

Streptococcus forms into three groups, and it was shown that his Group I coincided with *Str. agalactiae*, information which was already known in other countries. He and his colleagues were the first to point out the etiology of his Group II, which is known as *Str. dysgalactiae*. His Group III is now known as *Str. uberis*. Probably the best defence that Minett ever gave for the work which he and his colleagues did is in an article published in the *Journal of Hygiene*, 35, 504 (1935). This was in answer to an attempt by some medical bacteriologists to delve into a veterinary problem. His work also included the demonstration that certain human strains of *Streptococci* could affect the udder of the cow, and

in turn that affected milk may cause an outbreak of human disease. He directed attention to the toxin production of *Staphylococci* of animal sources; these differ in some degree from the human pathogens. His work on Johne's disease was largely concerned with methods of isolation and types of media, in addition to collaborating with others in the diagnosis of the disease, particularly by Johnin.

Minett was a strenuous worker, who expected equal work from his junior colleagues; he appeared stern, but beneath an apparently hard exterior he was warm-hearted and full of fun. His early death is a great loss to British veterinary science.

W. R. WOOLDRIDGE

NEWS and VIEWS

Mr. Cecil Warburton: 100th Birthday

ON February 6, Mr. Cecil Warburton celebrated his hundredth birthday. Mr. Warburton entered Christ's College, Cambridge, in 1876. He became a demonstrator in the School of Agriculture and in the Department of Zoology in the University, and later he was a member of the Quick Laboratory which eventually grew into the Molteno Institute. Mr. Warburton has always had wide interests in general entomology and was for many years honorary zoologist to the Royal Horticultural Society (of which he was elected a life member at the age of ninety-six). He has published papers, etc., on spiders, and wrote the section on Arachnida in the "Cambridge Natural History" (Macmillan). Perhaps his best-known scientific work is on the ticks, in collaboration with the late Prof. G. H. F. Nuttall, which led to the production of the standard monograph on this economically important group of animals. For many years now, Mr. Warburton has been a living confutation of the gerontologists, for he has maintained in almost legendary degree his activity of body and of mind—at least he still plays bridge and chess (at which many years ago he represented the University of Cambridge), he is still a dangerous opponent at croquet, and solves *The Times* crossword puzzle each day. At the luncheon given in his honour on the eve of his birthday by his old College, he responded with a lively speech; he was also entertained at luncheon on his birthday by his colleagues at the Molteno Institute of Parasitology.

Geology at Belfast:

Prof. J. K. Charlesworth

ALTHOUGH The Queen's University in Belfast has an ancestry going back more than a hundred years, its chair of geology was founded only in 1921. The first occupant, Prof. J. K. Charlesworth, this year retires from the service of the University in the proud knowledge that the task of creating a department almost from its foundations is visibly fulfilled in the newly completed building that forms such an adornment to the University's post-war fabric—though it must be a source of keen regret to him that he has been able to occupy his new rooms for so short a time. After graduating at Leeds under P. F. Kendall, Prof. Charlesworth carried out research and obtained his doctorate at Breslau. He finally moved to Belfast from a senior lectureship at Manchester. His academic interests have been mainly in Pleistocene geology, especially in the history of the Ice Age in Britain; and his work has achieved world-

wide distinction for the manner in which he has elucidated late-Glacial changes and described the deposits of the Newer Drift in England and Wales, the recession of the ice in southern Scotland, and the intricacies of successive glaciations in Ireland. These contributions will shortly be rounded off with an elaborate analysis of the glaciation of the Scottish Highlands. In ancillary studies he has discussed the origin of the Irish Sea and of the Irish fauna and flora. He has, however, never been narrowly content with specialist interests, but has used his position to popularize geology as a cultural subject, not least through his recently published book on the geological history of Ireland.

Dr. Alwyn Williams

PROF. CHARLESWORTH is to be succeeded by Dr. Alwyn Williams, a graduate and former Fellow of the University of Wales. While at Aberystwyth, he elucidated the complex structures of the classical Llandeilo district, and began his studies in Lower Palaeozoic fossils. Thereafter he spent a year at the Sedgwick Museum, Cambridge, with Prof. W. B. R. King. In 1948 he went with a Commonwealth fellowship to the United States National Museum, Washington, where he worked with Dr. G. A. Cooper on fossil brachiopods, a group in which his main interest lies. Some of his researches on the morphology and taxonomy of protrematous forms have been the subjects of monographs issued by the American Geological Society. Since 1950 he has been lecturer in geology in the University of Glasgow, and has extended his work on Lower Palaeozoic rocks from Wales to the Southern Uplands. The wide outcrop of similar rocks running south and south-west from Belfast will give him further opportunities of applying his special knowledge when he takes up his appointment in Ireland.

Physics in the National Physical Laboratory:

Dr. Ezer Griffiths, O.B.E., F.R.S.

DR. EZER GRIFFITHS recently retired on his sixty-fifth birthday from his position as a senior principal scientific officer in the Physics Division of the National Physical Laboratory. Appointed shortly before the First World War, Dr. Griffiths had already done outstanding postgraduate research work at University College, Cardiff, which had culminated in two papers (*Phil. Trans. Roy. Soc.*) on the heat capacities of metals, written jointly with Principal E. H. Griffiths. These early interests have been maintained, for Dr. Griffiths has been in charge of the work on heat