

At a subsequent meeting held on October 22, the following officers were elected: Claude A. Burrett, M.D., *director*; David Q. Hammond, *superintendent*; Beatrice E. Ritter, R.N., *principal of the School of Nursing*.

The Fifth Avenue Hospital building will be used jointly by both hospitals under one administrative management charged with the responsibility for carrying out the chartered provisions of each.

The Fifth Avenue Hospital, erected in 1922, with a potential bed capacity for 500 patients, has been operated with 285 active beds due to the necessity of utilizing hospital floors for nurses' quarters. Ample opportunity to fully meet the requirements of both institutions for expansion to full capacity waits on the erection of an adequate nurses' home.

Both boards are convinced that the adopted program is mutually advantageous. The Fifth Avenue Hospital will greatly strengthen the educational program of the Flower Hospital. This together with the Metropolitan, one of New York City's great municipal hospitals, will give the college unexcelled opportunity for clinical teaching and research. Flower Hospital, which has been utilizing clinical buildings erected half a century ago, will receive all the advantages of a modern plant and an opportunity to conserve its assets for income. Such conservation will permit the later erection of new college buildings, adequate room for which is available on unused property owned by and adjacent to the Fifth Avenue Hospital should such use prove mutually feasible to both boards of trustees in the future.

It is believed that the medical staffs of both institutions will find increasing opportunity for teaching, research and the care of the sick poor by virtue of this cooperative effort of both boards.

GRANTS IN AID OF RESEARCH OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

At its October meeting the Council of the American Academy of Arts and Sciences voted grants-in-aid from its Permanent Science Fund as follows:

To Professor James A. Beattie, Massachusetts Institute of Technology, \$500 to assist him in making a study of the relations existing between the International Temperature Scale and the thermodynamic scale.

To Dr. N. T. Bobrovnikoff, acting director of the Perkins Observatory, Delaware, Ohio, \$600 for the construction of a grating spectrograph for the Cassegrain focus of the 69-inch Perkins Reflector, to aid in investigation of stellar spectra in the visual and infra-red regions.

To Professor Joseph C. Boyce, Massachusetts Institute of Technology, \$400 to be spent for equipment, supplies

and assistance in an investigation of the extreme ultraviolet spectra of certain elements.

To Professor Edward Franklin Castetter, University of New Mexico, \$100 to aid in the expenses of a field study of the wild plants used for food, ceremonials and medicine by the Mojave Indians.

To Dr. T. T. Chen, Sterling research fellow of Yale University, \$300 to aid in completing his collection of Opalinid Ciliates inhabiting frogs and toads as a means of furthering his study of the biology of that group.

To Professor Thomas Harper Goodspeed, University of California, \$750 to assist in financing an expedition to South America for the purpose of collecting seeds and specimens of plants of the genus *Nicotiana*.

To Dr. Helmut Landsberg, Pennsylvania State College, \$300 for assistance in compiling and evaluating data in an investigation of suspensions in air with particular reference to the problem of uncharged particles of larger radii.

To Professor K. Lark-Horovitz, Purdue University, \$300 for the purchase of certain equipment to be used in a study of low energy particles emitted in nuclear disintegration processes.

The next meeting of the Permanent Science Fund Committee of the American Academy of Arts and Sciences will be held on March 24. Applications for grants-in-aid should be addressed to the chairman of the committee, Professor E. M. East, Bussey Institution, Forest Hills, Massachusetts. Applications to be considered must be received on or before March 1.

PROFESSOR GERRIT GRIJNS

DR. GERRIT GRIJNS, professor of animal physiology in the College of Agriculture of Wageningen, Holland, this year reached the retirement age and gave his final lecture on June 28, after which he was honored by a special committee in the auditorium of the college. It might be of interest to students in nutrition to give here a memorandum of Dr. Grijns's life and work.

He was born in 1865 in Leerdam, the Province of Zuid-Holland, and after attending the secondary school in Delft, he took up the study of medicine in the University of Utrecht, where in 1891 he obtained his degree of doctor of medicine. After this he spent some time in Germany, studying physiology under Dr. Carl Ludwig in Leipzig. At the end of 1892 he departed for the Dutch East Indies as a medical officer and joined the scientific staff of Dr. C. Eijkman, who since 1889 had been the first director of the medical laboratory at Weltevreden, on the island of Java, and who in the course of his experimentations found that beriberi in man was brought about by a long-continued consumption of polished rice. This disease was similar to polyneuritis, a disease he observed when chickens

were fed a diet of polished rice. The disease could be cured by adding "silverskin" to the polished rice.

