old Tilbury Fort and of timber and lead from the Tower of London, was designed by Wren and built at a cost of £520, the money being derived from the sale of spoilt gunpowder.

A RESEARCH MEDICAL SOCIETY was organized recently at the Loyola University School of Medicine. The following officers were elected for the academic year 1919-20: President, R. M. Strong; Vice-president, F. M. Phifer; Secretary, A. B. Dawson; Treasurer, E. S. Maxwell; Members of the council, S. A. Matthews, George W. Wilson, and F. B. Lusk.

PROFESSOR FREDERIC S. LEE, of Columbia University, lectured recently on "Problems of industrial physiology" before the Royal Canadian Institute, Toronto, and the Johns Hopkins School of Hygiene and Public Health.

PROFESSOR H. N. HOLMES, head of the chemistry department in Oberlin College, has recently lectured at Case School of Applied Science, Cleveland, and before the Cincinnati section of the American Chemical Society on "The industrial applications of colloid chemistry."

An address on the "Theories regarding the formation of phosphate deposits" was given at the Ohio Agricultural Experiment Station on February 16, by Dr. Walter H. Bucher, of the department of geology of the University of Cincinnati.

PROFESSOR H. SHIPLEY FRY, director of chemical laboratories, University of Cincinnati, lectured on "The electronic conception of valence and the constitution of benzene" before a joint meeting of the Leigh Chemical Society and the Lexington, Kentucky, section of the American Chemical Society at Georgetown College on February 13.

At a meeting of the Faculty Club of the University of Mississippi on February 2, 1920, Dr. Hiram Byrd, director of the department of hygiene, delivered a lecture on "Rattlesnakes."

THE president of the Royal College of Physicians, London, has appointed Dr. F. W. Andrews to be Harveian orator, and Dr. R. C. Wall to be Bradshaw lecturer for this year. The council has appointed Dr. Martin Flack to be Milroy lecturer for 1921. The Oliver-Sharpey prize for 1920 has been awarded to Professor Emil Roux, of the Pasteur Institute, Paris.

## UNIVERSITY AND EDUCATIONAL NEWS

MR. J. OGDEN ARMOUR has made a further gift of six million dollars to the Armour Institute of Chicago. A new site for the school has been purchased at the cost of one million dollars, and five million dollars will be expended on buildings.

AT YALE UNIVERSITY, Dr. W. H. Sheldon, of Dartmouth College, has been appointed professor of philosophy. Dr. W. R. Longley, has been promoted to a full professorship of mathematics.

DR. E. F. HOPKINS, associate plant pathologist at the Alabama Polytechnic Institute and Experiment Station, has been appointed plant pathologist and assistant professor of botany at the University of Missouri. Dr. Hopkins will begin his work on April 1.

DR. C. L. METCALF has been promoted to be professor of entomology in the Ohio State University.

DR. H. G. FITZGERALD has received an appointment as profesor of hygiene at the University of Toronto, to succeed Dr. J. A. Amyst, who has been appointed deputy minister of health in the Federal Department of Health, Ottawa.

## DISCUSSION AND CORRESPONDENCE A PROPOSED METHOD FOR CARRYING TRIANGULATION ACROSS WIDE GAPS

So far as is known, the possibility of extending an arc of triangulation across straits or arms of the sea has been limited in the past to cases in which one shore is visible from the other, or at most where the masts of a vessel anchored in mid-channel are visible from both shores. It has occurred to us that much wider