

Prof. F. G. Parsons

To many generations of men who received their medical training at St. Thomas's, the news of the passing of Frederick Gymer Parsons in his eightieth year must come with a sense of personal loss. For Parsons had a personality that could never be forgotten, and into every picture of the Medical School of St. Thomas's there must come, in the memories of hundreds of medical men, a kidney-shaped table and, standing in its concavity, a powerfully-built man with an enormous red moustache. The students sitting round the convexity of the table knew him as a teacher; but many knew him as more than that, for there was no form of student activity he did not foster, no work for student enterprises or welfare he ever found too arduous or ever left undone.

Of those who still cherish such happy memories of Parsons the majority are now in middle life, for his retirement from active teaching took place many years ago. But well past middle life are those who knew him at the height of his activities, when all his great energies were directed towards the subject that he made his own. When Parsons was laying the foundation stone of the work on comparative anatomy by which he must ever be known, London was, from an anatomical point of view, an 'island' of English anatomy entirely surrounded by Scotsmen. In the 'island' were, among others, C. B. Lockwood and G. D. Thane, G. B. Howes and Christopher Addison; and of that group Lord Addison is the only one who remains with us.

These men were making London an anatomical centre equalling in its reputation the traditional glory that clung to Edinburgh. All were what the younger generation of anatomists would now stigmatize as 'old-fashioned', for some were mainly concerned with the Hunterian tradition, some with human topographical anatomy and some, like Parsons, with comparative anatomy. It was mammalian myology to which Parsons devoted most of his energies for research, and this subject and the anatomy of mammalian joints he made his own. He dealt in facts—facts laid bare by his scalpel; and as a storehouse of facts his works are permanent.

It was considerably later that Parsons became especially interested in physical anthropology and made his valuable contributions to our knowledge of the osteology of the earlier inhabitants of England. In all his later work he found much interest in the historical setting of the Saxon Englishman. In this setting he saw even a personal intimacy, for he conceived himself to be representative of the typical Saxon, and probably he was near the truth in this. He loved the sea. He had spent happy years as ship's surgeon. True to the traditions of the sea he loved the countryside, and he had that age-long hankering of the sailor to settle down in retirement in a country inn with roses near the front door.

Parsons lost one great ideal when the tragic death of his wife nearly thirty years ago sundered a perfect partnership. Parsons was a man. He took this great blow like a man. His many friends must rejoice in this, that though he lost his great ideal, he did what many others have failed to do. An active life of devoted and useful work and of scientific attainment passed over into years of happy and contented retirement; and in the end and at the "Swan" in Thame he lived to see one of the dreams of his youth come true.

F. WOOD JONES.

WE regret to announce the following deaths:

Prof. P. P. Bedson, emeritus professor of chemistry, Durham College of Science, Newcastle-upon-Tyne (now King's College, University of Durham), on April 4, aged ninety.

Sir Edwin Butler, C.M.G., C.I.E., F.R.S., formerly director of the Imperial Mycological Institute, Kew, and secretary to the Agricultural Research Council, on April 4, aged sixty-eight.

Dr. H. Forster Morley, formerly director of the International Catalogue of Scientific Literature and of the Royal Society's Catalogue of Scientific Papers, on April 3, aged eighty-seven.

Mr. R. A. Roberts, a Royal Commissioner for Historical MSS., and formerly senior assistant keeper in the Public Record Office, on April 2, aged ninety-one.

NEWS and VIEWS

Sir Frederick Gowland Hopkins, O.M., F.R.S.

SIR FREDERICK GOWLAND HOPKINS' published contributions to biochemistry are well known; but as the time approaches of his relinquishing the Sir William Dunn chair of biochemistry at Cambridge, it is perhaps opportune to try to appraise his influence on the progress of the subject from 1899, when he took up work at Cambridge, to the present time. It has frequently been said in Great Britain during these years that "Hopkins *is* biochemistry"; when he decided to make this subject his own, biochemistry, as he visualized it, scarcely existed either in Great Britain or on the Continent. This is not to minimize the monumental achievements of such men as Emil Fischer and Albrecht Kossel, his immediate forbears; but while he fully appreciated the value and significance of this work, Sir Frederick visualized something beyond the isolation and description of the products and components of animal and vegetable tissue. He thought of biochemistry as a tracing out of the chemical events of the living cell, and a relating

of these events to function and ultimately to growth itself. All his papers bear the impress of this idea, and to-day it is the accepted meaning of biochemistry. This change-over from the static to the dynamic is largely his work. Not only in his papers, but even more in his lectures and in his discussions over the work of his pupils, this idea was ever uppermost, and if it were possible to measure his influence on the progress of science, his direction of the thought of his pupils and colleagues into these channels would surely be his greatest achievement.

Yet vigorously as Sir Frederick pursued his endeavours to describe the chemical occurrences of the living cell, his point of view was the reverse of vitalistic. Instead of regarding the biochemist as one occupied solely with isolating and analysing, leaving growth and function outside the scope of his investigation, Hopkins had a faith that the chemical changes accompanying and controlling living functions are discernible, and that to devise methods for such studies is the prime duty of the biochemist. It

is perhaps scarcely surprising that there grew up around him a school largely devoted to enzyme chemistry in many varied aspects—the machinery of the cell. The extent to which Sir Frederick's view of the scope of biochemistry is now accepted is the measure of his work, but it is only those who have been privileged to study under his influence in the years during which he has directed his school who can appreciate fully what the subject owes to him. His influence on those who worked with him, even for a short time, was always remarkable. He had the precious gift of illuminating discussions. This was especially evident during 'tea club' meetings of the Department, at which papers were read describing work in progress. Sometimes the audience listened to work which appeared dull and even unimportant, but as soon as the Professor opened the discussion the scene changed, the scattered threads made a pattern and the implication of the work took on a new value. In the experience of his pupils this gift is unique. To be associated with Sir Frederick has resulted for many in a certain liberation of the mind which enabled them then and later to approach problems with a new confidence, problems which, but for him, they would have discarded. Many lesser men freeze and inhibit; he thaws and liberates.

