rector of Corley, had preceded him and his uncle, the Rev. Canon Potter, had been a fellow. As, in addition, another uncle, Prof. Richard Potter, was a fellow of Queens', Potter rightly regarded himself as a well-established Cambridge man. He was ardent in support of his University on all public occasions. As an undergraduate he read natural science and graduated in 1881. He then read for the Mathematical Tripos, and in 1883 was classed senior optime. Shortly afterwards he was appointed to the post of assistant curator of the Herbarium under Prof. C. C. Babington, which became vacant through the tragic death by drowning of T. H. Corry. He assisted Dr. Walter Gardiner in re-establishing the University Botanical Museum, which had been founded by Prof. Henslow, and in commencing the preservation of botanical specimens in spirit.

Potter began his academic work when what was then known as the 'new botany', introduced by McNab at Dublin and by Huxley and Dyer at South Kensington, was coming to the fore, and when practical laboratory investigation was being developed at Cambridge under the direction of the reader, S. H. Vines. He stressed the new ideas, and the economic importance of plants, in the long-vacation course of lectures he gave on systematic botany, and he arranged excursions and laboratory work. He delivered the first course of lectures given at Cambridge on the geographical distribution of plants. On two occasions he was awarded a Wort's travelling scholarship. In 1886 he went to Portugal and made observations on an alga which lived parasitically on the carapace of the water tortoise. In 1888-89 he studied the tropical flora in Ceylon.

In addition to these travels, Potter went to Heidelberg and attended Prof. Pfister's lectures there. He thus became familiar with the Continental system of classification, and used it in his lectures on systematic botany. In 1894 he translated and edited Dr. E. Warming's "*Handbog i den Systematiske Botanik*" in order to introduce this system to English-speaking botanists.

In 1889, after six years of rich experience, Potter took up a lectureship in botany and biology at Newcastle upon Tyne. In his first term there were only five students in natural history, none reading for a degree. In 1892 a chair was instituted, and Potter was its first occupant. Potter, who could be a determined man, eventually won his uphill fight to secure the recognition of botany as an independent subject at the intermediate and final pass and honours degree examinations. A measure of the success with which he built is the fact that on his retirement from the chair in 1925 he had four lecturers on his staff, and his department, which was fairly well equipped, could accommodate in reasonable comfort the 167 students of pure science, agriculture and medicine who were then attending courses in it.

The link between the Departments of Botany and Agriculture has always been strong. Potter did much in establishing it. The content of his course for agricultural students is indicated by that of his elementary "*Text-book of Agricultural Botany*", which was published in 1893. He also took evening classes for farmers and gardeners. He became interested in problems of plant pathology, and his researches culminated in the major discovery in 1899 that white-rot of turnips is caused by a bacterium, which he named *Pseudomonas destructans*. In his presidential address to the British Mycological Society in 1909 he gave the evidence that led to the

recognition of bacterial diseases of plants, and placed his contribution in its historical setting. His interest in plant pathology and economic mycology was maintained throughout his life, and the subject received much attention in the curriculum he devised for students in science and in agriculture at Newcastle.

As a teacher and examiner, Potter laid great emphasis on experimental physiology. From 1895 (the date of publication of Darwin and Acton's book) onwards, students carried out experiments, even in the elementary agricultural and medical classes and examinations. Potter believed that, in those early days, the University of Durham's schools examination was unique in requiring a practical examination in botany in which each candidate was required to set up and explain a simple experiment and to determine a plant by means of a flora.

Some may regret that after 1910 his main research interest was transferred from plant pathology to electrophysiology, through his reading Dr. A. D. Waller's "*Signs of Life*". Physicists who knew about his work thought that such effects as he obtained were open to interpretations other than those he put on them. He held tenaciously to the idea that electrical effects accompany metabolism and are of primary importance in determining cellular activity. He may have been right. Who knows?

During the First World War Potter showed his ardour by acting for a period as a volunteer in a Newcastle signalling unit raised for home defence, and later by taking Holy orders to relieve younger clergymen required by the Forces. Among his hobbies were campanology and dowsing.

M. THOMAS

Prof. E. Waymouth Reid, F.R.S.

THE death of Prof. E. Waymouth Reid in Edinburgh on March 10 has taken from us one of the pioneers of British physiology. Born in 1863 in Canterbury, the son of a surgeon, he was educated in Sutton Valence Grammar School, and went as a classical scholar to the University of Cambridge. After taking a first-class in anatomy and physiology in the Natural Sciences Tripos in 1883, Waymouth Reid worked in St. Bartholomew's Hospital, and graduated M.B. Thereafter he was for a time assistant electrician in St. Bartholomew's, but soon began his life's work as a physiologist, first as demonstrator and then as lecturer in St. Mary's Hospital Medical School. At the early age of twenty-seven he was appointed to the newly established chair of physiology in University College, Dundee, where he joined a body of highly gifted men who held teaching posts in the recently formed College affiliated to the University of St. Andrews. Waymouth Reid served the University for forty-six years, and after his retirement in 1935 the University of St. Andrews conferred upon him an honorary degree of LL.D.

