

## Obituary.

MR. J. J. FLETCHER.

BY the death on May 15, at the age of seventy-six years, of Mr. J. J. Fletcher, who for thirty-three years was secretary of the Linnean Society of New South Wales, Australia has lost one of the ablest and most sincere as well as one of the most beloved of her scientific workers. He was one of the first two Australians to take a science degree at the University of London, and during his visit to England he came under the influence of the late Prof. Francis Balfour at Cambridge, an experience that exercised a lasting influence upon his work and ideals. For the last forty years his life has been devoted to the Linnean Society of New South Wales, and its work bears the imprint of his fine character in the standard which has been maintained throughout all these years. He joined the Society in 1881, and at the time of his death was the second oldest member. During the course of his tenure of the secretaryship of the Linnean Society he also controlled the general management of the Society's affairs and edited the *Proceedings*. But this list of duties gives no adequate idea of the extent of his services to biology in Australia. He took his work as editor very seriously, and few of the contributors to its *Proceedings* failed to receive very material help from him in the lucid presentation of their results and in completing their bibliographical references. He was as modest and tactful as he was helpful.

Since 1881 Mr. Fletcher contributed about thirty-five important papers to the Linnean Society, including twenty-seven zoological papers, dealing largely with kangaroos, earth-worms, and frogs. He was one of the first to investigate closely the embryology of the marsupials, for which purpose he made many expeditions to collect material. His knowledge of the Australian amphibia was unsurpassed. During later years he contributed some botanical papers dealing with phases of eucalyptus and acacia seedlings. The account of his careful study of the families Loranthaceæ and Proteaceæ has unfortunately not been completed. Much of the valuable information he possessed concerning these plants has gone with him, for he was unable to find time to prepare for publication more than a very small percentage of his valuable knowledge.

On his retirement from the position of secretary of the Linnean Society of New South Wales Mr. Fletcher was made president, occupying the chair during the years 1919 and 1920, and his numerous friends presented his portrait to the Society, with a request that it be hung in the Society's hall in recognition of the great work he had so successfully carried out. He was president of the Biology Section at the Melbourne meeting of the Australasian Association for the Advancement of Science in 1900. In 1921 he was honoured by the Royal Society of New South Wales as the recipient of the Clarke Medal, "awarded from time to time for meritorious contributions to the geology, mineralogy, or natural history of Australia." At the time of his death he was a member of the council of the Linnean Society of New South Wales and a trustee of the Australian Museum.

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PROF. C. J. LINTNER.

BIOCHEMISTRY of fermentation has sustained a loss by the death of Geheimer Hofrat Prof. C. J. Lintner, who died at the age of seventy years on April 8 after a long and severe illness. The deceased was the son of Dr. Carl (afterwards Hofrat) Lintner, director of what is now the Agricultural High School, Weihenstephan, who was also the founder of the Scientific Station for Brewing at Munich.

Lintner graduated at Munich in 1882 under Adolf v. Baeyer. After spending some years of work in connexion with agricultural chemistry, he became assistant at the Institut für Garungsgewerbe, Berlin, after which he acted as assistant to Soxhlet at the Landwirtschaftliche Zentralversuchsstation, Munich. In 1888 he was appointed to a chair of technical chemistry at the Technical High School, Munich, becoming "ordentlicher" professor in 1896, his work dealing more particularly with fermentation chemistry.

As regards his researches, Lintner will be chiefly remembered by his work on enzymes, more especially the amylases, and on the transformation products of starch. In 1891 he claimed that one of the products obtained from starch paste when treated with malt amylase is an isomaltose. The existence of this alleged substance was denied by Brown and Morris in 1895, and doubt was thrown on its existence by Ling and Baker in the same year. In 1897, however, Ling and Baker obtained some positive evidence of the truth of Lintner's views, whilst in 1902 Syniewski confirmed the existence of isomaltose and re-named it dextrinose. The existence of the sugar was definitely established by Ling and Nanji in 1923.

Lintner was a man of extreme amiability, and his generous and modest character won for him the esteem of his colleagues and pupils. A. R. L.

PROF. FRANZ VON SOXHLET, emeritus professor of agricultural chemistry at the Technical High School in Munich, died early in May at the age of seventy-eight years. Soxhlet was a native of Brünn, and was appointed to Munich in 1879, where he became director of the central agricultural research station. He was well known for his work on the sterilisation of milk. He did not long survive his distinguished assistant Lintner, whose death was recorded in our issue of June 12 and is referred to again above.

WE regret to announce the following deaths:

Prof. F. N. Cole, professor of mathematics in Columbia University since 1895 and secretary for many years of the American Mathematical Society, distinguished for his work on the theory of groups and the theory of numbers, on May 26, aged sixty-four years.

Dr. Henry Skinner, president in 1909 of the American Entomological Society, who was known for his work on Lepidoptera, on May 30, aged sixty-five years.

Prof. Sidney Irving Smith, professor emeritus of comparative anatomy in the Sheffield Scientific School of Yale University and a member of the National Academy of Sciences since 1884, known for his work on invertebrates, notably crustaceans, on May 7, aged eighty-three years.