OBITUARIES

Dr. Felix Oswald

DR. FELIX OSWALD, a distinguished geologist and archæologist, died on November 3 on the ninety-second anniversary of his birth in 1866.

After gaining the degree of B.A.(London), Oswald entered the Civil Service. In his spare time, however, he made a study of geology, botany and zoology, and eventually presented these as his subjects for the B.Sc. degree examination, London, in which he gained first-class honours.

In 1898 he accompanied N. B. Lynch as geologist on a tour through Turkish Armenia. On their arrival at Lake Van, he made a careful investigation of the rocks and structure of the Crater of Nimrud, a volcano on the west shore of the lake. He later wrote "The Geology of Armenia" and presented it as his thesis for the degree of D.Sc.(London). As the cost of providing the requisite number of copies for the examiners proved prohibitive, he set up a press and printed 200 copies himself. The book had 600 pages and a number of coloured illustrations. He also made a geological map of Armenia and a coloured relief model of the Crater on the scale of 1 in. to the mile.

In 1907 he was elected a Fellow of the Geological Society of London. He also received from the Council of the Society an award from the Murchison Fund in recognition of his work in Armenia. In 1911 he went to Central Africa, on behalf of the British Museum, to investigate fossiliferous beds of Mid-Tertiary Age that had been discovered north-east of Victoria Nyanza. Four years later he was sent to the Caucasus in response to a request from the Russian Government for a geologist to search that region for additional sources of oil. In this work he was successful, and in addition produced a geological map of the Caucasus mountains.

Meanwhile, Oswald was appointed probate registrar for the East Midlands and accordingly moved to Nottingham. Here he became interested in Margidunum, a Roman station situated on the Fosseway. About 1911 he started excavating the site and continued until his retirement, in 1936, to Solva in Pembrokeshire. He built up a remarkable collection of pottery from the site. This is now housed in the museum of the University of Nottingham. He visited every important collection of Roman pottery in Europe. With the unrivalled knowledge thus gained, he produced several magnificent works on *terra sigillata* and many small ones, including detailed accounts of Margidunum. He won an international reputation, and even during his long retirement was visited and consulted by scholars from many parts of the world.

H. H. SWINNERTON

Dr. Francisco Duran-Reynals

THE death of Dr. F. Duran-Reynals, which occurred on March 27, 1958, deprived experimental pathology of one of its outstanding figures. Apart from many well-known studies of the role of viruses in the etiology of cancer, I particularly wish to record Duran-Reynals's influence—not so widely appreciated—in stimulating this field over many years less

directly, and in encouraging developments which in turn have facilitated recent dramatic advances, particularly in the United States, in our knowledge of tumour viruses.

Francisco Duran-Reynals was born in Barcelona on December 5, 1899. After graduating from the University of Barcelona as M.D. in 1925, he then spent three years in work at the Pasteur Institute in Paris (with Profs. A. Besredka and E. Wollman), and (with Dr. J. B. Murphy) at the Rockefeller Institute, New York, to the staff of which he was appointed in 1928. In 1938, he became research professor at Yale University School of Medicine, with support from the Jane Coffin Childs Memorial Fund for Medical Research.

Duran-Reynals's earlier work was mainly concerned with the so-called ground-substance of the mesenchyme, and arose from the discovery of spreading factors—hyaluronidase and others—in mammalian testes (1928), bacteria (1933), snake venom (1936), and many other sources. His studies of viruses in relation to cancer date from 1938, and were continued to the end of his life, with much assistance from his wife, M. L. Duran-Reynals. These studies bore specially upon such aspects as virus variation and adaptation, antigenicity and epidemiology, and an important observation (of particular interest in relation to more recent discoveries) was of their maximal infecting power when injected into immature hosts.

Duran-Reynals was the recipient of many honours, notably (in 1952) the Anna Fuller Memorial Prize for Medical Research. His contributions not only to the above problems but also to many others in experimental pathology are embodied in upwards of a hundred papers, the last (1958) being a study of the infectious pulmonary adenoma complex in sheep.

In all he did he was not only scientist but artist as well. None who had the privilege to know him will soon forget his endearing qualities, his courage and gaiety, or his love of his native Spain.

A. HADDOW

Dr. R. C. Fisher

DR. RONALD CAMPBELL FISHER was born on August 6, 1899, at Edinburgh, and died unexpectedly in his sleep on October 23. He was the elder son of Archibald W. Fisher, solicitor, and Catherine Dick Fleming. From George Heriot's School he proceeded to the University of Edinburgh, where he graduated in forestry in 1921 and was awarded the medals for advanced forestry and forest zoology. Following studies at Kew and Rothamsted on a research scholarship awarded by the Ministry of Agriculture and Fisheries, he received his doctorate for a thesis on forest insects in 1923.

