of the problems to be solved, that have made necessary the provision of adequate and intelligent facilities for plant breeding. No longer can we afford to rely on a division of science into the pure and the applied, and wait for a piece of research to be completed in its appropriate pigeon-hole before further progress is attempted. Nor can we expect a science without scientists, and the training of a plant breeder presents yet another of those educational problems which most university curricula have so far failed to solve. WATKIN WILLIAMS

UNIVERSITY OF OXFORD SCHOOL OF FORESTRY

ON October 1, the University of Oxford School of Forestry celebrated its golden jubilee in the Imperial Forestry Institute, which has been its home since 1950, and in St. John's College, which has been very closely associated with it throughout the fifty years of its existence. When the Royal Indian Engineering College at Coopers Hill (near Windsor) closed in 1905, training for the Indian Forest Service which had been given there since 1888 was transferred to Oxford, temporary accommodation having been secured to serve until the building promised by St. John's was ready. The director, Dr. (afterwards Sir William) Schlich, and his assistant W. R. Fisher brought over the current class of twelve probationers and thus opened the first university forestry school in Britain (or indeed the British Empire), though Edinburgh already had a lecturer in forestry. The senior of this group, A. E. Osmaston, officiated at the planting of a jubilee oak tree at the recent celebrations. This was done in Bagley Wood, which has been continuously available to the School through the generosity of St. John's, the owner of the wood for four centuries. Mr. Osmaston is one of a famous forestry family of which seven members are serving or have served in the Forest Services of India, Britain and the Colonies ; three were present on this occasion. He was assisted by one of the present students, and a gathering of about 130 persons, nearly all former students or members of the staff, witnessed the ceremony.

The jubilee address was delivered by Sir Harold Glover, one of the first students to read forestry in Oxford, his year being headed by the late Lord Robinson, sometime chairman of the Forestry Commission. Many of that year took degrees in natural sciences, as well as the Forestry Diploma. Sir Harold joined the Indian Forest Service, Oxford having been for some years the only training centre for Indian Service probationers ; between 1907 and 1932, when recruitment in the United Kingdom ceased, 213 out of the total intake of 306 had passed through the School. The last five inspectors-general in India have been Oxford graduates, including the present holder of that important post.

In 1924, the School was strengthened by the establishment of the Imperial Forestry Institute to provide a centre for higher education and research for those parts of the Empire which needed such facilities : though the Institute was in no sense a part of the School, many facilities such as the library were shared, and members of the Institute staff undertook some of the teaching. The two organizations were amalgamated in 1938 to form the University Department of Forestry. In the early years, only a diploma was awarded on the work of the two or three years the course covered, but a pass degree was granted in 1918, and finally an honours degree in 1944.

The School has provided 144 recruits to the Colonial Forest Service, and since the opening of the Institute, practically all members of that Service have attended postgraduate courses in Oxford. The proportion of the officers of the United Kingdom Forestry Commission trained at Oxford has been lower, but forty-four are serving at present, and the Commission's research staff worked at Oxford before the research station at Alice Holt was established.

A lunch was given in St. John's College, the speaker being Sir Henry Beresford-Peirse, deputy director-general of the Forestry Commission. He made particular reference to the very wide range of subjects covered in a university forestry course, giving it an educational value much beyond a technical training.

The average number of students over the past three years has been fifty-eight, and the number graduating twelve. There are at present students from the United Kingdom, Canada, New Zealand, South Africa, India, Pakistan, Burma, Ceylon and several Colonies. The staff now consists of the professor, one reader, sixteen demonstrators, twenty technical assistants, twelve secretarial and librarian employees and six others, and the annual expenditure approximates £50,000. H. G. CHAMPION

OBITUARIES

Prof. H. K. Mookerjee

THE death occurred very suddenly on August 18 of Prof. H. K. Mookerjee, professor and head of the Department of Zoology of the University of Calcutta. Born in 1898, Mookerjee's undergraduate days were spent in the Presidency College, Calcutta. He won the University Gold Medal in zoology in 1924, and joined the University as assistant lecturer in 1925. As the Guruprasanna Ghose Scholar, Mookerjee went to London in 1926, and worked in the Imperial College of Science and Technology under the late Prof. E. W. MacBride. His work on the development of the vertebral column attracted considerable attention. He was Sara Marshal Scholar in the Imperial College during 1927–28, and Ghose Travelling Fellow of the University of Calcutta during 1928–29. He was awarded the D.Sc. of the University of London in 1930. He rejoined the University of Calcutta on his return, and in 1933 became the University professor of zoology, which post he filled with great credit until the end of his life.

Prof. H. K. Mookerjee's important contribution in the field of embryology and evolution was based on the study of development of the axial skeleton of practically all groups of the chordates starting from *Balanoglossus* right up to man. He pointed out further that the centrum of all the chordates is formed in the same manner according to a basic plan ; in the development of the vertebral centrum of all the chordates, from *Amphioxus* up to the mammals, only notochord, chord sheath, and the pericordal tube formed around the latter, take part, according to Mookerjee, but not the arch-bases or other elements claimed previously. Besides this hypothesis, Mookerjee also pointed out the many characteristic changes that take place in a non-plastic organ like the vertebral column along with change

of environment. Very recently, he had shown that the so-called notochord of *Balanoglossus* is really the true dorsal nerve cord with a definite neurocœl. He utilized this finding to draw up the affinity of the *Balanoglossus* in a recent paper.

