

of his great talents. His own country awarded him a Commandership in the Order of the Lion of the Netherlands. Similar decorations were conferred upon him by the Governments of Poland and Norway. In 1913 he received a Nobel Prize for physics. He was an honorary member of practically every learned society in the world. Onnes was awarded the Rumford medal of the Royal Society in 1912 and was elected a foreign member of the Society in 1916.

Turning to his personal side, it is impossible to speak of him without emotion. Onnes was one of the most genial, kind-hearted, and accessible men who ever lived. He made unremitting efforts towards the feeding of children in the destitute areas of Europe in the years immediately following the War. To young men, he was an inspiration. The writer will always remember, with gratitude, his extraordinary kindness and hospitality. He practically kept 'open house.'

Onnes's scientific memory is imperishable, and his personality will never be forgotten by any one who had the privilege of knowing him.

F. A. FREETH.

PROF. F. Y. EDGEWORTH.

By the death of Prof. Francis Ysidro Edgeworth fellow of All Souls College and emeritus professor of political economy at Oxford, on February 13, at eighty-one years of age, economists and statisticians alike have suffered a heavy loss. Born at Edgeworthstown, Ireland, in 1845, he was educated at Trinity College, Dublin, and Balliol College, Oxford, and was called to the Bar in 1877. Always a man of the widest interests—classic, mathematician, and philosopher—he was some time in finding his *métier*. Ethics and logic first gave scope to his abilities, but with his appointment as Tooke professor of political economy at King's College, London, in 1890, and his migration to Oxford as Drummond professor in 1891, the trend of his life's work was fixed.

On the foundation of the Royal Economic Society in 1890, Edgeworth became editor of its organ, the *Economic Journal*, and but for one short interval remained co-editor until his death. His early volume, "Mathematical Psychics" (Kegan Paul, 1881), dealing with the application of mathematical methods to economics, is in many ways very characteristic, not only in subject but also in style; in the fact that nearly half the small volume consists of appendices, as many of his later papers bristle with footnotes, and in the adornment of the text by quotations from the Greek. Olympian Zeus, Here, and Athena are but rare visitors to the pages of most economists! His numerous economic writings, for the most part on abstract theory and covering a very wide field, were recently reprinted by the Society in three handsome volumes (Macmillan and Co., 1925), and well exhibit the detached and acutely analytical character of his mind. A fellow of the Royal Statistical Society since 1883, he was awarded the Guy gold medal of the Society in 1907, and in 1912-14 held the office of president.

In statistics, Edgeworth's work was mostly concerned with the theory of error, averages, the normal distribution and its generalisations, and—as mundane a subject as perhaps he cared to touch—index-numbers. He was secretary of the British Association Committee "ap-

pointed for the purpose of investigating the best methods of ascertaining and measuring variations in the value of the monetary standard" and responsible for its classical reports (1887-90). The subjects chosen for his two presidential addresses to the Royal Statistical Society, "On the Use of the Theory of Probabilities in Statistics relating to Society" (1912) and "On the Use of Analytical Geometry to represent Certain Kinds of Statistics" (1913), show the bent of his mind. From the first paper he contributed to the very last—a note on "The Element of Probability in Index-numbers" in the *Journal of the Royal Statistical Society* for last July—all exhibit his lively but distinctly difficult style, leaping from one illustration to another: fluctuations of sampling in human statistics elucidated indifferently by counts he had made of the numbers of wasps entering and leaving a nest, or the numbers of dactyls in Virgilian hexameters. Young to the last, in spite of his years, courteous, humorous, and kindly, he will be greatly missed.

REV. S. J. WHITMEE.

THE Rev. Samuel James Whitmee, who died in London on December 10, was born at Stagsden, Bedfordshire, in 1838, and went to Samoa on behalf of the London Missionary Society in 1863, where he remained until 1877. During this period he contributed many notes to NATURE, including "Earthquakes in the Samoan Islands, South Pacific," "Origin of Cyclones," "Meteors in South Pacific," "Fauna and Flora of New Guinea and the Pacific Islands," and in vol. 12 (1875) a criticism of Prof. Dana's review of Darwin's "Coral Reefs," entitled "Mr. Darwin and Prof. Dana on the Influence of Volcanic Action in preventing the Growth of Corals." His other publication included a list of Samoan birds in *Ibis*, vol. 5; "On the Manifestation of Anger, Fear and other Passions in Fishes" in the *Proceedings of the Zoological Society* for 1878; and a paper on "The Ethnology of the Pacific" in the *Victoria Institute Journal*, vol. 14 (1881).

Mr. Whitmee collected and forwarded to Kew numerous botanical specimens, the ferns of which formed the subject of two papers by Dr. J. G. Baker in the *Journal of Botany* for 1876, in which fourteen new species were described. His other natural history specimens were sent to the British Museum.

Returning to England in 1877, Mr. Whitmee engaged in ministerial work, but returned to Samoa in 1891, where he became the close friend of R. L. Stevenson, to whom he taught the Samoan language. Whitmee finally returned to England in 1894 and settled down at Barnet.

C. H. W.

WE regret to announce the following deaths:

Prof. A. R. Cushny, F.R.S., professor of materia medica and pharmacology in the University of Edinburgh, on February 25, aged sixty years.

Prof. F. Roth, emeritus professor of forestry in the University of Michigan, known for his work on the technical properties of timber, on December 4, aged sixty-seven years.

Mr. W. F. Wells, president in 1911 of the British Pharmaceutical Conference and twice president of the Pharmaceutical Society of Ireland, on January 28, aged seventy-six years.