

At the time of his death, Prof. Plimmer was a member of the staff of the Department of Biochemistry at the British Postgraduate Medical School, Hammersmith.

Born on April 25, 1877, the eldest son of Alfred Aders, of Manchester, he adopted the name of his stepfather, Henry George Plimmer, F.R.S., an eminent bacteriologist who undoubtedly influenced him in his choice of a scientific career. He was educated at Dulwich College, University College, and in Geneva and Berlin, and obtained his D.Sc. (London) in 1902 and worked in the Lister Institute for two years as a Grocers' Company research student. In 1904 he returned to University College as an assistant in the Department of Physiological Chemistry, his first teaching post. He was to remain at University College for fifteen fruitful years, during which time he became assistant professor and finally reader in physiological chemistry. He was elected a Fellow of the College in 1906. Together with Bayliss and Starling, he helped to plan and equip the new Physiology School, and he reorganized the teaching of physiological chemistry. His well-known text-book, "Organic and Bio-chemistry", dates from this time, as does the valuable series of "Monographs on Bio-chemistry", of which he was co-editor with Hopkins, and to which he contributed "The Chemical Constitution of the Proteins". Protein analysis, which he had studied in Emil Fischer's laboratory at Berlin, became one of his main lines of research, and he was long regarded as a leading authority on this subject.

Biochemistry was just beginning to be recognized as a subject in its own right, and the time appeared to be ripe for the formation of a club or society with the object of encouraging closer co-operation among workers in this field. The lead was taken by Plimmer and J. A. Gardner. They called a meeting at University College in January 1911, which led to the founding of the Biochemical Society with Plimmer as its first secretary; Gardner became treasurer in 1913. The present flourishing, vigorous Society owes much to the initiative and foresight of these two co-founders, who steered it through its difficult early days. Plimmer was made an honorary member in 1943 and later wrote the "History of the Biochemical Society" up to the time of the First International Congress of Biochemistry held at Cambridge in 1949.

During the First World War, Plimmer was attached to the R.A.M.C. and worked for a time at the Army Medical College, Millbank. He was commissioned to assay the energy values of the common foodstuffs—a task which entailed many thousands of analyses. The results of this work were later published by H.M. Stationery Office.

In 1919 Plimmer was appointed head of the Biochemistry Department at the Rowett Institute for Research in Animal Nutrition, Aberdeen. His old school friend, John Q. Rowett, had generously contributed towards the founding of this Institute, and had also financed the last Antarctic expedition of Sir Ernest Shackleton, another old Dulwich College boy. But Plimmer was not happy away from London and, when the opportunity came, he applied for the chair in chemistry at St. Thomas's Hospital Medical School, London, the post he was destined to occupy with distinction for twenty-one years—from January 1922 until December 1942.

At St. Thomas's Plimmer found congenial colleagues and facilities for research. He was a successful teacher, beloved by his students, to whom he gave every encouragement while exercising strict discipline. His

lectures on inorganic and organic chemistry, biochemistry, toxicology, and the Nightingale Lectures in elementary science for nurses, were models of lucidity. Full of energy and drive, he carried out an astonishing amount of research on the nutritive values of foods and their relative vitamin contents. Plimmer's poultry farm on the roof of his department was a source of great interest and, incidentally, many a delicious meal for his colleagues. He was an advocate of the 'balanced diet', and, together with his wife, wrote several popular books on food values. "Food, Health, Vitamins", written by Prof and Mrs. Plimmer, ran through nine editions and contained their famous 'square meal' chart.

Plimmer loved hard work at his laboratory bench; but he also thoroughly enjoyed his leisure hours at home with his wife and family. Always a keen motorist, he toured extensively on the Continent with his family during vacation. He enjoyed watching first-class cricket, loved good music, frequently visited Glyndebourne, and was an ideal host.

On the outbreak of war in 1939, teaching continued at St. Thomas's until the Hospital was severely damaged by bombs in September 1940. The staff and students then moved to the Manor House, Godalming, and were permitted to use the laboratories in the nearby Charterhouse School. While at Godalming, Plimmer reached the age of sixty-five and retired from St. Thomas's in December 1942. He was too full of energy to remain idle for long, and he gladly accepted Prof. E. J. King's invitation to work in the Biochemistry Department of the British Postgraduate Medical School, Hammersmith. Greatly beloved by all his colleagues, he continued actively working there from January 1943 until the end of his life.

The death of his wife in July 1949 was a great blow to him; but he was comforted by the presence of his eldest daughter and her family, who lived with him until a few months before his death.

JOHN LOWNDES

Prof. Gustave Magnel

THE death of Prof. Gustave Magnel on July 5 deprives civil engineering of one of its leading figures. Prof. Magnel had a world-wide reputation as the originator of the Magnel-Blaton system of prestressing concrete, according to which the prestressing wires are formed into a cable of rectangular section by means of spacer grilles, and are anchored by steel wedges hammered into 'sandwich plates'.

Gustave Paul Robert Magnel was born at Esschen in the province of Antwerp in 1889, and graduated in civil engineering in the University of Ghent in 1912. His early working years were spent in England where, during the First World War, he worked as assistant, and later chief engineer, for the firm of D. G. Somerville and Co., of London.

