



logy from 1926-38. From 1939-45 he served as Lt-Colonel in the Grenadier Guards, GSO Psychological Warfare. At the end of the war he became Professor of Embryology at University College, London, a position which he held until he was appointed Director of the British Museum (Natural History) in 1950. He resigned in 1960 and became a director of Thomas Nelson, Publishers. In 1967 he settled in Switzerland, whence at the time of his death he had just returned to live in England.

Among his honours may be mentioned Knight (1954), Fellow (and Darwin Medallist) of the Royal Society, DSc (Oxon), Hon. ScD (Cantab), Hon. D-ès-L (Lausanne), Hon. D de l'Univ (Bordeaux), Chev Lég d'Hon.

One of the most remarkable features of de Beer's work is the unflinching high standard of scholarship that he maintained in spite of the diversity and scale of his output. He wrote 16 books and 110 articles on zoology, 5 books and 40 articles on the history of science, 9 books and 52 articles of a biographical character, 9 books and 80 articles on Switzerland, 3 books and 12 articles on military affairs, modern and ancient, and 3 books and 18 articles on a series of varied topics. The industry and learning involved seem overwhelming, especially in a man who found time for wide artistic and general interests; he was a Trustee of the National Portrait Gallery and a Fellow of the Society of Antiquaries.

De Beer's researches on comparative anatomy and embryology were particularly concerned with the vertebrate head, especially its segmentation. To this subject he made notable contributions. They were much assisted by his method of producing large-scale models in plaster of Paris, each built up from a sequence of microscope slides. His collection of these reconstructions, representing different stages in development, not only threw light upon fundamental vertebrate anatomy but pro-

vided teaching material of great value. In particular, they demonstrate the developmental stages from the chondrocranium to the bony skull. In carrying out that work he especially studied a number of sharks, primitive and specialized bony fish and the shrew. Related to the same subject was his investigation of the pituitary from the lamprey upwards, upon which is based the evolutionary sequence of that organ as accepted today.

More difficult to evaluate in its contribution to modern zoology was the rise of experimental embryology under the leadership of Ross Harrison and Hans Spemann, so fully described by de Beer in books and articles. It may be hard to realize how greatly that subject dominated zoological thought in the 1920s. Those establishing it then may perhaps have laid a foundation upon which the superstructure is in the main yet to be built.

During the decades when he was Director of the Natural History Museum, although deeply involved in administration, de Beer was bringing together the materials for his great *Atlas of Evolution* (Nelson, London). This, however, was not published until 1964.

Though comparative anatomy and embryology were the principal subjects of his research, he read widely and was keenly interested in all aspects of zoology and its history. In particular, he was fascinated by the work and writings of Darwin, upon which he threw much light; and he produced a reprint of the sixth edition of the *Origin of the Species*, the last to appear during its author's lifetime, to which he added a discriminating preface. He hailed the experimental study of evolution in wild populations, a subject developed during the last forty years or so, as the fulfilment of Darwin's hopes.

De Beer was essentially a man of culture; and he who was himself a distinguished scientist looked with no favour upon those whose interest is limited to science. Indeed, he personified a type more frequent in his youth, when the aim of education was to educate rather than to qualify candidates to pass examinations.

Among his many biographical, historical and other writings, those dealing with Hannibal's march into Italy have aroused special interest. They seem to have solved the age-old problem of the route by which the general brought his troops and his elephants across the Alps.

No assessment, however brief, of de Beer's life and character should omit reference to his outstanding ability as a linguist. He spoke German almost perfectly, his Italian was fluent and polished and, without raising a doubt,

he could pass as a Frenchman in France.

Casual acquaintances tended to find his encyclopaedic knowledge poured out on the widest variety of topics rather daunting in conversation, unless they realized that his interest in their remarks, if worthwhile, could be as keen as in anything he was saying himself. Those who knew him well discovered that in his friendship they possessed something enduring, for he was always to be relied upon, always the same.

Announcements

University News

Professor A. C. Turnbull, Welsh National School of Medicine, has been appointed Nuffield professor of obstetrics and gynaecology in the **University of Oxford**.

Appointments

Mr W. B. S. Walker has been appointed a part-time member of the **UK Atomic Energy Authority**.

Miscellaneous

The 1971 **Kalinga prize** for the popularization of science has been awarded to **Professor Pierre Auger**.

The Polish government has awarded the Knights' Cross of the Order of *Polonia Restituta* to two Soviet biologists, **Academicians Pavel P. Luk'yanenko** and **Vasilii N. Remeslo**, for their work in developing the high-yielding strains of wheat 'Mironovskaya-808', 'Avrora' and 'Kavkaz', which together now account for some 25% (by area) of all Polish wheat growing.

The **Ramsay Memorial Fellowships** trustees have made the following awards of new fellowships for the year 1972-1973: a general (British) fellowship to Dr P. J. Derrick at University College London; a Glasgow fellowship to Dr D. N. J. White at the University of Glasgow; a Canadian fellowship to P. J. Young at the Davy Faraday Research Laboratory of the Royal Institution; two Netherlands fellowships to Mr Yoe Han Thoeng at Royal Holloway College, University of London, and Dr J. F. M. Aarts at University College London, respectively; a New Zealand fellowship to Mr Charles R. Clark at the University of Stirling; a Spanish fellowship to Dr R. M. Utrilla at the Davy Faraday Research Laboratory of the Royal Institution. The trustees have renewed the fellowships of Dr F. M. Benoit, Dr P. Chamberlain, Mr B. L. Dickson, Dr S. Uemura and Dr L. V. Woodcock for 1972-73.