The Gas Research Board

DR. JAMES GRIEVE KING, superintendent of the Fuel Research Station, East Greenwich, has been appointed director of the Gas Research Board. Dr. King, who is fifty-one years of age, is a native of Scotland, where he started his career as assistant to Prof. T. Gray at the Royal Technical College, Glasgow, during 1912–1914. During the War of 1914–1918, he was chemist and finally departmental superintendent of Nobel's Explosives Co., Ltd. Dr. King joined the staff of the Fuel Research Station as research chemist in 1919, becoming chief chemist in 1920 and superintendent in 1941. He has a very wide experience in the field of fuel technology. The long list of his published researches includes a number of papers presented, either alone or in collaboration, at autumn research meetings of the Institution of Gas Engineers. His joint paper with the late Eng.-Captain J. F. Shaw, on "Recent Experiments at the Fuel Research Station upon Production of Solid Smokeless Fuel", was awarded the Institution Gold Medal for 1934, and his joint paper with Mr. James Jamieson, on "Products obtained by the Carbonization of Scottish Cannel in Continuous Vertical Retorts", was awarded the H. E. Jones London Medal of the Institution in 1936. Among his earliest publications was a joint paper, with Prof. T. Gray, on "The Assay of Coal for Carbonization Purposes", which described the now classic Gray-King apparatus.

Dr. Frederick James Dent has been appointed joint assistant director of the Board. Dr. Dent is thirty-seven years of age and is a native of Leeds. He obtained the B.Sc. degree in gas engineering at the University of Leeds in 1926, the Ph.D. degree in 1929, and was awarded the D.Sc. degree in 1939. He won the Arthur Smithells Research Scholarship and the Le Blanc Medal in 1927, and was the Institution Gas Research Fellow for 1927–1929. Since 1929 he has been a research chemist of the Institution of Gas Engineers and more recently of the Gas Research Board, engaged upon investigations for the Joint Research Committee. Dr. Dent has also given special lectures on water gas manufacture in the University of Leeds.

Newton's Library

MESSRS. HENRY SOTHERAN, LTD., of Sackville Street, W.1, are offering for sale the hitherto undiscovered portion of Newton's library. The collection includes several books of great personal and historical interest in connexion with their former owner, the most important being copies of the first and second editions of the "Principia" and Isaac Barrow's edition of Euclid. According to the vendor's notice of the sale, the first two contain a number of corrections, cancellations and additions in Newton's handwriting. These copies formed the basis of the new editions and, judging from the fact that the title page of the copy of the first edition was revised, it seems possible that this copy was intended for the printer. The edition of Barrow's "Euclidis Elementa" contains MS. notes in Newton's handwriting, mostly giving the propositions in algebraic notation. Books V, VI and X received his special attention. It seems likely that this copy was actually used by Newton in his undergraduate days at Trinity College, Cambridge, when he had come to appreciate Euclid. Other items of interest include a copy of the second English translation of Euclid—that made by Captain Rudd, engineer-in-chief to the Royalist forces, published in 1651. It may be the copy of which Brewster states that Newton "threw it aside as a 'trifling book'". There are also copies of Barrow's "Lectiones Opticae" (1669) and Huygen's "Traité de la Lumière" (1690), each of which contains an inscription by Newton stating that it was a presentation copy from the author. It is well known that Newton corrected the proofs of the former and made several corrections and additions. It is a surprising and unexplained fact that although Newton by this time was almost certainly in possession of his theory of colours, he did not correct Barrow's ideas on the subject.

The books are offered for sale in two lots, one of them consisting of Barrow's "Euclidis Elementa" and the other of 858 items. It is to be hoped that this interesting collection will be disposed of as a whole and that it will remain in Great Britain. It represents all that is left of the 1,896 books which formed Newton's library when he died in 1727. The complete library was then purchased for £300 by John Huggins, warden of the Fleet Prison, a near neighbour of Newton's. Huggins' receipt for the £300 and a complete list of the books is now in the British Museum. He presented them to his son, who pasted his bookplate, bearing the inscription "Revd. Carol. Huggins, Rector of Chinner, in Com. Oxon.", in all his books. They were afterwards sold for £400 to Dr. James Musgrave, who succeeded Charles Huggins at Chinner. He pasted his bookplate over that of Charles Huggins, his plate bearing the Musgrave arms and the motto "Philosophemur". The books then disappeared for about 170 years until bundles of them, including one of 200, were sold at rubbish prices at the sale of Thame Park (belonging to the Musgrave family) in 1920. Barrow's Euclid was one of the items disposed of on this occasion. It is these books which are occasionally found in the second-hand bookshops, though many have gone to the United States and, it is feared, many have been treated as waste paper.

The remainder of the library was discovered in 1928 at Barnsley Park (which also belongs to the Musgrave family) by Col. de Villamil, to whose industry and perseverance we owe the unravelling of the mystery of Newton's library. He also discovered at Somerset House a complete inventory of Newton's