

OBITUARIES

Prof. J. Bayley Butler

THE death of Prof. James Bayley Butler, emeritus professor of zoology, University College, Dublin, on February 21, in his eightieth year, has removed from the academic life of Dublin a distinguished and genial man. It is true to say that his life was varied, active and a very happy one. Born in India, educated in England and Ireland, he followed his medical course in the Catholic University of Ireland and graduated with both the M.B. and M.A. degrees. He was singled out for an academic life and was appointed as a tutor in anatomy in his Alma Mater, gaining the reputation of a gifted teacher and dissector. On the establishment of the National University of Ireland, Dr. Bayley Butler was appointed assistant to Prof. George Sigerson, poet and zoologist, at University College, Dublin. Some years later he became professor of botany in the same College, but he succeeded Sigerson on the latter's retirement in 1922. During the First World War he saw service with the Royal Army Medical Corps.

Prof. Bayley Butler was a member of the Royal Irish Academy, serving three periods on its Council; he was also a member of the Fauna and Flora Committee. At the time of his death he was vice-president and member of the Council of the Royal Dublin Society. He was one of the prime movers of its Bicentenary Exhibition in 1931 and was associated with subsequent exhibition meetings. He had a long association with the Royal Zoological Society, Dublin, serving on its Council since 1912. Later, he was to become one of the Society's honorary vice-presidents.

Prof. Bayley Butler is perhaps best known as an applied zoologist. He gained a remarkable reputation as an expert witness in court cases, both in Ireland and abroad. In his later years he became interested in the distribution and control of wood-boring beetles and of *Serpula lacrymans*, the cause of dry rot, and became scientific adviser to an Irish firm manufacturing both insecticides and fungicides. His work on the chytridiacean parasite, *Catenaria anguillulae*, in the ova of *Fasciola hepatica*, is known to parasitologists.

One could speak at great length of Dr. Bayley Butler's remarkable versatility. He sold the patent of a resinous water-proofing material used in the preparation of field maps to the American Army during the Second World War. His work at Glenlion, Baily, Co. Dublin, is familiar to both architect and botanist. He designed and built his home by direct labour, and the Roman and Alpine gardens were opened each year for the Jubilee Nurses' Fund and had the reward of remarkable attendances. For some years, though in failing health, he was engaged in writing his autobiography. It is hoped that the records of a very remarkable life will be published later.

This appreciation should not end without mention of a very important side of Prof. Bayley Butler's personality, the professor-student relationship, a relationship inclined to be overlooked to-day with increasing student numbers. One remembers the expeditions to Dalkey Island, the Christmas parties at his home in Ranelagh Road and, later, the garden parties at Glenlion, Baily, Co. Dublin, where frog, cockroach and snail races were novel features of very enjoyable afternoons. Dr. Bayley Butler was never happier than as host on such occasions.

He will be remembered by his students, colleagues and friends as a man of remarkable intellect, of great understanding and gentle disposition. C. F. HUMPHRIES

Dr. A. H. R. Goldie, C.B.E.

DR. A. H. R. GOLDIE, who died at his home in Stirling on January 24, aged seventy-five, was deputy director in charge of research when he retired from the Meteorological Office in 1953.

With the Dux Medal from his school at the Harris Academy, Dundee, and a first-class honours degree in mathematics and natural philosophy from the University of St. Andrews in 1909, Goldie went on to St. John's College, Cambridge, where he was a wrangler in the mathematical tripos of 1913. Deciding on meteorology as a career, he spent two years in weather forecasting and the Meteorological Office Observatories at Falmouth and Eskdalemuir before he joined the Meteorological Section of the Royal Engineers, newly formed under Capt. (later Lt.-Col.) E. Gold. In his duties with the British Army, first in France and later on the Italian front, Goldie enthusiastically applied Gold's recently developed theory of the gradient wind to the preparations of reports for the artillery, a practice which was soon acknowledged by the British and German Army Staffs as providing accurate information for shooting when balloon ascents could not be made.

When he returned to the Meteorological Office in 1919 with the rank of major, Goldie was for five years in control of local forecasting centres at civil and military airfields before he was appointed superintendent of the Meteorological Office, Edinburgh, where he remained until 1938. This was Goldie's most productive scientific period. His early interest in what goes on in the upper air above weather systems had matured, and his keen powers of interpreting observational data (which had led him in 1923 to direct attention for the first time to the occurrence of the laminated tropopause) backed by a thorough grasp of the various problems he tackled bore fruit in a valuable series of papers. He wrote five Geophysical Memoirs on the distribution of wind and rainfall around depressions and on the kinematical features of depressions treated as vortices; he also contributed papers to the *Quarterly Journal of the Royal Meteorological Society* and to the *Transactions and Proceedings of the Royal Society of Edinburgh*. These were on such diverse themes as "Waves at an Approximately Horizontal Surface of Discontinuity in the Atmosphere", "The Structure and Movement of the Atmosphere as Affected by Diurnal Variations" and "The Electric Field in Terrestrial Magnetic Storms". Though well enough known to the staff at the Observatories at Lerwick and Eskdalemuir which he controlled at that time, the insight into geomagnetic phenomena shown in the last-named paper surprised many of Goldie's meteorological contemporaries: its value as a contribution to geomagnetic theory was recognized by Goldie's appointment as secretary of the International Association of Terrestrial Magnetism and Atmosphere Electricity, a post he held for eleven years.

In 1938 Goldie became the first assistant director (research) in the Meteorological Office, and in this appointment, even with the administrative responsibility of controlling the work of the Instruments, Climatology and Marine Branches added soon after the outbreak of the Second World War, Goldie continued to make important contributions to meteorological theory and practice. He produced an explanation of how aircraft condensation trails are formed, and this led to a means of forecasting the altitudes where they could occur and to the adoption of rules for aircrews on how to avoid making