A NEW AGRICULTURAL RESEARCH INSTITUTE

GLASSHOUSE CROPS, MUSHROOMS AND OUTDOOR FLOWERS AND SHRUBS

By DR. E. E. CHEESMAN

Agricultural Research Council

ON the advice of the Agricultural Research Council, the Minister of Agriculture is founding an independent Agricultural Research Institute to promote research on the cultivation of glasshouse crops and mushrooms and of bulbs, flowers and shrubs grown commercially in the open. The announcement marks another step in the evolution of the Agricultural Research Service, and there is interesting history behind it (see also *Nature* of July 18, p. 89).

Forty years ago a group of nursery growers in the Lea Valley north of London were alarmed by the losses caused by pests and diseases on glasshouse crops and realized the need for research to be directed upon means of control. They formed the Nursery and Market Garden Industries' Development Society, Ltd., and, assisted by grants from the Ministry of Agriculture and from three local county councils, started a small experimental centre at Cheshunt.

The venture quickly proved its value, and acquired a reputation more than local. In 1923 the Ministry of Agriculture increased its grant to allow for increase of staff and more laboratory accommodation, on condition that the centre should extend its services beyond the Lea Valley to the glasshouse industry of the whole of Britain. The Experimental and Research Station, Cheshunt, then began to take the form it has to-day. The field of investigation widened to include studies of glasshouse soils with particular reference to the effects of partial sterilization by steaming or other methods, the physiology of glasshouse crops, and new techniques in glasshouse practice generally. The contributions of the Station, under the direction of Dr. W. F. Bewley, to increased production under glass have been set out in a series of annual reports, of which thirty-seven have been published.

When, after the Second World War, the National Agricultural Advisory Service was established, the Station, like other research institutes of similar origins, found itself relieved of direct advisory responsibilities to growers and freer to concentrate on the fundamental scientific questions that underlie the day-to-day practical problems of the industry. It was, however, not equipped to take full advantage of the change in emphasis.

By this time the facilities at Cheshunt had become inadequate for a national glasshouse research station. The Lea Valley had changed in character; the site was hemmed in by urban development and critical work was handicapped by the atmospheric pollution associated with the growth of Greater London. A move that would have been inevitable in any event was made more urgent by damage sustained by the Station during the War, which left the experimental glasshouses in bad condition.

A group appointed jointly by the Agricultural Research Council and the Agricultural Improvement Council to survey the post-war needs of research in the various branches of horticulture recommended that a new site should be found for glasshouse research, and that the opportunity should be taken

to couple with it research into other commercial nursery crops for which no central facilities have hitherto existed, especially flowers grown out of doors.

A long search began for a site combining all the necessary features, one of which is proximity to an important local glasshouse industry. It ended recently with the acquisition of a hundred acres of land at Toddington, near Littlehampton, Sussex. Here the new Institute will begin its work with staff and apparatus transferred from Cheshunt and will have room to extend the Cheshunt programme in several directions.

The better light conditions for which the Worthing district is famous will make possible many studies of plant growth under glass on a scale hitherto impracticable. There is, for example, a promising field in the exact definition of the light and temperature requirements of glasshouse crops, which are known to vary between different varieties and at different stages of development for each variety. With facilities for critical experiments, the new Institute will be able to collaborate more effectively with the National Institute of Agricultural Engineering, which is working on glasshouse design and the control of glasshouse climate and so seeking to find the means of meeting the requirements of plants economically.

In developing new lines of inquiry, the Institute will not abandon the old, for the war against pests and diseases under glass still remains of major importance, and the study of new weapons and tactics deserves the better facilities that will be provided.

OBITUARY

Mr. C. D. le Maistre, C.B.E.

SOME men achieve fame for the number of important jobs they have held; others, like Charles Delacour le Maistre, achieve their ambition by sticking to the same job throughout their working life, building up an organization or a movement from practically nothing to a mature and steadfast entity. The cause built up by le Maistre is that generally referred to as 'industrial standardization'; it has world-wide ramifications, and the national standards bodies set up in more than thirty different countries are directly or indirectly modelled on the British Standards Institution, which, in its earlier years, was built up under le Maistre's supervision. Born in Jersey in 1872, trained as an electrical engineer in South Kensington, he joined the small staff of the Engineering Standards Committee in 1902 and became its secretary in 1916, a post he retained until 1929. In that year the British Engineering Standards Association (the successor to the Engineering Standards Committee) received its Royal Charter, and le Maistre was appointed director. He was thus at the helm when the Association again changed its name, this time to the British Standards Institution, in 1931, and he finally retired from the Institution in 1943, having served as chairman of the Executive Committee during the year 1942-43.

