of which are mere matters of administration and moderate expenditure.

Public health service should be as fully organized and as universally incorporated into our governmental system as is public education. The returns are a thousandfold in economic benefits and infinitely more in reduction of suffering and promotion of human happiness.

SCIENTIFIC NOTES AND NEWS

THE degree of doctor of science has been conferred by the University of Oxford on Dr. Oswald Veblen, professor of mathematics at Princeton University, now lecturing at Oxford.

THE Nichols medal of the New York section of the American Chemical Society, awarded to Dr. William Lloyd Evans in recognition of his achievements in studying the sugar molecule, was presented to him at a meeting of the section on March 1. Dr. R. R. Renshaw presided. Dr. Evans read a paper on the mechanism of carbohydrate oxidation.

Dr. John J. Abel, of the Johns Hopkins University, Dr. John H. Finley, of the New York *Times*, the Honorable John W. Davis, and Dr. Charles H. Herty, of the Chemical Foundation, will be the speakers on the occasion of the presentation by the American Institute of Chemists to Mr. and Mrs. Francis P. Garvan of the medal for outstanding service to the science and profession of chemistry in America. The presentation will be made on May 4.

Dr. J. A. V. Butler, lecturer in physical chemistry in the University of Edinburgh, has been awarded the Meldola medal of the Institute of Chemistry for his work on the modern theory of conducting solutions.

THE Council of the British Institution of Electrical Engineers has made the eighth award of the Faraday medal to Signor Guido Semenza, of Milan.

THE first Colwyn gold medal has been awarded by the council of the Institution of the Rubber Industry of Great Britain to G. Stafford Whitby, professor of organic chemistry at McGill University. The medal was instituted by Lord Colwyn in 1928 to be awarded for conspicuous services of a scientific or technical character having an important bearing on the improvement or development of rubber manufacture or production. The medal is to be presented to Professor Whitby in the spring, when he expects to visit England.

THE New Year's Honors List of Great Britain includes a peerage for Sir Berkeley Moynihan, president of the Royal College of Surgeons. Dr. John A. Fleming, professor emeritus of electrical engineering in the University of London, has received knighthood.

Notes in Science have stated that the Edison medal of the American Institute of Electrical Engineers had been awarded to Dr. Frank B. Jewett and also to Dr. W. D. Coolidge. This medal was presented this year to Dr. Jewett and last year to Dr. Coolidge.

An exchange has been arranged between Princeton University and the Lowell Observatory at Flagstaff, Arizona, according to which Dr. Carl Lampland will work at Princeton while Dr. Raymond S. Dugan will work at Flagstaff.

Dr. L. L. Woodruff, professor of protozoology in Yale University, is in residence at Washington as chairman of the Division of Biology and Agriculture of the National Research Council.

Dr. H. W. TYLER, head of the department of mathematics at the Massachusetts Institute of Technology, is on leave of absence in Washington, D. C., in order to establish there a permanent office of the American Association of University Professors, of which he has acted as secretary for many years. Professor Tyler was reelected secretary at the recent New York meeting.

Dr. Sam Lenher, a former fellow of the International Education Board and recently National Research Fellow in Chemistry, has joined the staff of the experimental station of E. I. du Pont de Nemours and Company, Wilmington, Del.

Dr. George F. Reddish, formerly senior bacteriologist in the food, drug and insecticide administration of the U. S. Department of Agriculture, is now with the Lambert Pharmacal Company, St. Louis, as chief bacteriologist. Dr. Reddish assumed his new work on February 1.

Dr. W. A. Morgan, formerly state chemist with the Georgia Department of Agriculture, has accepted a position with Lazote, Inc., and is at present at the Experimental Station, Wilmington, Delaware.

AT a special meeting of the board of trustees of the American Museum of Natural History on February 21, Mr. George T. Bowdoin, of the Bankers Trust Company, was elected to fill the vacancy on the executive committee created by the recent death of Ogden L. Mills.

HERBERT P. WHITLOCK, curator of minerals and gems at the American Museum of Natural History, New York, has been appointed honorary curator of mineralogy at the Wadsworth Atheneum and Morgan Memorial, Hartford, Conn.

