

intuitive insight that enabled him to go directly to the heart of the problem. He also carried an aura of intense integrity, and in his presence insincerity and pretentiousness seemed to wither. He was called upon to serve on many committees, both administrative and scientific, and his advice was much sought by universities and Government departments.

To his staff and students Muir was to some extent an enigma. He evoked in them an outstanding affection and loyalty that was entirely uncourted, and in his professional life-time he was something of a legend, many apocryphal tales being told of him. Robert Muir was a highly cultured man, interested in art, literature and music, and he combined these with a keen delight in sport, especially golf and angling. He was knighted in 1934 and was the recipient of many honorary doctorates and fellowships.

D. F. CAPPELL

#### Sir Guy Marshall, K.C.M.G., F.R.S.

SIR GUY ANSTRUTHER KNOX MARSHALL, director of the Imperial (now Commonwealth) Institute of Entomology during 1913-42, died in London on April 8 at the age of eighty-seven.

Marshall was born in India in 1871 and educated at Charterhouse. Having been unsuccessful in entering the Indian Civil Service, he joined a firm of mining engineers in Salisbury, Southern Rhodesia, in 1895. His intense interest in natural history and acute powers of observation had ample scope in Rhodesia and, in collaboration with the late Sir Edward Poulton, and inspired by him, he published a paper on his observations in the *Proceedings of the Royal Entomological Society of London* of 1902. In 1906 he returned to Great Britain determined to devote his life to entomology, and in 1909 he was appointed scientific secretary to the Entomological Research Committee (Tropical Africa) by the Secretary of State for the Colonies. Almost immediately he started the publication of the now well-known *Bulletin of Entomological Research*, and his energy and enthusiasm were such that in 1913 an Imperial Bureau of Entomology was established. This new organization embraced, and was supported by, all the countries of the British Empire; it was to be a centre of information with two main functions, to issue a monthly periodical giving abstracts of all current literature dealing with noxious insects and to identify injurious insects sent in by workers overseas. The *Review of Applied Entomology*, the abstract journal, first appeared in January 1913 and is now in its forty-seventh volume. At the beginning of 1914 Dr. Sheffield Neave, who had represented the Committee in East Africa since its inception, was appointed assistant director and eventually followed him as director of the Institute in 1942.

The great value of the service that Marshall was building up was quickly recognized by Governments overseas, and first the mycologists of the Commonwealth, and later research workers in other branches, pressed for a similar service. All these services, covering practically all branches of agricultural science, are now grouped together in the organization known as the Commonwealth Agricultural Bureaux.

As adviser on entomological matters to the Colonial Office, he played a very important part between the two World Wars in guiding the development of

entomological work in the Colonies and in advising on specific problems. He had a particular interest in tsetse fly research, stemming from his early experience of this pest in Southern Africa. Throughout his long life he never ceased to stimulate, inspire and help entomologists from the Commonwealth, in their work of controlling insect pests. He was a firm believer in commercial companies and insecticide manufacturers employing their own entomologists, and his influence in this direction did much to raise the standard of insecticide products and the service rendered to the public.

Apart from his other activities, Marshall was a leading specialist on the Curculionidae for more than half a century. From 1902 until his death, he published two hundred works on the systematics of weevils, including the descriptions of 2,269 new species of weevils. His major works were "A Monograph of the Genus *Hipporrhinus*" (1904), a volume of "The Fauna of British India" (1916), "Insects of Samoa" (1931), "Entomological Results of the Swedish Expedition 1914 to Burma and British India" (1948) and "The Otiorrhynchine Curculionidae of the tribe Celeuthetini" (1956). He identified the large quantities of weevil material received at the Institute for determination with great promptitude, and he continued to do so after his retirement in 1942, working constantly at the British Museum until a very few weeks before his death.

Marshall received many honours: hon. D.Sc. (Oxon.) 1916; C.M.G. 1920; F.R.S. 1923; knighthood 1930; K.C.M.G. in 1942. He was a corresponding member of the American Academy of Sciences, Philadelphia, honorary member of the Royal Society of New Zealand, of the National Institute of Science, India, of the Entomological Society of Belgium, of the Entomological Society of Russia and an honorary fellow of the Royal Entomological Society of London.

He married in 1933 and is survived by his wife and two stepsons. He will be sadly missed by a host of friends in Great Britain and abroad.

W. J. HALL

#### Dr. Lynde P. Wheeler

DR. LYNDE P. WHEELER died on February 1, at Roanoke, Virginia, U.S.A., at the age of eighty-four, after a long and active career in physics and radio communication. For many years he was associated with Yale University; he graduated in 1895 and became associate professor of physics during the period 1923-26. In 1918, he also spent some months at the National Bureau of Standards, Washington. On leaving Yale, Dr. Wheeler joined the U.S. Naval Research Laboratory near Washington and, during his ten years service there, he was associated with the application of radio and allied techniques to naval problems. His long experience in radio matters was then made available to the Federal Communications Commission, where he became chief of the Technical Information Section for the period 1936-46. On retirement from the Commission, he became staff-consultant to Pickard and Burns Inc., of Needham, Massachusetts.

Dr. Wheeler was actively associated for many years with the Institute of Radio Engineers (New York), and particularly with its Washington section. He was elected a Fellow of the Institute in 1928, and served as president in 1943.