institute at the Ohio State University. The subjects follow: "Proteins in the Lyotropic Series," "Colloid Chemistry in Relation to Vital Phenomena," "Certain Electrokinetic Properties of Colloid Systems and Their Influence on Colloid Behavior," and "Chemical Problems Involved in Flour Strength."

DR. ALEŠ HRDLÍČKA, of the U. S. National Museum, Washington, D. C., lectured in Chicago on January 24, before the Chicago Chapter of the Sigma Xi, on "The Glacial Age and its Relation to Man"; on January 25 and 26 at the University of Chicago, on "Origin and Evolution of Man in the Light of the Latest Knowledge" and "The Lessons of Human Evolution"; on January 27 before the downtown science group on "Human Evolution—Past, Present and Future."

THE Portland Academy of Medicine has recently been addressed by Dr. Corneille Heymans, University of Ghent, upon "Contributions to the Physiology and Pharmacology of the Vagus and Respiratory Centers," by Dr. T. Wingate Todd, Western Reserve University, concerning "The Bowels of the Profession," by Dr. Arthur L. Bloomfield, of Stanford University, upon his "Observations on the Composition of the Gastric Juice and the Mechanism of its Secretion," and by Dr. Moritz Weber, of the Hooper Foundation for Medical Research, on "Osteodystrophia Fibrosa: Clinical and Pathological Aspects, Etiology and Experimental Reproduction."

DR. E. SCHRÖDINGER, who recently visited the United States, is to lecture in London on wave mechanics at the invitation of the Royal Institution. It has been arranged provisionally that the lectures shall be given on March 5, 7, 12 and 14.

ON November 21, 1927, the memory of Reginald Somers Cocks, who for twenty years occupied the Richardson chair of botany at Tulane University, was honored when a bronze tablet was unveiled in the botany laboratory in the science building.

DR. WILLIAM C. L. EGLIN, vice-president of the Philadelphia Electric Company and president of the Franklin Institute, died on February 7, aged fifty-eight years.

DR. GEORGE ERIC SIMPSON, of the department of physiological chemistry at the University of Pennsylvania, died on December 23 at the age of thirty-nine years.

PROFESSOR JAMES LOCKE, at one time professor of chemistry at the Massachusetts Institute of Technology, died on February 11 at the age of fifty-eight years.

MRS. FLORA WAMBAUGH PATTERSON, formerly mycologist in charge of the pathological collections, U. S. Bureau of Plant Industry, died on February 5, aged eighty-one years. Mrs. Patterson retired from the bureau in 1923 after a period of twenty-seven years.

WILLIAM WALLACE PAYNE, of the observatory of the National Watch Company, Elgin, Ill., and founder of *Popular Astronomy*, died on January 29, aged ninety-one years.

DR. TRUMAN W. BROPHY, well-known oral surgeon of Chicago, died on February 4, in his eightieth year.

Nature announces the deaths of Sir Dyce Duckworth, formerly president of the Clinical Society of London from 1891 until 1893 and foreign correspondent of the Paris Academy of Medicine, on January 20, aged eighty-seven years; Surgeon Rear-Admiral Sir Percy Bassett-Smith, a past president of the Royal Society of Tropical Medicine and Hygiene, on December 29 at the age of sixty-six years, and Professor C. Diener, professor of paleontology in the University of Vienna, well known as the editor of the "Fossilium Catalogus," on January 6, aged sixty-five years.

THE Helminthological Society of Washington has passed the following minute: "The Helminthological Society learns with profound regret of the death of Professor Francesco Saverio Monticelli, a foreign corresponding member of this society since 1911. His election among the first group of twenty foreign parasitologists was a recognition of his distinguished achievements, now extending over forty years. He has joined the illustrious group of Blanchard, Ijima, Linstow, Looss, Luehe, Manson, Parona and Shipley, elected at the same time and now passed away. His work remains as the scientist's most fitting memorial and will long perpetuate his memory. This society laments his passing while at the same time it pays tribute to his worth and accomplishments. No better monument could a man have than that posterity remember his as a life well spent in the advancement of human knowledge."

THE nineteenth annual meeting of the Paleontological Society held at Cleveland, Ohio, from December 29 to 31, had the largest attendance and the largest election of new members in its history, making the total number of members in this affiliated branch of the Geological Society of America now 322. Twenty-one papers were delivered and the presidential address by Professor W. A. Parks on "Some Reflections on Paleontology" was given in joint session with the Geological Society of America. The following officers were elected for the year 1928: *President*, A. F. Foerste, Dayton, Ohio; *first vice-president*, M. G. Mehl, Columbia, Missouri; *second vice-president*, E. R. Cumings, Bloomington, Indiana; *third vice-president*, G. R. Wieland, New Haven, Conn.; *secretary*, R. S. Bassler, Washington, D. C.; *treasurer*, Carl O. Dun-

bar, New Haven, Conn.; *editor*, Walter Granger, New York City.

THE 226th meeting of the northeastern section of the American Chemical Society was held on February 10, in Boston. The meeting was devoted to a discussion of the measurement of hydrogen ion concentration. Dr. William M. Clark, professor of physiological chemistry, the Johns Hopkins Medical School, read a paper on "Oxidation and Reduction," and gave an account of his studies of oxidation-reduction equilibrium in systems of dyes made by the potentiometer. Dr. W. A. Taylor, president of the LaMotte Chemical Products Company, Baltimore, Md., discussed the colorimetric method of "Hydrogen Ion Control in Industrial Processes," illustrating by experiments based on a color method devised by himself and his associates.

