twenty-four by Colonel Richard P. Strong, director of tropical medicine of the school, assisted by Lieutenant Colonel Thomas T. Mackie, the executive officer of the course. Graduates of this class included officers of the United States, Canadian and Peruvian armies and officers of state health departments.

Colonel G. R. Callender, director of the Army Medical School, presided. A simple ceremony commemorating the fiftieth anniversary honored Colonel Deane C. Howard, U. S. A., retired, who ranked No. 1 in the first class to graduate. Members of the faculty signing this diploma were Assistant Surgeon General G. H. Alden, first officer to command the school; W. H. Forwood and John S. Billings, deputy surgeons general; Charles Smart and Walter Reed, surgeons, and J. M. Cabell, assistant surgeon. Colonel Howard has had a distinguished career in the Medical Corps of the Army and was the chief of the Division of Sanitation in the Office of the Surgeon General in World War I. It was announced that a brochure covering the history of the school is being prepared.

OFFICERS OF THE AMERICAN CHEMICAL SOCIETY

Dr. Carl Shipp Marvel, professor of organic chemistry at the University of Illinois, has been elected president of the American Chemical Society for 1945. He will take office as president-elect on January 1, when Dr. Thomas Midgley, Jr., vice-president of the Ethyl Corporation, becomes president, succeeding Dr. Per K. Frolich, director of the Chemical Division of the Esso Laboratories of the Standard Oil Development Company, Elizabeth, N. J. The new president-elect was chosen by the council from four nominees receiving the largest number of votes in a national mail ballot of the approximately 40,000 members of the society.

Dr. Robert E. Wilson, of New York, president of the Pan American Petroleum and Transport Company, and Professor Roger Adams, head of the department of chemistry of the University of Illinois, were elected directors of the society. Dr. Ernest H. Volwiler, of Abbott Laboratories, Chicago, was named director at large.

The following councilors at large were chosen: Dr. Henry B. Hass, Purdue University; Dr. Joel H. Hildebrand, University of California; Dr. Gustav E. F. Lundell, National Bureau of Standards, Washington, D. C.; Dr. Linus C. Pauling, California Institute of Technology.

Dr. Marvel was recently awarded the 1944 William H. Nichols Medal of the New York Section of the American Chemical Society, one of the highest distinctions in chemical science. It is conferred annually to stimulate original research in chemistry.

The presentation will be made at a meeting of the New York Section on March 10.

Dr. Marvel was cited for outstanding organic chemical contributions to the structure of vinyl polymers, used as synthetic plastics, particularly in the production of transparent aircraft pieces; as rubber substitutes and as thickening and blending agents in the chemical manufacturing industry. The citation also stressed the importance of his research in the structure of polymers of sulphur dioxide and olefines.

Dr. Marvel has carried out notable investigations in the fields of synthetic and structural organic chemistry, including the development of practical methods for preparing amino-acids, which are becoming increasingly important in the preparation of synthetic diets for intravenous feeding. Other studies have dealt with the relationship of hydrogen bonding and solubility behaviors, which forms the basis for one method of electrical refrigeration operating at low pressure, minimizing explosion hazards; the identification of organic compounds; the effect of structure in hexaarylethanes; the synthesis and rearrangement of polyines and polyynes and the organo-metallic compounds.

AWARD OF THE EDISON MEDAL TO DR. VANNEVAR BUSH

Dr. Vannevar Bush, president of the Carnegie Institution of Washington and director of the Office of Scientific Research and Development of the Office of Emergency Management, Washington, D. C., has been awarded the Edison Medal for 1943 of the American Institute of Electrical Engineers. The award goes to Dr. Bush "for his contribution to the advancement of electrical engineering, particularly through the development of new applications of mathematics to engineering problems, and for his eminent service to the Nation in guiding the war research program." The medal will be presented on January 26 at a general session of the winter technical meeting of the institute in the Engineering Societies Building, New York, N. Y.

The Edison Medal was founded by associates and friends of Thomas A. Edison and is awarded annually for "meritorious achievement in electrical science, electrical engineering or the electrical arts" by a committee of the American Institute of Electrical Engineers.