After an absence of more than a year, during which Dr. Grijns took part in a military expedition, he returned to Weltevreden and succeeded Dr. Eijkman, who in 1898 was nominated professor in the University of Utrecht. Until 1917 and from 1912 on as its director, Dr. Grijns was connected with that laboratory, except for a few years of sick leave, which he spent in Holland. During these years, he confirmed and extended the research work on polyneuritis begun by Eijkman. He was the first to express clearly the conception of beriberi, that it developed when the diet was lacking certain substances which were of importance in the metabolism of the peripheral nervous system. The Indian Government in 1902 was convinced and forbade the use of polished rice in all jails, where from then on beriberi disappeared. Dr. Grijns called it a deficiency disease, since it was due to a deficiency of unknown substances. Curative substances similar to those occurring in rice bran were found in a kind of bean, called Katjang idjo, in meat and in other native legumes. These foodstuffs lost their curative properties when they were heated to 120° C. In another series of experiments he disproved the infection theory and the theory that starch was the cause of the disease and also Schaumann's phosphoric acid and nuclein theory.

During his stay in the Dutch East Indies, Dr. Grijns for several years taught such subjects as anatomy, physiology and legal medicine in the school for the training of native physicians. He also did research on the significance of drinking water, insects and soil being the cause of the spread of infectious diseases, and he investigated the epidemiology of cholera and plague. In 1917, Dr. Grijns returned to Holland, where he became connected with the Colonial Institute for Tropical Hygiene and later again with the laboratory of Dr. Eijkman. From 1921 until 1935 he was professor in animal physiology in the Agricultural College in Wageningen, during which time he continued his studies on vitamins and published several papers dealing with reproduction and fertility in rats. Research workers, throughout the world, who have been concerned with the discovery of the various vitamins, will be interested to know that Dr. Grijns's important papers have been translated into English and published by Noorduyn en Toon, Gorinchem, Holland.

With the retirement of Dr. Grijns, the College of Wageningen loses one of its inspiring and much beloved teachers and an able investigator.

M. C. KIK

COLLEGE OF AGRICULTURE
UNIVERSITY OF ARKANSAS

AWARD OF THE JOHN FRITZ GOLD MEDAL

THE John Fritz gold medal has been awarded for 1936 to William Frederick Durand, professor emeritus of mechanical engineering at Stanford University. Professor Durand was cited as an "authority in hydrodynamic and aerodynamic science, and in its practical application; outstanding leader in research and in engineering education."

The award is given each year for "notable scientific or industrial achievement." The Board of Award is composed of sixteen past-presidents of the four national engineering societies of civil, mining and metallurgical, mechanical and electrical engineers. This is the thirty-second award to be made.

Professor Durand is an inventor of precision measuring instruments. Becoming interested in scientific and engineering research early in life, he devoted his attention to mathematics and physics, and to problems of ship propulsion, hydraulics of pipes and aeronautics. He was one of the first men to engage in scientific research in aeronautics. He constructed a wind-tunnel at Stanford University, and conducted a long series of investigations on propellers.

Professor Durand was born in Bethany, Conn., in 1859 and was graduated from the United States Naval Academy in 1880. He served in the Engineers Corps of the Navy until 1887, and then went to the Agricultural and Mechanical College of Michigan as professor of mechanical engineering. He received the degree of doctor of philosophy from Lafayette College in 1888. From 1891 to 1904 he was professor of marine engineering in Cornell University. In the latter year he joined the faculty of Stanford University. The University of California bestowed the honorary degree of doctor of laws upon him in 1923.

In 1914, Professor Durand with others organized the National Advisory Committee for Aeronautics, authorized by the Congress, and was named chairman in 1916. In 1918 he was scientific attaché at the American Embassy in Paris, and served as a member of the Inter-allied Commission on Inventions.

He was appointed by President Coolidge in 1925 member and secretary of the Aircraft Board, of which the late Dwight W. Morrow was chairman. In 1929 he joined the Advisory Board of Engineers of the Boulder Dam, and has served as consultant on projects of the Bureau of Reclamation, including the Grand Coulee Dam, and the all-American canal near the Mexican border. Last March President Roosevelt named him chairman of a committee to review the entire question of airship design and construction for the U. S. Navy.

Professor Durand is a past president of the American Society of Mechanical Engineers, a life member