

whole-time medical health officer, one public health nurse and a clerk.

The state health officers will submit to the Public Health Service a statement of the situation in each county or district recommended for assistance and will attach a proposed budget showing the distribution of funds from all sources and indicating the items required from the Public Health Service for the period ending June 30, 1935. The surgeon-general will then review these with discretion to approve or disapprove of any project submitted for consideration.

Quarterly reports will be required from state health officers to the Public Health Service for each project, showing the activities carried on by the unit and presenting a statement of expenditures incurred by the several participating agencies for the quarter.

Notices went out to state health officials on October 19, announcing that the allocation of funds could be made as soon as desired by counties needing assistance. There are now 550 full-time county units. The number in 1933 was 616 units. The first to be organized was in Yakima County, Washington, in 1911. The state health officials at that time asked the Public Health Service to aid in setting up an agency to combat typhoid fever. The unit has continued active since.

It is estimated that less than twenty-five per cent. of the rural population of the country has the benefit of full-time service at the present time.

#### EDWARD W. BROWNING'S BEQUESTS FOR PUBLIC WELFARE

By the will of the late Edward W. Browning, of New York City, the income from his residuary estate, said to be over \$5,000, will be divided into six equal portions and such portion be devoted each year as a prize for the results achieved during such year in the six classes or purposes outlined in the will which are to be known as the Browning Prizes. The classes are as follows: "The prevention of cruelty to children or animals, or the promotion of peace and international harmony.

"The spreading of the Gospel under Protestant auspices, either by distinguished example, effective teaching or exceptional service.

"The uplifting of the moral condition of the world, either by some direct and positive service or example to that end, or by the introduction or furtherance of methods most successful in decreasing vice, gambling, intemperance; or dishonesty and corruption in government and politics.

"The production of the most serviceable invention or useful discovery; or architectural improvement in fireproofing and sanitation or otherwise; or the most important work of art in painting, sculpture or literature.

"The most widely beneficial discovery or new method in medicine, surgery or in the prevention of disease.

"The increased production or improvement of fish, birds or animals; the conservation of forests; the irrigation of arid lands; the increase or improvement of crops, flowers or plants." The value of Mr. Browning's estate is said to be \$7,000,000. The testament, dated in December, 1912, named as trustees of the prize funds Dr. Elmer Ellsworth Brown, formerly chancellor of New York University; Dr. Nicholas Murray Butler, president of Columbia University; Dr. John H. Finley, Robert T. Morris, M.D.; Dr. Henry S. Pritchett; The Rev. Henry A. Stimson, and the late Clarence H. Kelsey.

#### DEDICATION OF THE NEW ZOOLOGICAL LABORATORY AT BELTSVILLE, MD.

MORE than a hundred guests attended the dedication services on October 20 of the new Zoological Laboratory building which has now been completed at the Beltsville Research Center, Maryland. Dr. Maurice C. Hall, chief of the Zoological Division of the Bureau of Animal Industry, presided and several guests spoke briefly. Among the speakers were: Dr. Cooper Curtice, who was the first chief of the division and is now retired; Dr. Charles Wardell Stiles, who also served as chief of the division; and Dr. Albert Hassall, who until his recent retirement was assistant chief. These men discussed the early work of the bureau in research and procedures for the eradication and control of animal parasites, and stressed the possibilities which the new building and equipment provide for additional investigations.

Other speakers were Dr. Henry B. Ward, permanent secretary of the American Association for the Advancement of Science; Dr. W. E. Cotton, superintendent of the Bureau of Animal Industry Experiment Station at Bethesda, Md.; Dr. Lawrence A. Avery, superintendent of the new laboratory; and Earl C. Butterfield, the newly appointed superintendent of the Beltsville Research Center. Other guests represented the Johns Hopkins University, the Helminthological Society of Washington, the Smithsonian Institution and various branches of the Department of Agriculture.

The building cost \$50,000 and contains thirty-one rooms. It will be used for experimental work in the control and eradication of parasites. Several other buildings accommodate small animals such as dogs, cats, guinea pigs, rabbits, chickens, pigs and others. The special equipment includes a variety of apparatus, a post-mortem room, refrigerator room, incinerator and library. The lots and pens outside these buildings are separated by double fences and ditches

to prevent contamination from other pens. Special equipment is provided also for the disposal of manure from pens where parasitized animals are being kept. There are also small oil moats, in some cases, to insure isolation of animals in certain types of experiments.