THE spring meeting of the American Society of Mechanical Engineers is to be held in Pittsburgh from May 14 to 17. The technical program has been completed and the manuscripts for the papers are expected to be in hand by March 1 so that they may be printed and distributed in advance of the meeting. Special sessions will be devoted to the iron and steel industry, the glass industry and the ceramics industry. In addition, the fuels, power, materials handling, machine shop practice, railroad and hydraulics divisions will sponsor sessions. There will be another group of sessions centering around the division of applied mechanics and the special research committee of mechanical springs.

ELECTRICAL engineers in New York and London planned to hold a joint meeting on February 16 through the use of two-way radio communication across the Atlantic. Programs of the American Institute of Electrical Engineers and the British Institute of Electrical Engineers were to be exchanged. The American Institute opened its meeting in New York on February 13.

THE invitation extended by the University of Virginia to the eastern section of the Seismological Society of America to hold their third annual meeting at that institution has been accepted by the executive committee on behalf of the section. The exact date has not been arranged.

THE Aristogenic Association, an organization which has for its purpose the extension of human life, and the development of leaders, with a view to improving the human race in the future, met for the first time on February 2, at the Union Club, New York, as guests of William S. Moore. Dr. C. Ward Crampton was chairman of the meeting. Among those who spoke were Professor James T. Shotwell and George Haven Putnam.

THE fifteenth International Geological Congress will be held in South Africa in 1929, and the date of the inaugural meeting in Pretoria is to be during the fortnight following July 29. The special subjects provisionally proposed for discussion are: (a) magmatic differentiation; (b) pre-Pleistocene glacial periods; and (c) the stratigraphy, paleontology, and world distribution of the Karroo system.

GENERAL UMBERTO NOBILE, designer, constructor and pilot of the airship *Norge*, in which the expedition of Captain Raoul Amundsen, Lincoln Ellsworth and General Nobile voyaged from Spitzbergen to Alaska over the North Pole in 1926, has left for Germany and Russia to make final arrangements with the governments of those countries for the Italian airship expedition with which he proposes to make scientific studies in the polar regions this summer. It is reported that with the exception of mechanics the crew will be composed entirely of scientific men, who will take the observations which are the object of the expedition.

ACCORDING to the Tokio correspondent of *Industrial and Engineering Chemistry*, more than five thousand engineers attended the first general meeting of the Kogakkai (the Engineering Society) on November 3 at the Tokyo Imperial University. The Kogakkai is made up of twelve technical societies, including those relating to mining, iron and steel, civil engineering, ordnance and explosives, shipbuilding, architecture, chemical industry, hygienic industry, electrical engineering, telegraphy and telephony, illuminating engineering and mechanical engineering. M. Okochi, head of the Institute of Physical and Chemical Research, gave an address on the fundamental industries. He selected the precision mechanical and the dye-stuff industries as types. Addresses were given on the recent advances in twelve important industries by the representatives of the related societies. Y. Oshima, president of the Society of Chemical Industry, Japan, told of the recent progress of chemical industry in Japan. On the two following days, sectional meetings of each society were held and about one hundred and sixty papers were read, fourteen being those of the Society of Chemical Industry. Six popular lectures and one radio broadcasting were given. Factories and laboratories were open for inspection by attending members. The International Engineering Congress will be held in Tokyo in October, 1929, under the auspices of the Kogakkai. The congress proposes to discuss various engineering problems for the promotion of international cooperation in the study of the engineering science in all its branches.

ACCORDING to press reports the offer by the Gen-

eral Education Board of the Rockefeller Foundation of \$1,250,000 to aid the University of Minnesota in establishing a medical center on condition that the city of Minneapolis build a general hospital adjacent to the university was definitely rejected on January 5, at a joint meeting of the public welfare committee of the city council and the committee of twenty-three representing the board of regents, the public welfare board, and the Hennepin County Medical Society.

THE *Journal* of the American Medical Association states that an allotment of \$2,000 has been made by the U. S. Treasury Department of the public health service for the preparation of an exhibit to be used at the International Exhibition at Seville, Spain, that will be held in October, 1928. The U. S. Government is participating in this exposition, and all of the government departments and bureaus will be represented. The exhibit of the public health service that is being prepared includes the subjects of smallpox vaccination, venereal diseases, tularemia, safe water and other miscellaneous items.

IN connection with the seventy-fifth annual meeting of the American Society of Civil Engineers it was announced that Charles E. Fowler, consulting engineer of New York, had given the society a trust fund for the granting of annual awards and prizes for engineering work, the awards to be bestowed in memory of the donor's late mother.

UNIVERSITY AND EDUCATIONAL NOTES

EIGHT fellowships worth from \$4,000 to \$9,000 a year will be established at the New York Orthopedic Dispensary and Hospital from the income of a gift of more than \$1,000,000 from the residuary estate of Mrs. John Innes Kane. Mrs. Kane's will made bequests of approximately \$4,000,000, including two \$500,000 gifts to Columbia University, and directed the executors to distribute the residuary estate among such groups as she might select during her own lifetime.

A GIFT of \$2,500,000 for the study of Oriental art has been made by the estate of the late Charles M. Hall, of Oberlin, who acquired \$45,000,000 by a process of refining aluminum, which he devised. An institution in Peking will be endowed under the direction of Harvard University and the University of Peking.

FIRE destroyed the main building of Villanova College, Philadelphia, on January 28, and seriously damaged the monastery, with a loss estimated at \$2,000,000. The chemical, physical and biological laboratories were a total loss.