HAROLD J. COOK, of Agate, Nebraska, has been made active curator of the department of paleontology

of the Colorado Museum of Natural History at Denver, having served in the past as honorary curator. Robert J. Niedrach is now head of the department of ornithology and will proceed with the preparation of the specimens secured by the last two South American expeditions, which are to be installed in the new South American wing.

Dr. B. A. Etcheverry, professor of irrigation at the University of California, has leave of absence from March 26 to June 30, to study irrigation, reclamation and flood control in Italy, France and Spain.

DR. GEORGE N. WOLCOTT, who for the past year has been entomologist for the Estaçion Experimental Agricola of Lima, Peru, during the absence of Dr. C. H. T. Townsend in Europe, where he has been studying the types of Muscoid Diptera, is returning early in April.

Kenneth P. Emory, ethnologist for the Tuamotuan Archipelago at the Bishop Museum, Honolulu, Hawaii, has sailed to continue the investigation of Polynesian island groups inaugurated by the museum in 1920.

Dr. William J. Schieffelin was reelected head of the American Mission to Lepers at the recent annual meeting. It was decided to send Dr. Lee S. Huizenga on a year's tour of countries where leprosy prevails to attend conferences, to stress the need for action against leprosy and to initiate programs of public health education. He will inform local physicians, chiefly in Asia, of the modern treatment of leprosy and will urge the establishment of out-patient clinics.

Frank Cortese, formerly research associate at the Massachusetts Institute of Technology, is now National Research Fellow at the University of Munich, Germany, investigating the alkaloids of ergot with Professor Heinrich Wieland.

Dr. F. Strueck, of the University of Würzburg, is visiting the United States in order to make a study of work in nutrition.

Dr. Ernest W. Goodpasture, professor of pathology at the Vanderbilt University School of Medicine, delivered one of the De Lamar lectures in hygiene at the Johns Hopkins School of Hygiene and Public Health on February 26 on "Herpetic Infection, with Especial Reference to Involvement of the Nervous System."

DR. ROY GRAHAM HOSKINS, director of The Memorial Foundation for Neuro-endocrine Research at the Harvard Medical School, is giving the third series of lectures under the Harrington Foundation at the University of Buffalo as follows: April 4, "Interrela-

tions of the Endocrines"; April 5, "Practical Endocrine Therapy."

Dr. C. G. Abbot, secretary of the Smithsonian Institution, gave an address on February 18 on the life and work of Spencer Fullerton Baird, the second secretary of the institution, at Dickinson College, Carlisle, Pennsylvania.

Professor Alexander Silverman, of the University of Pittsburgh, delivered a public lecture on the occasion of the annual convention of the American Ceramic Society in Chicago on "Modern Glass Manufacture in Europe and Glass Collections in European Museums," illustrated by motion pictures taken during his three months' tour of Europe last summer.

"PREHISTORIC Man, His Industries, Inventions, Beliefs, Artistic Production" was the subject of a recent lecture given by Dr. Henry M. Ami, director of the Canadian School of Prehistory, before the Sigma Xi chapter of McGill University. The lecture was illustrated with views taken by the lecturer.

THE Third National Symposium on General Organic Chemistry will be held at Princeton University late in December, 1929. The executive committee is as follows: E. C. Franklin, *chairman*, Stanford University; Frank C. Whitmore, *secretary*, Northwestern University; W. L. Evans, Ohio State University; F. B. Dains, University of Kansas, and J. B. Conant, Harvard University.

Under the auspices of the Bussey Institution, Harvard University, Professor Nikolai A. Borodin, formerly dean of the Department of Fish Culture and Fisheries, Petrograd Agricultural College, is giving a series of lectures on "Biology as Applied to Fisheries and Fish Culture."

Professor G. H. Hardy, of the University of Oxford, who has been lecturing at Princeton University during the first semester of the present academic year on "Chapters in the Theory of Functions," lectured at the Ohio State University on January 18 on the "Theory of Primes," and at the University of Chicago on January 21 on the "Analytical Theory of Numbers."

SIR ERNEST RUTHERFORD opened a discussion at the Royal Society on February 7 on "The Structure of Atomic Nuclei." Dr. F. W. Aston, Dr. J. Chadwick, Dr. C. D. Ellis, R. H. Fowler and Professor O. W. Richardson took part in the discussion.

