

print as could be obtained from that negative material whatever the exposure. The quality of the prints was estimated by purely visual judgment, without reference to any physical measurements. The process sounds, and indeed was, laborious; but something of the kind is inevitable, and in Loyd A. Jones's hands it led to a physical measurement which correlated well with the observed speed. This way of measuring speed was adopted by the American Standards Association and the British Standards Institution. The same characteristic approach is to be found in his later papers, on graininess and granularity, and on sharpness, wherein the main effort is directed to the discovery of a purely physical measurement which correlates well with some visual estimate.

Loyd A. Jones served on many scientific bodies, notably on the Colorimetry Committee of the Optical Society of America and the sectional committee on photography of the American Standards Association, for many years. Besides the recognition which he received from scientific and photographic societies in the United States, the Royal Photographic Society of Great Britain awarded him its Progress Medal, the Hurter and Driffield Medal and an honorary fellowship. He leaves a wife and many friends to regret his death so soon after retirement. E. R. DAVIES

Mr. Hugh Griffiths

THE chemical engineering profession has lost a doughty fighter in Hugh Griffiths, who died on June 26, 1954. He was born at Middlesbrough on July 28, 1891, and a very strong influence on his career was his contact there with A. F. van der Heyden, who laid the foundation of his love for mathematics. He took his A.R.C.Sc. in chemistry and was for the most part of his life in consulting practice. His command of the German language and

his contacts on the Continent proved most valuable in this connexion.

In 1945 he was elected president of the Institution of Chemical Engineers. As a biography is contained in the *Transactions* for that year, it is now opportune to try to assess his outstanding contribution to the profession. This was undoubtedly his advocacy of the use of the 'Home Paper' as a part qualification for associate membership. He came into the chemical engineering profession as a young man with the practical heritage of the Victorian period behind him. First and foremost with him was the essential engineering background—the need for a practical estimate of the magnitude of the problem and the sizes involved. It was his mathematical and scientific training which then enabled him to apply fundamental conceptions to rule-of-thumb methods, and to develop processes in a manner not dreamt of by his forbears.

His philosophy in supporting the use of the 'Home Paper' for examination purposes was the realization that, if a student is faced with a problem such as, for example, the design of a plant required for the manufacture of 10 tons a day of mono-nitrotoluene, it brings out all that is latent within him and automatically poses to him all the problems which a chemical engineer has to face to be successful. His fierce advocacy of the use of this method of training did sometimes bring him into conflict with his colleagues, as he was always afraid that modifications might result in a lowering of his high standards.

It was in keeping with Griffiths's love of his profession and its heritage that his last public appearance was at Mr. Norman Swindin's lecture in Manchester on the life of that grand old man and founder of chemical engineering, George E. Davis. It was then only too apparent to his colleagues that his life was on the ebb tide. In him they have lost a good friend, and the profession has lost a notable servant.

M. B. DONALD

NEWS and VIEWS

Agricultural Physiology at Cambridge:

Dr. John Hammond, F.R.S.

DR. JOHN HAMMOND, who on September 30 retires from his post as reader in agricultural physiology in the University of Cambridge and his honorary directorship of the Agricultural Research Council Unit of Animal Reproduction, has brought an immense amount of prestige to British agricultural science. While his contribution to fundamental research is widely appreciated, it will be as the prophet—in the proper sense of the word—of the physiology of reproduction that his name will be honoured. Son of a Norfolk farmer and nephew of a veterinary surgeon, he absorbed as a student the teaching of the late Dr. F. H. A. Marshall on the pure physiology of reproduction. The significance of his life's work is that, at a time when animal production was under the influence of pedigree breeders and the auction mart, on one hand, and the pathological outlook of the veterinary profession on the other, he brought to its development a more positive scientific approach. The essence of his teaching was the extent to which production could be increased by studying the normal physiology of farm animals and not merely by removing the adverse effects of

disease and abnormal physiology. Further, and this may yet be his greatest monument, Dr. Hammond has enthused a large and influential band of disciples, not only within the British Commonwealth but also throughout the world, to initiate research themselves and apply the newer knowledge to the farming industry. Among a wide range of subjects on which he has worked must be mentioned the reproduction and milk production of the cow, which provided the basis of the artificial insemination movement in Britain, and his study of the effect of nutrition and environment on the growth and conformation of sheep and pigs. If the study of animal husbandry ever becomes a profession independent of either agriculture or veterinary science, it will be largely due to the pioneer work and inspiration of John Hammond.

Registrar of Trade Marks in India:

Dr. S. Venkateswaran

DR. S. VENKATESWARAN, deputy registrar of trade marks, India, has been appointed as registrar of trade marks in succession to K. S. Shavaksha, who has recently retired. Dr. Venkateswaran, who is a D.Sc. of the University of Madras and a law graduate of the University of Calcutta, was assistant chemist at