Waymouth Reid showed his ability in the number and versatility of the published records of his research work. He contributed in 1898 noteworthy articles to Schäfer's "*Text-book of Physiology*" on diffusion, osmosis and filtration, and on secretion and absorption by the skin; and papers in journals on a diversity of topics. He was made a fellow of the Royal Society in 1889, and later on received the honorary degree of Sc.D. from the University of Cambridge.

Waymouth Reid was especially interested in the physical mechanisms of living processes and kept in touch with modern developments. He was an early

worker with X-rays, and investigated their effects on the animal organism, using his own body to its detriment. He was an expert photographer, and his laboratory was at one time richly equipped with apparatus for experimental purposes. At another time he occupied his spare time in the making of elaborate sweetmeats. He was always busy, and everything he did was done thoroughly.

He was largely instrumental in the development of what is now a very big and important concern, namely, the examination and reporting upon pathological material sent in to the College by medical practitioners in Angus, Fife and Perthshire. Much of the early work was done by Waymouth Reid himself, but it became so big that the University Court had to take it over and make special provision for it in the Department of Bacteriology.

Waymouth Reid was a good teacher and did not neglect that side of his Department's work. He was concise, humorous on occasions, and was liked and respected by his students. For some time he acted as dean of the Medical Faculty of the University, and took his share of administrative work. He was for a

period one of the editors of the *Journal of Physiology*, a vice-president of the Section of Physiology at the annual meeting of the British Medical Association in 1898, and president of the Dundee Branch during 1903-4. He also acted as external examiner in physiology for the Royal College of Surgeons, the University of Cambridge, and the Royal College of Veterinary Surgeons.

On his retirement Waymouth Reid went to live in Edinburgh, but failing health lessened his activities, though he retained his mental acuity.

P. T. HERRING

WE regret to announce the following deaths:

Prof. F. O. Bower, F.R.S., professor of botany in the University of Glasgow for more than forty years, on April 11, aged ninety-two years.

Prof. Alexander Ogg, formerly professor of physics in the University of Cape Town, and a past-president of the Royal Society of South Africa, on February 23.

NEWS and VIEWS

Institution of Civil Engineers: James Alfred Ewing Medal

ON the joint recommendation of the presidents of the Royal Society and the Institution of Civil Engineers, the Council of the Institution of Civil Engineers has awarded the James Alfred Ewing Medal for 1947 to Sir John Cockcroft, for specially meritorious contributions to the science of engineering in the field of research. The medal is awarded annually and was founded in 1936 in memory of Sir Alfred Ewing. Sir John Cockcroft succeeded Sir Edward Appleton in May 1939 as Jacksonian professor of natural philosophy in the University of Cambridge. During the War he became director of the Air Defence Research and Experimental Establishment of the Ministry of Supply and a member of the Ministry's Advisory Council on Scientific Research and Technical Development. Later he became director of the Montreal Laboratory of the National Research Council of Canada, and of the Canadian Experimental Atomic Research Plant until early in 1946, when he was appointed director of the Atomic Energy Research and Development Establishment, Harwell, Didcot, formed under the Ministry of Supply to deal with all aspects of the use of atomic energy. He has published various papers on nuclear physics and also on technical subjects. In 1936 he delivered the thirty-seventh Kelvin Lecture before the Institution of Electrical Engineers, taking as his subject "The Transmutation of Matter by High-Energy Particles and Radiators". In 1946 he received the Hopkins Prize from the Cambridge Philosophical Society for researches carried out during the period 1933-39 on the artificial transmutation of elements. Sir John Cockcroft has been concerned with most of the major achievements of the Cavendish Laboratory during the past sixteen years, his advice having been sought on the design of much of its special equipment; he took a leading part in the construction of the cyclotron at Cambridge.

Hatfield Memorial Lecture of the Iron and Steel Institute: Prof. Robert E. Mehl

THE third Hatfield Memorial Lecture of the Iron and Steel Institute will be delivered in London on May 5, in connexion with the annual general meeting of this Institute, by Prof. Robert E. Mehl, of the Carnegie Institute of Pittsburgh. Prof. Mehl, who was born in Lancaster, Pa., on March 30, 1898, received his early training at Franklin and Marshall College, Lancaster, Pa., proceeding eventually to Princeton University, and, as a national research fellow, to Harvard University. He then became superintendent of the Division of Physical Metallurgy at the Naval Research Laboratory, Washington, D.C. (1927-31), inaugurating this division. In 1932 he became director of the Metals Research Laboratory and professor of metallurgy at the Carnegie Institute of Technology, Pittsburgh, Pa., and in 1935 head of the Department of Metallurgical Engineering in the Institute. Prof. Mehl has published many papers on the constitution of alloys, crystal structure, radiography, the electron microscope, the properties of forging steels, general metallurgy, theory of age-hardening, heat-treatment of steel, etc. He translated Gustav Tammann's book on "The States of Aggregation" (1925) and published his own book on the "Metallurgy of Iron and Steel" (in Portuguese) in Sao Paulo in 1944. His "History of Physical Metallurgy" was issued this year by the American Institute of Mining and Metallurgical Engineers.

Royal Zoological Society of Scotland

THE President and Council of the Zoological Society of Scotland have been informed by the Secretary of State for Scotland that the King has been graciously pleased to grant to the Society the privilege of prefixing the title "Royal" to its name, so that the proper title of the Society is now the Royal Zoological Society of Scotland. The Society,