THE suicide of Professor Clemens Pirquet, director of the Children's Clinic in Vienna, together with his wife, is announced in the daily press.

A CONFERENCE of research workers and others interested in investigation and control of root rot, caused by the fungus *Phymatotrichum omnivorum*, was held at the Texas Agricultural Experiment Station on January 14 and 15. The results of investigations with this disease in the Texas Experiment Station, the U. S. Department of Agriculture Bureau of Plant Industry and Bureau of Chemistry and Soils and the Arizona Experiment Station were presented by workers from these organizations. A more detailed account of the conference will be published in *Phytopathology*.

THE Pasteur Society of central California met at the Hotel Whitcomb in San Francisco on February 27, with one hundred and ten members and guests present. The general subject was tuberculin. Dr. J. Traum, University of California College of Agriculture, division of veterinary science, Berkeley, spoke on "Tuberculin, with Special Reference to its Use in Animals"; Dr. Zera A. Bolin, University of California Medical School, Department of Pathology, San Francisco, discussed the pathological aspects; Dr. Frederick Eberson. University of California Medical School and the George Williams Hooper Foundation for Medical Research. San Francisco, spoke on "The Clinical Aspects of Immunity in Tuberculosis"; Dr. Robert A. Peers, medical director of the Colfax School for the Tuberculous, California, discussed the practical use of tuberculin in human tuberculosis. Thirty-six new members were elected to the society. Officers elected for the calendar year are: President, Captain V. H. Cornell, M. C., U. S. A., Letterman General Hospital, San Francisco; vice-president, Dr. C. S. Mudge, division of dairy industry, University of California College of Agriculture. Davis; secretary-treasurer, Dr. M. S. Marshall, George Williams Hooper Foundation for Medical Research; councillors, Miss Ida May Stevens, assistant epidemiologist, State Department of Public Health, San Francisco, and Dr. E. C. Dickson, professor of epidemiology, Stanford Medical School.

WE learn from Nature that at the University of Cambridge a syndicate consisting of the vice-chancellor; Sir J. J. Thomson, master of Trinity; Professor Seward, master of Downing College; Dr. Willis, Dr. A. W. Hill, Dr. H. Hamshaw Thomas, Professor A. G. Tansley, Sherardian professor of botany in the University of Oxford; A. Amos, R. A. Hayes, and F. L. Engledow has been appointed to consider the organization and finance of the Botanic Garden and the relations between the garden and the department of botany and other scientific departments, and to report to the university by the end of the ensuing term.

THE Journal of the American Medical Association reports that, through the generosity of Mrs. Grace V. Harris, an endowment has been furnished for completely equipped laboratories for research in metabolic diseases at Carmel, California, and for the housing of about twenty-five patients. The building is now under construction. The initial expenditure will be about \$200,000, with ample provision for continued maintenance funds for research. The aim will be to increase the knowledge of metabolic diseases and to provide facilities for diagnosis and treatment. staff at first will comprise Dr. Rudolph A. Kocher (formerly of the Hooper Foundation), University of California, as medical director, and Julian R. Blackman (now at Stanford University School of Medicine), in charge of the roentgen-ray department; the two other appointments are vet to be made.

THE University of California Museum of Vertebrate Zoology has established scientific connections with the United States of Soviet Russia, and received its first shipment of specimens from Dr. B. Vinagradov, of the Zoological Museum of the Academy of Sciences, Leningrad. The shipment was received in exchange for material sent to Leningrad by the university, under a plan proposed by Dr. E. Raymond Hall, curator of mammals at the University Museum. He was desirous of obtaining a number of specimens from Russia, and offered to send 200 American specimens in exchange for those he wanted.

Preparations are on the way for the fourth season of excavations at Combe Capelle in the Dordogne District of France, by the Canadian School of Prehistory in France. The director, Dr. H. M. Ami, in charge at Combe Capelle, in the Mousterian and other deposits of the Couze Valley, will be pleased to furnish such information as may be deemed necessary regarding prospective students in this field of prehistoric research. The results of 1929 work are being classified and distributed to various university museums of Canada.

