

treatment and prevention of a number of plant virus diseases of great economic importance and theoretical interest.

It was shown for the first time in his laboratory that several different yellows-type diseases (such as the virus disease of asters known as 'yellows') could be cured by heat-treating the plants in which they occur naturally or to which they may be transferred. Various virus diseases of the peach were cured in this manner as well as some virus diseases in cranberry, periwinkle, and the potato.

Dr. Kunkel and his associates discovered the transmission ability of leafhoppers in spreading virus disease, the ability to kill such infective activity by heat treatment, and the restoration of the infective ability to the insect. He charted out carefully the infective ability of various virus strains of such diseases as the tobacco mosaic virus or yellows-type, and demonstrated for the first time how a leafhopper infective for one strain was unable to pick up and transmit the other. He showed how a parasitic plant, the dodder, can transmit virus diseases from woody plants to herbaceous plants in which they are more easily studied. He also demonstrated that peach yellows, one of the oldest and best-known plant diseases, is transmitted by a leafhopper of a certain

species. He demonstrated the same kind of transmitting factor for corn stunt, a yellows-type virus disease of maize.

Born in Mexico, Missouri, on May 7, 1884, Dr. Kunkel received the bachelor's and master's degrees from the University of Missouri, and the Ph.D. degree from Columbia University in 1914. He held a travelling fellowship in Europe, served as a pathologist in the Bureau of Plant Industry, U.S. Department of Agriculture, and started to study the virus diseases of plants.

Working with the Hawaiian Sugar Planters Association, he served as associate pathologist to study the problems of mosaic disease of sugar cane. He then became a staff member of the Boyce Thompson Institute in Yonkers, New York, in 1923 and gathered around him a group of young men trained in several fields of scientific investigation. At the Boyce Thompson Institute, Dr. Kunkel made important contributions to our knowledge of the mosaic diseases of tobacco, sugar cane and Indian corn as well as asters yellows.

He was a member of several scientific societies including the National Academy of Sciences, the Botanical Society of America and the American Philosophical Society.

NEWS and VIEWS

New Foreign Members of the Royal Society

THE following have been elected foreign members of the Royal Society: Prof. G. W. Beadle, chairman of the Division of Biology, California Institute of Technology, Pasadena, California, distinguished for his outstanding contributions to genetics; Prof. Ragnar A. Granit, professor of neurophysiology, Kungl. Karolinska Mediko-Kirurgiska Institutet, Stockholm, distinguished for his researches on the physiology of vision and neurophysiology; Prof. G. B. Kistiakowsky, professor of chemistry, Harvard University, Cambridge, Massachusetts, distinguished for his work in chemical kinetics of gaseous reactions, photochemistry, thermochemistry, and structure of polyatomic molecules; Academician L. D. Landau, professor of theoretical physics, S. I. Vavilov Institute of Physical Problems, Moscow, U.S.S.R., distinguished for his contributions to theoretical physics.

The Zoological Society of London: Nuffield Institute of Comparative Medicine

THE Nuffield Foundation has made a grant of £100,000 to the Zoological Society of London to found an Institute of Comparative Medicine, and to provide two senior research fellowships. In expressing its deep gratitude, the Council of the Society has asked that the name of Lord Nuffield be associated with the name of the Institute. The Society already has a modern animal hospital, and the new Institute will provide a much-needed opportunity to increase knowledge of disease in animals, and so to maintain the health of the Society's collections at an even higher degree of excellence than at present. Much unique material from the Society's collections and elsewhere is available for study, and full use can now be made of opportunities for research that have not been fully exploited in the past owing to the lack of the facilities and personnel. A Committee, including Sir Roy Cameron, Dr. E. Cotchin, Mr. R. Fiennes, Dr. R. E.

Glover, Prof. A. Haddow, Prof. R. Hare, Dr. L. Harrison Matthews, Mr. J. N. Ritchie, Dr. J. G. Smith, Prof. G. Paling Wright and Sir Solly Zuckerman, has been appointed to advise the Council on the organization of the new Institute, the terms of reference of which are to study disease in all its comparative forms.

Mr. Richard Llewelyn Davies, director of the Nuffield Foundation Division for Architectural Studies, and professor elect of architecture in the University of London, will design the new building in accordance with the over-all plan for the Gardens that has been devised by Sir Hugh Casson in collaboration with Mr. F. A. Stengelhofen, the Society's resident architect. In planning the Institute, it is hoped that effect can be given to conclusions drawn from an exhaustive study of the laboratory designs for which the Nuffield Foundation has been responsible over the past few years.

The new Institute, which it is hoped will be in operation in about two years time, is to be built as part of a new block immediately west of the main offices. It will form the central part of the block, the east wing of which will provide a new meeting room for the Society. The western wing will be added at a later date and will house the Education Centre. It is proposed that the Institute itself will have a frontage of about 85 ft. and a depth of 50-60 ft., and will have a basement, ground floor, and two upper floors. The foundations will be constructed so that an additional floor can be added at a later date if required. The floor area, including the basement, will be about 18,200 sq. ft. Twelve laboratory units each of 300 ft. are planned, with offices, technicians' rooms, photographic rooms, workshops and stores. In addition there will be weighing and sterilizing rooms, a media kitchen, chromatography, balance and other specialized instrument rooms, hot and cold rooms, animal accommodation, seminar and common rooms.