

NEWS and VIEWS

Botany at Birmingham: Prof. W. Stiles, F.R.S.

PROF. W. STILES has retired from the Mason professorship of botany in the University of Birmingham, which he has held since 1929. He moved to Birmingham after occupying the chair of botany at Reading for ten years. He has brought renown to his Department, both by his own published papers, reviews and books, and by the direction or stimulation given to the physiological researches of his colleagues and students, especially in the fields of permeability, the salt relations of plant tissues, and respiration. The way was prepared in the first field by early work done in the University of Leeds, where he collaborated, first with Mr. I. Jørgensen and, later, with Dr. Franklin Kidd. They developed the method of placing representative samples of disks of storage tissue under selected and controlled conditions. This technique for obtaining reproducible results is now widely used in many types of investigation.

Throughout his career, Prof. Stiles has favoured the use of physical instruments for measuring plant performance. In more recent times, skilled work has been performed in his research school with the katharometer in studies on respiration, and with the spectrograph, polarograph and absorptiometer in measuring small amounts of ionic absorption. Exact quantitative data have been obtained for physiological performances, controlled in the light of existing knowledge. Certain passages in his presidential address delivered in 1938 to Section K (Botany) of the British Association make it clear that no one knows better than Prof. Stiles that this knowledge is incomplete. However, he has helped to make it more ample than it was forty years ago. Moreover, no one in Great Britain has ever done more in bringing together scattered literature and making widely known major advances in knowledge of plant physiology as these occurred. We may note his review articles which have appeared regularly in *Science Progress* since 1927, and his books on "Carbon Assimilation" (1917, with I. Jørgensen), "Permeability" (1924), "Photosynthesis" (1925), "Respiration" (1932, with W. Leach), "An Introduction to the Principles of Plant Physiology" (1936, second edition 1950), and "Trace Elements in Plants and Animals" (1946, second edition 1951).

Prof. E. J. Maskell, F.R.S.

DR. E. J. MASKELL, reader in plant physiology in the University of Cambridge and Fellow of Emmanuel College, has been appointed to succeed Prof. W. Stiles in the Mason chair of botany from October 1. After a distinguished academic career at Cambridge, interrupted by service in the Friends' Ambulance Unit, 1915-19, Dr. Maskell, as Frank Smart student, carried out researches under the late Dr. F. F. Blackman on carbon assimilation with particular reference to stomatal control. In 1922, Dr. Maskell was appointed plant physiologist at the Cambridge Horticultural Station. Two years later he moved to Rothamsted Experimental Station in the same capacity, where he worked on problems of crop growth and methods of field experimentation. In 1926 he went to Trinidad as plant physiologist at the Cotton Research Station, where, in association with Dr. T. G. Mason and Dr. E. Phillis, he carried out notable investigations on the transport of carbohydrates and other solutes in the cotton plant. In 1930 he was recalled to Cambridge as lecturer in

plant physiology, afterwards becoming reader and head of the sub-department in this subject in the Botany School. Since his return he has taken a prominent part in teaching and research, chiefly on the metabolic aspects of plant physiology, and many students have carried out investigations under his direction. He was elected a Fellow of the Royal Society in 1939. He returned to Trinidad for the summer of 1950 and assisted in the researches proceeding at the Imperial College of Tropical Agriculture on the mineral nutrition of the cocoa plant. Dr. Maskell has had much experience of university and college administration, and served for a considerable period on the General Board of the Faculties. Birmingham is fortunate in securing the services of Dr. Maskell, and he will be greatly missed by his colleagues in the Cambridge Botany School.

Scientific Civil Service: Promotion of Individual Research Workers

It is announced that further special posts are being created for individual research workers of exceptional merit. The promotions will be effective from January 1, 1952.

Deputy Chief Scientific Officers:

Dr. E. Glueckauf

DR. E. GLUECKAUF, an outstanding physical chemist who during the pre-war period made notable contributions in surface phenomena, radiochemistry and in the measurement of the constituents of the atmosphere. Since joining the Atomic Energy Research Establishment his researches have included solution chemistry and the study of chromatography and ion exchange.

Mr. N. W. Pirie, F.R.S.

MR. N. W. PIRIE, of Rothamsted Experimental Station, is well known for his work on the separation and biochemical properties of substances of diverse biological origin and high molecular weight. The group includes antigens from *Brucella melitensis* and *B. abortus*, agar, several plant viruses, hyaluronic acid and proteins from the normal leaf. The last has been studied both on the laboratory and on the industrial scale. Most of these substances have been shown to be heterogeneous, and he has emphasized the importance of looking on macromolecules, even when they have a defined biological activity, as categories rather than as chemical individuals.

Dr. H. G. Thornton, F.R.S.

DR. H. G. THORNTON, of Rothamsted Experimental Station, has investigated many aspects of the life of the nodule bacteria and their symbiosis with their host legume, including their behaviour in soil, the process of the root infection, the growth and decay of the nodule and the structure of nodules ineffective in fixing nitrogen. With P. S. Nutman and J. H. Quastel he took part in the early experiments on the selective toxicity to plants of 2,4-dichlorophenoxy-acetic acid. He has made quantitative studies of the soil microflora, and in this field he has devised improved counting methods.

Senior Principal Scientific Officers:

Mr. J. E. Gordon

MR. J. E. GORDON, a research engineer at the Royal Aircraft Establishment, whose work has been directed towards the use of plastic structural materials for