After working for two years at the Imperial Forestry Institute, Oxford, Fisher transferred to the Forest Products Research Laboratory (Department of Scientific and Industrial Research) at Princes Risborough, as the first officer-in-charge of the Entomology Section. At that time, little was known of timber-boring insects in Great Britain, but during the thirty-one years he was in charge of this work,

he published, or was the co-author of, more than sixty papers and H.M. Stationery Office publications on this group of insects, and his staff published many more. His main contribution to the literature was the four papers which he published in the *Annals of Applied Biology* under the title of "Studies in the Biology of the Death Watch Beetle". These papers, and those of the late W. G. Campbell (officer-in-charge, Wood Chemistry Section, Forest Products Research Laboratory) on the nutritional aspects of this species, formed a basis for improved control measures in the light of the knowledge revealed on the association between death watch beetle attack and preceding fungal decay. For his paper on "Recent Work on Wood-Destroying Insects" he received a silver medal from the Royal Society of Arts. He read his last paper, entitled "Developments in the Control of Timber Insects", before the Society of Chemical Industry only three days before his death.

During his years at the Forest Products Research Laboratory, Fisher was constantly consulted on problems concerning wood-boring insect infestations, not only in timber, joinery and furniture, including

many of the ancient buildings of historical interest in Britain, but also on infestations of tropical timbers. A physical disability had prevented him from following the career of a forest officer, but he retained a keen interest in the entomological problems of forest insects and in particular of the *Ambrosia* beetles. The post-war shortage of traditional timbers and demand for substitutes from among tropical species brought the *Ambrosia* beetle problem to the fore, and it was mainly due to his efforts that the West African Timber Borer Research Unit was set up by the Colonial Office in 1952. The supervision of the training of the staff of this unit and their research programme became one of his chief interests. He also served on H.M.S. *Victory* Technical Advisory Committee and on the committee set up by the Central Council for the Care of Churches. He was elected a Fellow of the Royal Society of Edinburgh in 1952.

He leaves a wife and two sons of whom the elder, Dr. R. Campbell Fisher, is studying insect parasites at the Entomological Laboratory, Belleville, Ontario, Canada, and the younger, aeronautical engineering at the University of Bristol. J. D. BLETCHLY

NEWS and VIEWS

Atoms for Peace Award :

Prof. G. C. de Hevesy, For.Mem.R.S.

THE second Atoms for Peace Award of 75,000 dollars and a gold medallion, founded as a memorial to Henry and Edsel Ford, has been made to Prof. G. C. de Hevesy, associate of the Institute for Research in Organic Chemistry, University of Stockholm, and of the Institute of Theoretical Physics, Copenhagen. In announcing the award, Dr. Detlev Bronk, president of the Rockefeller Institute for Medical Research and of the U.S. National Academy of Sciences, said that Prof. Hevesy was selected unanimously from 111 nominations for "his basic contribution to the peaceful uses of atomic energy in the discovery and development of tracer techniques in chemistry, biology, and medicine, using natural and artificial radioactive and stable isotopes for his continuing work in these fields". Prof. Hevesy is a Foreign Member of the Royal Society and was awarded the Copley Medal in 1949. He received the Nobel Prize for Chemistry in 1943.

United States Atomic Energy Commission :

Dr. Frank K. Pittman

DR. FRANK K. PITTMAN has been appointed director of the Division of Reactor Development of the U.S. Atomic Energy Commission, and the functions previously assigned to the Office of Industrial Development have been transferred to that Division, except for those having to do with isotope development. The functions of isotope development will be undertaken by an Office of Isotope and Radiation Development with Dr. Paul C. Aebersold acting in charge.

Dr. Pittman graduated at Vanderbilt University and received his Ph.D. in inorganic chemistry from the Massachusetts Institute of Technology. He has been associated with the United States atomic energy programme since 1944, when he joined the staff of the Los Alamos Scientific Laboratory. He was in charge of plutonium production at the

Laboratory until 1948. He has been director of the Office of Industrial Development since it was established in December 1957, and also had been serving as acting director of the Division of Reactor Development since August 5, following the resignation of W. Kenneth Davis.

Smith Kline and French Research Institute :

Prof. W. A. Bain

PROF. W. A. BAIN, who has held the chair of pharmacology at the University of Leeds since 1946, has accepted an invitation to become director of the Smith Kline and French Research Institute, and will resign his university appointment to take up this new post. After graduating in Edinburgh, William Alexander Bain became assistant to the late Sir E. Sharpey Schafer in 1928. In 1931, he was appointed lecturer in experimental physiology in the University of Edinburgh, before moving to Leeds in 1934, where he became, first, lecturer in physiology and later reader in pharmacology. Prof. Bain has conducted research on the autonomic nerves, on adrenaline and on the antagonists of histamine.

Laboratories for the Smith Kline and French Research Institute are under construction at Welwyn Garden City and are expected to be completed by the late summer of 1959. The research team which Prof. Bain will direct will form an important part of, and be complementary to, the extensive research effort of the parent company in Philadelphia. The Company believes that by having research teams both in Great Britain and in the United States there will be advantages to both by the interplay and exchange of scientific fact, opinions, outlook and approach.

Bell Telephone Laboratories : New Directors of Research

Dr. W. D. Lewis, of Mendham, and Mr. A. H. White, of Summit, have been appointed directors of research at Bell Telephone Laboratories, Murray Hill, New Jersey. Dr. Lewis will be in charge of