

of outlook were important factors in making him a most successful chairman of the many university committees on which he served. His work as acting vice-chancellor of the University of Liverpool for one session was much appreciated.

Wilberforce vacated the Lyon Jones chair of physics in 1935 in full vigour. He continued to serve on the committee of the Liverpool Maternity Hospital, of which he had been vice-president for more than twenty years, and on the committee of the Liverpool Radium Institute, besides taking an active interest in church work.

No account of Wilberforce would be complete without reference to his mountaineering activities and his great skill as a skater, which he maintained almost to the time of his death in his eighty-third year.

R. W. ROBERTS.

Sir Thomas Ranken Lyle, F.R.S.

FORMER students of the University of Melbourne in all parts of the world will be sorry at the death in Melbourne of Sir Thomas Ranken Lyle, at the age of eighty-three. Lyle came from Dublin, after an academic career of distinction (enhanced by three years of playing Rugby for Ireland), to the Melbourne chair of natural philosophy in 1889, when the University was in its thirty-sixth year and he in his thirtieth; he held the professorship for more than a quarter-century, and thereafter continued to give valuable services to the State of Victoria until a few years ago.

In the school of physics Lyle had at first much to build up—though on a sound foundation—and he very soon became one of the vigorous group of young professors who in the ensuing years did great work in advancing the University both internally and by reputation. Lyle's direct contributions to physics, especially in the principles of current generation in dynamos, were recognized in 1912 by the fellowship of the Royal Society. His knighthood came in 1922.

In the more elementary parts of his teaching, to students of engineering and medicine as well as science, Lyle imparted even to backward members of a class solid realities and conceptions which endured. For the better students, and in senior work, he laid very fine foundations indeed. No one who was in Lyle's classes could forget his firm good-humour, his benign tolerance of the mathematical weakling. He himself was a strong mathematician, though his first-year men—confusing arithmetic with mathematics—were apt to watch hopefully for the contest for the right result between any of his admirable lecture-bench experiments and his impatient manipulation of a Fuller's slide-rule in working them out. As befitted a good experimenter, any error was always debited to the slide rule. But no student took liberties with Lyle; they all felt too much respect and affection towards him for that. He did not seek this; he received it. His strong and honourable common sense, his shrewdness that stooped to nothing petty, the reserves of his judgment and its cogency when he did give it utterance, helped to make him a force in the whole University and, coupled with a geniality brought from his native land, made him a friend for life of its other best men.

Retiring fairly early from his chair, Lyle was called upon to give advice to the State on educational questions and, especially, on large technical developments: first as chairman of the Electricity Commission of Victoria and then for nearly twenty years

more a member, he did very important public work which, with his impress on the University, has had effects which will endure.

Lyle married Clare Millear in 1892; and their family have made high places of their own in Australian affairs.

J. I. O. MASSON.

Mr. S. E. Winbolt

ARCHAEOLOGY has lost a keen worker by the death, at the age of seventy-six, of Samuel Edward Winbolt. Educated at Christ's Hospital and at Corpus Christi College, Oxford, where he took high classical honours, he returned to Christ's Hospital as a master. There he published some educational editions of the classics and other works on history and English literature. His classical training turned his attention naturally to Roman and kindred archaeology, to which he devoted himself upon his retirement.

Winbolt's most important work was the excavation of the large Roman villa at Folkestone, published in book form, "Roman Folkestone", in 1925; the smaller villa at Southwick, Sussex, owned by the Sussex Archaeological Trust; the posting stations on Stane Street and other detailed investigations upon this Roman road, published recently in "With a Spade on Stane Street", which will be the standard authority on this road; a series of camps of the Early Iron Age in the Weald ranging from Tonbridge to Hascombe; and the rediscovery of the sites of the important local medieval glass industry at Chiddingfold, near Horsham, published in book form, "Wealden Glass" (Cambridge, Hove), in 1933.

Winbolt contributed the Romano-British portion, an important collection of material of the volume on Sussex, in the Victoria County History. He prepared some attractive guides for Bell's county series, including Sussex, Kent, Devon, Somerset and others. He had a gift for the popular exposition of archaeology and one of his last works was a Pelican book on prehistoric Britain, "Britain B.C.". A most helpful correspondent, he had great charm of manner, and the important knack of encouraging beginners and young helpers in archaeology.

I. D. MARGARY.

Prof. L. S. Palmer

PROF. L. S. PALMER, chief in the Division of Agricultural Biochemistry of the Department of Agriculture at the University of Minnesota, died on March 8 at the age of fifty-six. Dr. Palmer had been at the University of Minnesota since 1919 and became head of the division at University Farm a year ago, succeeding the late Dr. Ross A. Gortner. More than thirty years of research and teaching at the Universities of Missouri and Minnesota had earned for him wide recognition as a chemist, especially in the field of dairy science and nutrition. He was the first recipient of the Borden Award for outstanding research in the chemistry of milk.

While Dr. Palmer's investigations carried him into many of the broad phases of nutrition and vitamin values, his principal interest was in such fields as the pigments of milk and butter, the cause of butter defects and storage troubles, the physical and colloid chemistry of milk and the churning process. He carried out extensive research in animal nutrition, with stress on the mineral needs of dairy cattle and the relation of feeding to dairy production and quality.