Dr. Bush joined the faculty of the Massachusetts Institute of Technology in 1919 as associate professor of electric power transmission, and became professor in 1923. He was appointed vice-president and dean of the school of engineering, Massachusetts Institute of Technology, in 1932. He has been president of

the Carnegie Institution of Washington since 1939. In 1942 he was appointed chairman of the joint committee on new weapons and equipment of the joint U. S. chiefs of staff, and is a member and former chairman of the National Advisory Committee for Aeronautics.

Dr. Bush is known for his development of mathematical analyzing instruments for solving complex equations in science and engineering. The most notable of these is the differential analyzer, which greatly increases the range of engineering calculations in the field of differential equations.

SCIENTIFIC NOTES AND NEWS

At the December convocation of the University of Pennsylvania, the doctorate of laws was conferred on Dr. Edwin G. Conklin, professor emeritus of biology at Princeton University and president of the American Philosophical Society. The doctorate of science was conferred on Brigadier General James S. Simmons, chief of the division of preventive medicine of the Office of the Surgeon General.

Dr. Ludvig Hektoen, executive director of the National Advisory Cancer Council and chairman of the Chicago Cancer Committee since its organization in 1941, has been reelected chairman.

THE council of the British Institution of Naval Architects has conferred honorary membership on Thomas Henry Havelock, F.R.S., professor of mathematics and head of the department at King's College, Newcastle, in recognition of his work on hydrodynamics and its application to ship wave resistance.

THE United Press reports that Professor Lennart von Post, the Swedish geologist, has returned an honorary doctor's degree awarded to him two years ago by the University of Königsberg as a gesture of protest against Nazi tactics in Norway.

Dr. Emma Perry Carr, head of the department of chemistry at Mount Holyoke College, has been appointed to a visiting professorship at the Institute of Chemistry of the University of Mexico during the months of January and February. The invitation to collaborate with leading Mexican chemists on a research project was extended through the Cultural Relations Division of the State Department.

Dr. C. E. Clark, assistant professor of mathematics at the Bradley Polytechnic Institute, has been appointed to an associate professorship at Emory University.

Dr. Sidney W. Fox, research chemist with the F. E. Booth Company, Albany, Calif., has become assistant professor of chemistry and chemist in the sub-section of plant chemistry of the Iowa Agricultural Experiment Station.

Dr. Charles M. Breder, director of the New York Aquarium, until its closure and its transference to the New York Zoological Park on October 4, 1941, has been appointed curator of the department of fishes of the American Museum of Natural History. Since 1926 he has served as research associate in ichthyology at the museum. Dr. Breder served the New York Aquarium and the New York Zoological Society for twenty-two years, having been made director of the aquarium in 1937. Christopher W. Coates, a member of the staff of the aquarium, has been appointed curator of fishes at the Zoological Park. Dr. Myron Gordon, also a member of the staff of the aquarium, has been made assistant curator.

Chemical and Engineering News reports that Dr. John D. Clark, head of the department of chemistry of the University of New Mexico, has leave of absence to become associated with the Institute of Chemistry of the National University of Mexico, Tacuba. He will direct research, teach and conduct a seminar at the Benjamin Franklin Library and will be an employee of the Department of State.

C. L. Warwick, secretary-treasurer of the American Society for Testing Materials, has resigned as chief of the Materials Branch of the War Production Board in order to give more time to the work of the society. He plans, however, to devote half his time as consultant to the conservation division of the board. He will continue as administrator of the National Emergency Steel Specifications Project, and he will be chairman for the division of the advisory committee on conservation in construction.

Dr. H. L. COCHRAN, from 1935 to 1943 associate horticulturist in charge at the Georgia Agricultural Experiment Station, has been appointed horticulturist in charge of the production of raw products for Pomona Products Company of Griffin, Ga. He will be responsible for research on canning crops.

Dr. Sidney Weinhouse, of the University of Chicago, has become associated with the Houdry Laboratories of the Catalytic Development Corporation of Marcus Hook, Pa.

Dr. W. H. Stark, superintendent of the Butyl Alcohol Plant of Asociación Azucarera Cooperativa Lafayette, Arroyo, Puerto Rico, has resigned to become director of research with Joseph E. Seagram and