

NEWS and VIEWS

Botany in the University of London

King's College

PROF. T. A. BENNET-CLARK, of University College, Nottingham, has been appointed to the University of London chair of botany, tenable at King's College, London, as from October 1944. Prof. Bennet-Clark was educated at Marlborough College and Trinity College, Cambridge, and in 1923 was placed in the first class of the Natural Sciences Tripos (Part II) list and was the Frank Smart prizeman. He worked for a time under Dr. F. F. Blackman until, in 1924, he was appointed as assistant to the professor of botany, Trinity College, Dublin. During these years, research on the metabolism (especially the respiration) of succulent plants yielded results of great interest. This line of research continued after his appointment in 1931 as lecturer in botany in the Victoria University of Manchester. His appointment to Manchester coincided with an increase in the number of research students there, and a large proportion were then attached to plant physiology and under his guidance investigated the metabolism, especially of acid-producing plants, including fungi, while research on another aspect of plant physiology served to focus attention on the important part which protoplasmic activity may play in water absorption by plant cells. Under his direction plant physiology at Manchester received a considerable stimulus. In 1936 he was appointed to the chair of botany at University College, Nottingham, where a heavy burden of teaching has not restricted his other activities. Since 1937 he has served the Society of Experimental Biology as botanical secretary. Botanists throughout the country will wish him success and happiness in his new appointment.

Birkbeck College

By the appointment of Dr. C. T. Ingold to the chair of botany, Birkbeck College maintains a strong mycological tradition built up during the period of office of Dame Helen Gwynne-Vaughan. Dr. Ingold is well known for his studies on the aquatic Hyphomycetes, and for work on mechanisms of spore dispersal in fungi. He is a keen and first-class naturalist, and one of the limited band of those who 'know their higher Basidiomycetes', so that it is a real pleasure to tramp the country with him as guide. He conveys his enthusiasm with success to students and colleagues. Dr. Ingold was a student of the Queen's University, Belfast, and has served on the staff of the University of Reading. Latterly he has been head of the Department of Botany at University College, Leicester. His published work includes papers on permeability, aquatic fungi and algæ, and an attractive book on spore dispersal.

Transmutation of Wood

In a short message printed in *The Times* of April 17, attention is directed to what is claimed to be a new chemical treatment which makes wood nearly as hard as steel, transmuting it into a new material, part wood and part plastic, announced by the du Pont Company in the United States. From the brief description given, it appears that this new material is only one of the many forms of what has become known as 'improved wood'. Until specimens have been examined it is not possible to verify the claims. In

preparing a material of this kind it is, in general, sought to improve the strength properties and the dimensional stability of wood by a combination of impregnation with synthetic resins and densification under heat and pressure. The manner of effecting this varies from process to process. It was believed for some years that the use of synthetic resins was essential for the production of improved wood, but only recently the U.S. Forest Products Laboratory has demonstrated that much of what is done by the earlier processes can be achieved through the use of heat and pressure alone.

In the use of synthetic resins for making 'improved wood', most success has been achieved with the phenol-formaldehyde type. Hitherto the amino resins have not been favoured for the manufacture of improved wood, presumably because they have been found to be chemically not so stable as some other types and to have somewhat inferior ageing characteristics under warm and humid weather conditions. It remains to be seen, therefore, whether the urea/formaldehyde resin involved in the Dupont process incorporates any new feature which marks it out as superior to others of its class. It is stated that the monomer combines with the natural acids in the wood; but the more conventional view of the setting process would appear to be that these acids merely behave like all other acids which are known to catalyse the setting reactions in urea/formaldehyde resins. The two claims which it will be most interesting to confirm are that almost any species of timber can be treated—particularly as nothing is said as to the thickness of piece which can be treated—and that all dimensional change is prevented. So far as existing experience goes, this latter claim seems to be incompatible with the implied retention of the best other properties of wood. Should these claims hold good after a period of years, the process will mark a big advance in the field of wood-plastic composites.

Development of the Highlands of Scotland

A CRITICAL study in the February number of *Agenda* by Mr. Hugh Quigley on "The Highlands of Scotland: Proposals for Development", urges that the one policy which will make a permanent contribution to the Highland civilization is in effect to make a collective regional unit of the Highlands after the pattern of the Tennessee Valley Authority. Mr. Quigley strongly criticizes the creation of the North of Scotland Hydro-Electric Board, which has only indirect influence on the problem of Highland reconstruction; it regularizes the supply of electricity, but electricity has not been, and is not, the sole essential for new developments. The lack of industrial enterprise is not to be attributed to any defect in availability or price of electricity. The economic condition of the Highlands has not changed materially since the Hilliary Committee reported in 1938. The War, if anything, has caused further deterioration through cutting of timber, much of it immature, and restriction of communications, but has, on the other hand, brought greater activity to the ports. Reconstruction cannot be carried out piecemeal but must cover as wide a range of economic factors as the state of our knowledge and the limits of administrative ability will permit.

Reconstruction in the Highlands should be entrusted to a Highland planning authority with powers similar to those of the Tennessee Valley Authority and over-riding control over the North of Scotland