RECENT DEATHS

DR. OLIN H. LANDRETH, professor of engineering at Union College from 1894 to 1919, when he was appointed professor emeritus, died on November 5, aged seventy-nine years. Previous to 1894 he had been professor of engineering and dean of the engineering department at Vanderbilt University.

DR. EDWARD H. JENKINS, director emeritus of the Connecticut Agricultural Experiment Station, died at his home in New Haven on November 7 at the age of eighty-one years.

MR. LEWIS TAYLOR ROBINSON, engineer in charge of the general engineering laboratory of the General Electric Company, died suddenly from a heart attack at his home in Schenectady on November 3. He was sixty-three years old.

THE death is reported from Dresden, at the age of sixty-six years, of Professor Dr. Ing. Fritz Foerster, who had been connected with the Dresden Technical Institute for the past thirty-one years.

THE *British Medical Journal* reports the deaths of the following medical men: Dr. Louis Goudard, a former president of the Medical Society of Paris; Dr. Ducamp, professor of clinical medicine at Montpellier; Dr. A. Besson, of Paris, author of a work on microbiological and serotherapeutic technique, and Dr. Piana, for twenty-five years director of the Radiological Institute of Genoa.

SCIENTIFIC EVENTS

THE BERMUDA FRESH-WATER SYSTEM

THE first fresh-water system in the history of Bermuda, regarded for centuries as impossible of achievement, will be opened for public use on November 30, according to Professor W. D. Turner, of the department of chemical engineering at Columbia University, who planned and directed the construction. He states that drain water caught on the house tops and frequently polluted to a high degree, has served the residents of the island for generations. New York's water supply would be condemned if it contained as much as one *Bacillus coli* per cubic centimeter, while water is considered good in Bermuda if it contains not more than 100.

Professor Turner writes:

> In Bermuda most of the rock is of porous coral, filled with small cavities and fissures. After a survey of the island we selected a small hill near Hamilton, capital of the colony, believing that the fresh water filtering through the rock crevices might be collected. A trench about 250 feet long and four feet deep was dug at the base of the hill. The bottom of the excavation was approximately a foot above sea-level and sloped gradually to a pump pit.
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> A pipe line was laid in the trench with open joints so that water might find its way into the pipe and thence to the basin or pit. By concreting the basin, which, of course, was dug below sea-level, we prevented sea-water from seeping in. This was one of the points which was overlooked in previous attempts to tap a fresh-water supply.
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> From the collecting basin the water will be pumped into a new reservoir which is practically completed at Pymwood, near Hamilton. From that point the supply will be piped to the capital city and perhaps to St. George's, the old capital, twelve miles from Hamilton.

After the trench was covered over and the basin complete, Professor Turner tested his "horizontal well." For three months a two-inch stream was pumped out of the pipe line day and night. The water was allowed to gush over a nearby golf course. New Yorkers use three times as much water as the residents of Bermuda. Hotels are the largest consumers on the island because of their American guests. The capacity of the island system is 300,000 gallons. In the United States this supply would meet the demands of a community of 3,000 persons. The population of Hamilton is 6,000, but because of the conservative use of water in Bermuda the new system will more than meet the demand. Since they have been using rain water for 300 years, the people are used to very soft water. In order to meet this requirement, the new system will include a water-softening plant, which will also remove the soil bacteria. The hardness is due to carbonate and hence can be removed by lime. The average rainfall is 60 inches annually, approximately the same as that of New York and New Jersey. It is estimated that the trench will collect about 50 per cent. of the water-fall. The well may be extended to increase the supply in event of additional demands.

The new water system, which will be known as the Bermuda Water Works, was financed by Mr. H. W. Watlington, philanthropist and a member of the House of Assembly. Construction work was started in the summer of 1930.

TOPOGRAPHICAL MAPS

THE U. S. Coast and Geodetic Survey, with the aid of time signals sent from the U. S. Naval Observatory, is planning to utilize the stars at several points along the Mississippi River for scientific calculations. The expert in charge of this work, Mr. Joseph P. Lushene, will use the data from his observations to adjust an arc of triangulation from Chester, Illinois, to St. Paul, Minnesota. These arcs of triangulation