Le Maistre's work in the international sphere, and still in the field of standardization, covered an even longer period, for he was appointed general secretary of the International Electrotechnical Commission on its formation in 1904 and still held that post at the time of his death, on July 5. He became seriously ill, for the first and last time in his energetic life, a few months ago, thus having to cancel his plans

for motoring to Yugoslavia for the meetings of the International Electrical Commission which were held in that country at the end of June. It was a great disappointment to him that for the first time in all these years he had to miss a meeting of the Commission. It will also be a cause of great regret to his many friends throughout the world that le Maistre has died before the jubilee celebrations of the Commission which are being planned for Philadelphia in 1954. He died just before he could be informed of the decision of the Commission to institute an annual lecture to be known as the Charles le Maistre Lecture, to be given by prominent personalities in the field of international standardization.

Charles le Maistre was a member of Council of Aslib for many years, and its chairman during 1949-50. During his association with Aslib, he became interested in the work of the International Federation for Documentation, and it surprised no one but himself that he very soon found himself elected president of the Federation, a post which he held with great distinction from 1946 until 1951.

He joined the Institution of Electrical Engineers as an associate in 1897 and became a full member in 1908. He was an associate member of the Institution of Civil Engineers, a member of the American Institute of Electrical Engineers, and a fellow of the City and Guilds Institute. He had served on the Council of the Institution of Electrical Engineers, and for his services in connexion with standardization

during the First World War le Maistre was awarded the C.B.E. Among the foreign honours bestowed upon him were the knight commander (second degree) of the Royal Swedish Order of Vasa, honorary membership of the Royal Dutch Institution of Engineers and, quite recently, he was made a chevalier of the Legion of Honour (France).

Long after most men of his age would have claimed a well-earned rest after so active a life, le Maistre continued to thrive on work and he was constantly making journeys all over the Continent on behalf of the International Electrotechnical Commission or the International Federation for Documentation. When not abroad he regularly played squash, an energetic game even for a far younger man, and he devoted many of his leisure hours to his beloved bees. He took his hobby seriously and was chairman of the Surrey Beekeepers' Association during 1946-47.

Le Maistre had the happy knack of drawing the best out of all his colleagues, and his steadfastness of purpose earned him the respect of all with whom he came into contact. He firmly believed in his mission, not for the sake of standardization itself, but because he was convinced that the only salvation for mankind was the creation of a spirit of real understanding between individuals and between peoples, and the work on which he was engaged was a step in that direction. The foundations on which this work is now forging ahead in all parts of the world were indeed soundly laid by that pioneer Charles Delacour le Maistre.

J. F. STANLEY

NEWS and VIEWS

The Drummond Memorial Fund

WITH the object of commemorating the name and work of Sir Jack Drummond, who, together with Lady Drummond and their daughter Elizabeth Anne, were murdered on August 4 (see *Nature*, 170, 229, 401; 1952), a Committee has been formed under the chairmanship of Lord Woolton, and over Lord Woolton's name an appeal has been issued. The members of the Committee are Lord Horder and Prof. E. C. Dodds, representing medicine; Sir Harold Himsworth, secretary of the Medical Research Council; Sir William Slater, secretary of the Agricultural Research Council; Dr. Norman Wright, of the Ministry of Food; Profs. A. C. Chibnall, G. F. Marrian and F. G. Young, representing biochemistry; Mr. Leonard Anderson, Dr. H. J. Channon, Sir Harry Jephcott and Mr. Wilfred Vernon, representing industry; and Dr. Ifor Evans, provost of University College, London. The Committee considers that the most suitable memorial would be an endowed Drummond Research Fellowship dealing with Sir Jack's main interest, namely, nutrition. A fund of about £25,000 is required, which will be administered by a body of university trustees, and the Fellowship will be tenable at any university or appropriate research institute. Subscriptions, whether by gift or covenant, should be addressed to the Drummond Memorial Fund, c/o Westminster Bank, Ltd., 154 Harley Street, London, W.1.

Applied Mathematics at Nottingham:

Dr. Rodney Hill

THE Department of Mathematics at the University of Nottingham is expanding, and from the beginning

of the 1953-54 session will include a professor of applied mathematics in addition to the professor of pure mathematics. Dr. Rodney Hill, now Research Fellow in theoretical mechanics in the University of Bristol, has been appointed to the new chair. His appointment at the early age of thirty-two is a fitting testimony to the outstanding work he has done in the relatively new and difficult field of mathematical plasticity. Dr. Hill graduated at Cambridge in 1941, and after a period spent in research there he joined the theoretical branch of the Armament Research Department. He returned to Cambridge after the War and worked there until 1948, when he became head of the Solid Mechanics Section of the British Iron and Steel Research Association laboratory at Sheffield. During his stay there he accomplished some notable work on the rolling and forming of metals. In 1950 he was appointed Research Fellow in theoretical mechanics in the University of Bristol, and there he collaborated with others engaged on theoretical and experimental investigations. His contributions to the theory of plasticity are contained in some thirty papers which he has written since 1945, either alone or in collaboration with others, and in a book, "The Mathematical Theory of Plasticity", published in 1950. This outstanding book is likely to remain for some time to come the standard work on the foundations of the subject. Last year he was appointed joint editor of the new international *Journal of the Mechanics and Physics of Solids*. The University of Nottingham can look forward to a period of development in applied mathematics and to the formation of close and valuable links with industrial research in Dr. Hill's field.