After the War he returned to Ghent, and to his old University, where he became professor of structures and reinforced concrete, and director of the concrete laboratory. Between the Wars he became one of the earliest enthusiasts for prestressed concrete; it was during the Second World War that he developed his own system of prestressing. The system did much to widen the scope of the new and revolutionary technique of prestressing, and has been used in many different countries for bridges, buildings and circular structures such as tanks and silos. Prof. Magnel himself designed most of the early structures

prestressed by his system—as a consulting engineer he had an international reputation.

As a university professor, Magnel was acknowledged to be outstanding. His lectures were remarkable for their clarity of exposition, and the same quality marked his writings. His numerous technical books are standard text-books; they cover a wide range of subjects, and contain an unusual wealth of practical detail. Chief among his published works are: "Pratique du Calcul du Béton Armé" in four volumes, of which Volume 4 is "Le Béton Précontraint", "Cours de Stabilité des Constructions" in four volumes—the complete University course in structures—and "Le Calcul pratique des Poutres Vierendeel" "Le Béton Précontraint" has been translated into English, and published in Great Britain. He was also the author of numerous papers in French and English (in a paper given before the Institution of Civil Engineers in 1949 he introduced the Magnel-Blaton system of prestressing to Britain), and he initiated the publication of the bilingual periodical *Précontrainte-Prestressing*.

As a lecturer, Prof. Magnel was well known in the United States and in South Africa, as well as in

Britain, his perfect command of English no less than his command of his subject always ensuring him an appreciative audience. Wherever he went he was an outspoken crusader for high-quality concrete and was forthright in his condemnation of slipshod workmanship.

Prof. Magnel had been honoured both in Great Britain and in the United States as well as in Belgium. A member of the Belgian Royal Academy, he was elected a member of the Institution of Structural Engineers in 1934, and of the Institution of Civil Engineers in 1950. He was also a member of the American Society of Civil Engineers and the American Concrete Institute, and a holder of the American Frank P. Brown Medal. He was chairman of the Belgian Prestressed Concrete Group, and senior vice-president of the International Federation of Prestressing. In this capacity his keen intellect, sound judgment and always unruffled courtesy, as well as his genius for smooth organization, will be sadly missed at the forthcoming International Congress at Amsterdam. His dynamic, yet always kindly, personality will be missed by all who knew him.

BETTY CAMPBELL

NEWS and VIEWS

Chemistry at the Imperial College, London :

Prof. E. A. R. Braude

IN taking up the appointment of professor of organic chemistry at the Imperial College of Science and Technology, London, Dr. E. A. R. Braude follows a distinguished line starting with Hofmann and continuing to recent times through Frankland, Armstrong, Tilden, Thorpe and Heilbron. South Kensington has been celebrated not only as a centre of research in the subject but also as a training ground for students, from the time of Perkins, father and son, onwards. In the appointment of Dr. Braude the College has selected one of the leading young British organic chemists, who has a wide and important range of interests; at the same time, it has secured the services of one deeply experienced in the special educational methods associated with this school. Dr. Braude was born in 1922. After a distinguished undergraduate career at the Imperial College, he continued there as a postgraduate research student under Sir Ian Heilbron. He was awarded the Ph.D. degree in 1945. He was appointed assistant lecturer in 1946, lecturer in 1947, and reader in organic chemistry in 1952. He was awarded the Meldola Medal of the Royal Institute of Chemistry for 1950, and received the D.Sc. degree in the same year. He is a member of the Council of the Chemical Society.

Prof. G. Wilkinson

THE chair of inorganic chemistry in the University of London tenable at the Imperial College of Science and Technology, from which Prof. H. V. A. Briscoe retired last year, has been filled by the appointment of Dr. G. Wilkinson, who graduated there as a Royal Scholar in 1941 and was elected Frank Hatton prizeman. Dr. Wilkinson then undertook research in inorganic chemistry at the College until, in 1943, he was appointed to a research post in the joint British-Canadian-United States atomic energy project, serving for three years at Montreal and at Chalk River. After the War, he was a research associate,

engaged in Prof. G. T. Seaborg's laboratory in the University of California, on investigations of radioisotopes leading to quantitative studies of the reaction of high-energy protons with the heavier elements; he later held a similar post in Prof. C. D. Coryell's laboratory at the Massachusetts Institute of Technology, working on the conditions of formation of complexes by phosphorus halides. Since 1951, as assistant professor of chemistry at Harvard University, he has been directing a research group studying, *inter alia*, the properties of bis-cyclopentadienyl compounds of the transitional elements, and in association with Prof. R. B. Woodward and others has been responsible for considerable progress in this new field of chemistry. Last year Prof. Wilkinson, as John Simon Guggenheim Fellow, spent some months in Prof. J. Bjerrum's laboratory at Copenhagen. By his delight in experimental investigation, his experience as a lecturer on inorganic and nuclear chemistry, and his administrative services as secretary to the Department of Chemistry at Harvard, he will take to the Imperial College enthusiasm for the development of studies in modern aspects of inorganic chemistry and wide knowledge of the facilities now available for that purpose.

Physics at King's College, London :

Prof. W. C. Price

HIS many friends on both sides of the Atlantic will be pleased to know that the title of professor of physics in the University of London has been conferred on Dr. W. C. Price in respect of his appointment at King's College. Dr. Price has held the post of reader in experimental physics in the College for several years, and is well known as a spectroscopist who has worked mainly on the structure of polyatomic molecules, both in the vacuum ultra-violet and in the infra-red spectral regions. He was the first to show that the short-wave spectra of a large number of basic molecules, such as acetylene, ethylene, benzene, water, the alkyl halides, etc., can