BIRD sanctuaries in every state and in Alaska will be established under the provisions of the Norbeck migratory bird bill, which has been signed by President Coolidge. Not only will migratory and game birds be protected, but all wild life is to live unmolested in the sanctuaries. The program for establishment of the refuges is expected to be completed within ten years.

ANOTHER attempt to climb Mount Everest in the Himalayas will be made this summer by a party of Dutch alpinists and scientific men, aided by Swiss and Indian guides. The Swiss guide Franz Lochmatter, who climbed the Rockies and Andes with

leading American climbers during the past few years, has left Zermatt for Amsterdam to join as chief guide to the Dutch expedition, which is leaving shortly for Bombay. The expedition will be divided into two sections. While the scientists will remain around the snow-line with their base at Kashmir, the alpinists will attack unclimbed peaks of the Himalayas, including Mount Everest.

FINANCIAL needs of the Bureau of Mines of the Department of Commerce to enable a broader field of research were emphasized before the Senate Committee on Mines and Mining on February 15 by the director of the bureau, Mr. Scott Turner. The importance of the industry for which additional aid is asked was illustrated by Mr. Turner, who testified that gross mineral production in the United States in 1928 aggregated \$5,400,000,000 as compared with \$12,253,000,000 for agricultural products in the fiscal year 1928.

The J. T. Baker Company, eastern division, has established a research fellowship in analytical chemistry of the value of \$1,000 a year. A similar fellowship has been established by this company in the midwest and other sectional fellowships are contemplated. The committee of award is composed of Drs. N. Howell Furman, Princeton University, chairman; Philip E. Browning, Yale University, secretary; Gregory P. Baxter, Harvard University; E. M. Chamot, Cornell University; H. A. Fales, Columbia University.

EDWARD S. HARKNESS has made a gift of \$150,000 to the Neurological Institute of New York City. The cost of completing and equipping the new building of the institute at the Medical Center has been \$1,900,000, of which \$300,000 remained to be raised when Mr. Harkness made his donation. The sum of \$150,000 remains to be contributed before the opening of the center unit on full scale.

A GIFT of \$480,000 for development of civil aviation in Chile has been made by Mr. Daniel Guggenheim.

An insectary has recently been completed at Iowa State College, equipped with greenhouse facilities, screened out-door laboratory and underground laboratory for the study of subterranean insects. Among the studies which this new building is already making possible are researches on oil sprays and other insecticides, on the life history of stored grain insect pests, on the native corn borer, on onion pests and on truck garden and field pests.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of California will receive a gift of approximately \$140,000 from the estate of the late James Sutton, recorder of the institution for more than thirty-seven years. The will contains a provision that half of his estate shall go to the university, with no restrictions as to how it shall be used.

GIFTS of \$2,000,000 from the General Education Board of New York and the Julius Rosenwald Fund of Chicago have been received by the Meharry Medical College, Nashville, for the establishment of an adequate school for the training of Negro physicians. A part of the project, to which alumni will contribute \$200,000, will be a 120-bed hospital. There will be facilities for 200 students and departments of dentistry and pharmacy. The college was established in Nashville in 1876.

Assemblyman James R. Robinson, of Ithaca, has introduced a bill in the legislature providing \$1,000,000 for the construction of a home economics building at Cornell University.

A BILL carrying an appropriation of \$12,000,000 for the establishment of a national university, with an endowment fund of \$60,000,000, as a memorial to George Washington, has been introduced in the House by Representative Guyer, Republican, of Kansas.

AT Stanford University, the following promotions to assistant professorships have been made: Albert Paul Krueger in bacteriology; George E. MacGinitie in zoology (Hopkins Marine Station); Victor Ernest Hall and John Field, 2d, in physiology; W. Bryan Duncan in electrical engineering, and John Kent Lewis in medicine.

DISCUSSION

BIOLOGICAL PUBLICATION IN AMERICA

Are we not making a mistake in this country in the restrictions we have chosen or have allowed to be forced upon us in the publication of the results of biological research? We discourage the publication of comprehensive studies adequately illustrated and use our facilities for publication mostly for short papers with a minimum of pictorial illustration. It is not difficult to get one of our journals to publish a brief and scantly illustrated paper, but only very limited media are available for the presentation of monographic studies.