

ventiveness are everywhere apparent; he was at once the architects' best collaborator and the investigators' chief reliance, in construction and equipment. He introduced and perfected the new system of accounting that the larger operations demanded, and was constantly at the service of investigators in the satisfaction of their multifarious needs.

Drew was an upstanding, unselfish, conscientious, uncompromising, energetic man, enjoying the confidence of all, and the affectionate regard of many friends. His election as president of the American Society of Zoologists in 1920 testifies to the respect of his confrères. His memory deserves perpetual preservation in the minds of American biologists.

FRANK R. LILLIE

RECENT DEATHS

DR. EDWARD RENOUF, from 1890 until his retirement in 1911 collegiate professor of chemistry at the

Johns Hopkins University, died on November 14 at the age of eighty-six years. Dr. Renouf had been connected with the university since 1885, when he was appointed assistant in chemistry.

DR. ERIC VON FUELNEGG GEBAUER, organic chemist, of Gary, Ind., formerly assistant professor in the Medical School of Northwestern University, died on November 18, from inhaling hydrochloric acid gas, while carrying out an experiment in his laboratory. He was thirty-three years old.

DR. KARL RITTER VON LINDE, who developed the Linde process for the manufacture of liquid air, died on November 16, in his ninety-third year.

HENRY ATTWOOL ALLEN, formerly a member of the staff of the British Geological Survey, died on October 3 at the age of seventy-nine years.

SCIENTIFIC EVENTS

THE WAITE AGRICULTURAL RESEARCH INSTITUTE

AN account of the history and development of the Waite Agricultural Research Institute from the year 1925, when its activities first started, up to 1932 has been issued by the University of Adelaide and is summarized in *Nature*. Although the chief objective of the institute is to conduct research on plant and soil problems, it also provides an advisory service to the Department of Agriculture in plant pathology and entomology and gives specialized courses of instruction for the agricultural degrees in the University of Adelaide.

The scope of the scientific work undertaken at the institute covers a wide field. As might be expected, the limited rainfall and the development of a system of cereal and grassland management to suit such conditions forms one of the major problems, and a study of the water requirements of plants under various manurial treatments and the differences exhibited by improved varieties of cereals and leguminous plants in this respect has led both to increases in yield being obtained and also to the extension of the area capable of supporting the crop. Pasture problems are being investigated both from the agricultural and the chemical point of view, special attention being paid to their mineral content and improvement by means of the introduction of superior species and strains.

Survey and classification of the various soil types in Australia forms a further branch of the work in the chemical section, and fertility problems, particularly in the irrigation settlements, are also being in-

vestigated. Entomological work has only been in progress since 1929, but already much valuable information has been obtained with regard to various pests of pasture, cereal and orchard crops. Diseases of agricultural crops inevitably form an important branch of the work of the institute, and deficiency diseases due to a lack of some mineral element have also been successfully investigated. Breeding experiments with the view of securing varieties with improved resistance to fungus diseases form a natural corollary to the work of the plant pathology section.

Besides the land devoted to agricultural experiments, a certain area is reserved as a permanent park. Advantage has been taken of this to plant a portion as an arboretum, one section being used for indigenous, and another for introduced, species. The report includes a list, with abstracts, of the one hundred and forty-one papers published from the institute during the years under review.

ELM DISEASE IN GREAT BRITAIN

THE London *Times* writes: "The conclusion this autumn of the seventh annual survey of the elm disease permits a review of the extent of attack by this insidious and at times highly virulent malady of the elm genus." During the past summer the disease has made definite progress in nearly every area examined, but the severity of attack is still below that of the peak year, 1931.

Infected trees have been recorded in three new counties, Lancashire, Merionethshire and Cornwall. If the counties of England and Wales are classified according to severity of attack the following position is