Prof. Mookerjee was elected president of the Zoology Section of the Indian Science Congress in 1936 and was elected a Fellow of the National Institute of Sciences of India in 1939. He was associated with various learned bodies and connected with different Indian universities in various capacities. He acted as a secretary of the Asiatic Society in the Natural History Section and was the founder-president of the Zoological Society of Bengal. He was an important member of the senate and syndicate of the University of Calcutta.

Prof. Mookerjee was responsible for initiating fishery research in the University, and himself made notable contributions to the life-history of fresh-water fishes of Bengal. He was admired and respected by all who came in contact with him. He leaves his mother, wife and one son and three daughters and a host of friends and admirers who mourn his loss.

S. R. Bose

Mr. Howard Evans

The death occurred, suddenly, on September 11, of Mr. Howard Evans, superintendent of the Laboratory of the Development and Research Department of the Mond Nickel Co., Ltd.

Mr. Evans was born in 1907. He was educated at the Grammar School, Penistone, after which he was for five years junior chemist at the Penistone Iron and Steel Works of Cammell Laird and Co., Ltd. During this period he was a student at the University of Sheffield, and graduated A.Met. with the award of the Mappin Medal and Premium in 1930. From 1930 until 1938 he was employed as research metallurgist in the Physics Section of the Research Department of the Metropolitan-Vickers Electrical Co., Ltd., Manchester, except for one year, when he was working on iron–aluminium alloys on a George Senior fellowship at the University of Sheffield. It was during this period that he co-operated with Dr. C. Sykes in his classic work on order/disorder transformations.

In 1938, Mr. Evans joined the Development and Research Department of the Mond Nickel Co., Ltd., as a research metallurgist in the Birmingham Laboratory, under Dr. L. B. Pfeil. After a period of activity on various research projects relating to steel, including work on steel castings and on temper brittleness, he became closely associated with war-time investigations undertaken by that company on behalf of government departments. To all this work he brought outstanding energy and enthusiasm, a meticulous attention to detail and insistence on an excellence of performance from which he would never depart.

In 1945 he was appointed principal assistant to the superintendent, and in May 1954 superintendent of the Laboratory. In these capacities he was connected with a wide variety of research projects in both the ferrous and non-ferrous fields, and his indefatigable zeal was a constant inspiration to those with whom he worked.

Mr. Evans was elected a Fellow of the Institution of Metallurgists in 1946 and was a member of many metallurgical organizations, to which he presented numerous technical papers. During the year 1954–55 he was president of the Birmingham Metallurgical Society.

A notable feature of Mr. Evans's activities was his sincere interest in the training and education of junior members of his staff, many of whom have profited by his sympathetic guidance and encouragement when embarking upon a metallurgical career. His interest in technical education led him to undertake part-time lecturing for some years at the Birmingham College of Technology, despite his very heavy duties in other fields. He joined with typical wholeheartedness and no little skill in the recreational life of his colleagues and continued to take part in many of their sporting activities right up to the time of his death.

In all the many circles in which he moved, Howard Evans will long be remembered for his enthusiasm, initiative and ability to get things done.

W. Steven

NEWS and VIEWS

Editor of *Science* and *The Scientific Monthly*: Prof. G. DuShane

Prof. Graham DuShane, of Stanford University, has been appointed editor of *Science* and *The Scientific Monthly*, the two journals published by the American Association for the Advancement of Science. Prof. DuShane, who is forty-five years old, took his Ph.D. degree at Yale in 1934 for embryological work and then did two years of research in the University of Iowa and in Stanford University. The following ten years were spent in the University of Chicago, teaching in the Department of Zoology and carrying out research on problems of amphibian morphogenesis. In 1946 he moved to Stanford University where, in addition to his work in embryology, he devoted himself to the development of the University's programme in general biology and gave freely of his services for editorial consultation and faculty committee activities and as the president of the Stanford chapter of the American Association of University Professors. Prof. DuShane goes to the editorship of *Science* and *The Scientific Monthly* initially on the basis of a year's leave of absence from Stanford. The breadth of his scientific knowledge, his facility in writing and editing, and his interest in the accurate communication of the findings and conditions of science are good auguries for the future of the Association's journals.

United Kingdom Agricultural and Food Representative in the United States: Mr. O. G. Williams

Mr. Owen G. Williams, provincial grassland officer for the East Midland Province of the National Agricultural Advisory Service, has been appointed to the new post of United Kingdom assistant agricultural and food attaché in Washington, D.C. The post of agricultural adviser (technical) has been discontinued, but its main functions will be incorporated in the new assistant attaché post. Mr. N. F. McCann, the former agricultural adviser (technical), will take up a new appointment as deputy director of the