

the Zoological Society nearly continuously from 1893 until 1911, and was for several years a vice-president. He was a doctor *honoris causa* of Louvain, Giessen and St. Andrews, and received a silver medal from the Société d'Acclimatation de France. In 1935, the American Society of Ichthyologists and Herpetologists elected him as its first honorary member, and in 1937 the country of his birth conferred upon him the Order of Leopold, an honour which gave him great pleasure and of which he was justly proud.

The writer of this notice did not come into contact with Boulenger until shortly after his retirement, but he cherishes the memory of several informal talks and discussions. The kindness and courtesy shown to a beginner by one who was the acknowledged master of his subject will always be remembered, and played no small part in the writer's education in systematic ichthyology.

A naturalized Englishman, Boulenger married Emilie, daughter of Charles Heyman of Brussels, who died in 1936. He leaves three sons, two of whom have adopted zoology as a profession. J. R. N.

Prof. A. J. Ewart, F.R.S.

ALFRED JAMES EWART, who died suddenly at his home near Melbourne on September 12, was the first professor of botany to be appointed in any Australasian university. Born at Liverpool on February 12, 1872, he was educated at Liverpool Institute and the University of Liverpool. He afterwards worked in the Universities of Leipzig (Ph.D.) and Oxford (D.Sc.). After a period as science master at the King Edward School, Bromsgrove, he became lecturer in botany at the Municipal Technical School and deputy professor in the University at Birmingham.

In 1906 the Government of Victoria decided that a successor must be appointed to Baron Sir Ferdinand von Mueller as Government botanist, and that the duties could be combined with those of a chair of botany at the University. For fifteen years, Ewart carried the heavy double burden, spending half his day at the University and half in the Herbarium at the Botanic Gardens, South Yarra, two or three miles away across the city. Ewart was further handicapped by lack of laboratories. Botany in the University had been split from the Department of Biology, and still shared the same building. It was not until 1929 that the Department was able to remove to buildings of its own. Ewart was justly proud of the fine Institute which was officially opened in November of that year. He had been elected a fellow of the Royal Society in 1922.

Ewart is best known to British botanists as a plant physiologist, the translator of Pfeffer's "Plant Physiology" and the author of a monograph on protoplasmic streaming published by the Oxford University Press. At about the time of his appointment to Melbourne he was engaged in work upon the ascent of water in trees (*Phil. Trans.*, 1905 and 1908), but after his arrival in Australia systematic and economic botany occupied most of his time. This

did not prevent his publishing upon such a wide range of subjects as the longevity of seeds, photosynthesis, the chemistry of chlorophyll and the sensitivity of apples to poisons. This last work led him to hold certain views as to the cause of bitter pit in apples by metallic poisoning. His contributions to the flora of Australia number thirty-six papers. He also published a "Flora of the Northern Territory" in 1918 and in 1930 there appeared his "Flora of Victoria", a book of some 1,000 pages with 400 line drawings. This work is of great value to students in that State. Until its appearance, there was only an incomplete flora by von Mueller and the "Flora Australiensis" for reference.

Ewart's duties as a Government botanist compelled him to pay much attention to weeds and poisonous plants. His services were utilized by the Federal Government in connexion with stock poisoning along the overland route from the Northern Territory to Oodnadatta. In the winter of 1924 he visited Central Australia to examine the problem in the field.

Ewart was a man of robust physique. He delighted in country life and hard physical work. He found much pleasure in the labour of clearing and burning bush around his country cottage near Healsville, close to the heart of the giant eucalyptus forests. He was, however, keenly interested in forestry education and in efforts to develop a forest consciousness in Australia. In 1925 he published a "Handbook of Forest Trees" for use in Victoria, and at the time of his death he was chairman of the Forestry Examinations Board.

For the last two years of his life, Ewart had been far from well. He developed heart trouble. His sudden death, at the comparatively early age of sixty-five years, is a severe loss to his friends and colleagues.

T. G. B. O.

WE regret to record the death of Miss Lilius Armstrong (Mrs. S. Boyanus), which took place unexpectedly in London on December 9. Miss Armstrong was one of the foremost exponents of the science of phonetics, and was well known for her studies of the phonetic systems of the African languages. Lilius Armstrong, the daughter of the Rev. J. W. Armstrong, was a graduate of the University of Leeds. She joined the staff of the Department of Phonetics of University College, London, in 1918. Her abilities as research worker, teacher and organizer won her a world-wide reputation, which was recognized when at the close of the academic year 1936-37 the University of London conferred on her the title of reader. Miss Armstrong was the author of a large number of books dealing with the phonetics of English, French, Burmese, Somali and Kikuyu. It is especially in connexion with the two last named that Miss Armstrong's contributions to the study of languages were of especial note. Her phonetic studies put the grammar of these two languages on a new basis, her most remarkable discovery being the function in them of voice pitch, by which in both, she discovered, grammar and meaning are determined.