The laboratory building and other small buildings were designed by Dr. Lawrence A. Avery, who also planned the landscaping of the adjacent grounds in such a way as to utilize as much of the native topography and native shrubbery as possible. A ravine which lies at some distance from the buildings has been utilized by simulating a zoological park with pens and shelters for dogs that will be kept for experimental purposes.

#### RECENT DEATHS

DR. OTTO FOLIN, professor of biological chemistry in the Harvard Medical School, died on October 26, at the age of sixty-seven years.

A TELEGRAM from Eagle Lake, Fla., announces the death of Dr. Gilman A. Drew, until 1911 professor of biology at the University of Maine and resident assistant director of the Woods Hole Biological Laboratory from 1911 to 1926. Dr. Drew was in his sixty-sixth year.

DR. SAMUEL PARSONS MULLIKEN, professor of organic chemistry at the Massachusetts Institute of Technology, died in his seventieth year on October 24.

DR. WILLIAM CHITTENDEN LUSK, who for seventeen years until his retirement last June was professor of clinical surgery at the University and Bellevue Hospital Medical College, died on October 24 at the age of sixty-seven years. He was a brother of Dr. Graham Lusk, who died two years ago.

SIR JOHN AIRD, engineer of the great Assuan Dam in Egypt, died on October 20. He was seventy-two years old.

DR. RADÓ KÖVESLIGETHY, professor of cosmography and geophysics in the University of Budapest, died on October 12 at the age of seventy-two years. Professor Kövesligethy was a leading authority on seismology and was general secretary of the International Seismological Association from 1904 to 1916.

*Nature* reports the death of Professor Adalbert Fernau, director of the Institute for Radium Technology at Vienna, on August 30, aged fifty-six years.

ROSS ALBERT WELLS, since 1912 head of the department of mathematics and astronomy at Park College, died on October 8. A correspondent writes: "Pro-

fessor Wells was a native of Ohio and received his education at Franklin College and the University of Michigan. Previous to his work at Park College he had served in the public school system in Ohio, was professor of mathematics at Bellevue College, and professor of mathematics and physics at Westminster College, Fulton, Missouri. He also served for several years on the staff of the summer school at the State Teachers College, Warrensburg, Mo. During the interval of 1920 to 1922, he was associate professor of mathematics at the State Normal College at Ypsilanti, Michigan. From 1918 to 1920, he also served as dean of Park College. He was a member of the Mathematical Association of America, the American Mathematical Society, the American Association of University Professors, and also was treasurer of the newly organized Missouri Academy of Sciences. Professor Wells was an exceptionally gifted teacher, and has made a definite contribution in the field in which he worked."

FRANK JULIAN SPRAGUE, inventor, consulting engineer of the Sprague Safety Control and Signal Corporation, died on October 25 at the age of seventy-seven years. Among Dr. Sprague's inventions are the modern trolley system, the multiple-unit system of electric railways and high-speed electric elevators. *The New York Times* writes editorially: "With Frank Julian Sprague has passed another of the brilliant group that Edison gathered around him in the brave days of the incandescent lamp when youth and imagination created electrical engineering. Office elevators, trolley cars, subway trains—Sprague left his impress upon them all. It was in London's smoky 'tube' that he conceived the idea of driving trains electrically. His opportunity came in Richmond, Va., where he gambled his last dollar on building a twelve-mile trolley road, a central power plant, forty cars with eighty motors and all the auxiliary apparatus, and this in the year 1888 when there were not a hundred motors in the world. The effect was immediate. The electric street railway was born. But it was the 'multiple unit' system of control that made him really famous. By placing motors on cars and lock-stepping them so that they could all be started and stopped at once by a mere turn of a handle, he made long subway trains possible. Had he lived but a few days longer he would have received the John Fritz Gold Medal for his achievements and thus become a member of a similarly honored group that includes Kelvin, Edison, Marconi, Pupin and Carty."

#### SCIENTIFIC NOTES AND NEWS

THE Nobel Prize in physiology and medicine has been awarded to Dr. George Richards Minot, director of the Thorndike Memorial Laboratory of the Boston

City Hospital and professor in medicine at the Harvard Medical School; to Dr. William P. Murphy, of the Peter Bent Brigham Hospital and the Harvard