

It is scarcely too much to say that without the work of Windaus, Wieland and their colleagues, no such achievements would have been possible, and no such exciting prospects would now lie before us. Prof. Windaus is still alive, but Prof. Wieland died recently at the age of ninety.

G. A. D. HASLEWOOD

Prof. William Rowan

DR. WILLIAM ROWAN, emeritus professor of zoology in the University of Alberta, died at Edmonton, Alberta, on June 30 at the age of sixty-five. Born in Basle, Switzerland, on July 29, 1891, he emigrated to Canada in 1908. For a time he worked on a ranch near Dorothy, Alberta, and, in later life, often spoke with some pride of his prowess as a cowboy. But while this outdoor life fostered a latent interest in biology, young Rowan's inquiring mind found this mode of development too slow and he soon went to Britain to complete his formal education. This was interrupted by the First World War. Rowan enlisted as a private in August 1914, and served with the London Scottish Regiment until 1916. He then returned to his studies and graduated in the following year from University College, London, with the B.Sc. degree. His artistic talents began to show at this time. A period of study at the Slade School of Art developed skills in drawing and sculpture. In future years his knowledge of animal life and a fine aesthetic sense combined to produce models and sketches of birds and mammals notable in particular for their flow of line. He studied music and became an accomplished pianist. So strong was his love of music that he thought seriously of turning to the concert platform. Throughout his life he was never quite certain that he had made the right choice in following the path of science.

After the War, Rowan returned to Canada to lecture in zoology for a year at the University of Manitoba. In 1920 he went to the University of Alberta at Edmonton, where in the following year, with the rank of associate professor, he founded the Department of Zoology. He remained as head of this Department until his retirement in 1956. He was a popular and stimulating lecturer, fond of using startling statements to shake students from their mental lethargy.

Of the various branches of zoology, Rowan had always shown a preference for ornithology and now, established in a university community, he proceeded to investigate some of the problems which had intrigued him for years. One of these was the migration of birds. He postulated that there is an inherent migratory habit in some species of birds which is impelled by a hormone the production of which is controlled by the environmental factor of changing day-length. Working at times under great difficulties, he kept canaries and juncoes in cages in his own garden and produced the first experimental evidence that fluctuations in day-length cause a cyclical development and regression of the gonads of birds. This was the first step in proving the hypothesis that photoperiodism is a controlling factor in the phenomenon of avian migration. In further experiments he attempted to make juncoes sedentary during the normal migratory period and to reverse the usual direction of migration in others. The results of this work were presented in a thesis for the D.Sc. degree of the University of London in 1929.

In that year, also, Rowan was elected a Fellow of the Zoological Society of London.

Results of the experiments with juncoes were not conclusive. This, Rowan felt, was largely due to the small size of the bird, with consequent difficulty in recognizing and recapturing the experimental birds. He therefore determined to repeat the experiments using crows as subjects. The publicity attendant upon capture, treatment, release and recapture of these birds put his work and his name upon the tongues of laymen throughout North America and undoubtedly assisted greatly in popularizing science. His book, "The Riddle of Migration", published in 1931, included the results of this work and brought him international recognition. It also marked the beginning of a decline of interest in the problem of migration. His scientific efforts were henceforth largely directed toward a study of the cyclical fluctuation in numbers of certain species of North American birds and mammals, a study which he felt was essential to a complete understanding of the problems of conservation on the continent. In 1946 he was awarded the Flavelle Medal of the Royal Society of Canada in recognition of his investigations. He was working on various aspects of animal cycles at the time of his death.

Always a firm believer in an oligarchy of the intelligentsia, Rowan looked upon the events following the Second World War as conclusive evidence of the depravity of democracy. He was convinced that mankind is heading towards total self-destruction and that it can be saved only by placing itself under the guidance of an intellectual few; after the development and use of the atom bomb his prognostications became even more gloomy.

Rowan's influence in the field of experimental ornithology will long be felt. The world-wide circle of friends with whom he discussed favourite subjects over coffee and cigarettes will feel not only a sense of great personal loss but also sincere regret at the passing of a large heart and a fine mind.

W. RAY SALT

Dr. Gerald Roche Lynch, O.B.E.

THE death of Roche Lynch at the age of sixty-eight on July 3, at his home in Slough three years after retirement, ended a long period of distinguished service to medical science. It also erased the name of the last of a group of remarkable men, including Pepper, Luff, Spilsbury and Willcox, who for thirty years in the first half of this century had been the mainstay of the Home Office in scientific crime investigation in England and Wales.

Roche Lynch, whose father was a Kensington medical practitioner, was educated at St. Paul's School and entered St. Mary's Hospital, London, in 1905, gaining an entrance scholarship in science and, a year later, the prize in chemistry. This was undoubtedly the turning point in his career, for while still studying medicine he also trained in chemistry under H. E. Armstrong at the City and Guilds Institute and demonstrated in the subject at his own medical school. The latter appointment brought him under the influence of William Willcox, who then lectured in chemistry, and together they were drawn into the practice of Pepper and Luff, no small part of which was medico-legal. Qualifying in medicine in 1913, Roche Lynch served in the Royal Navy until 1919, when he was appointed O.B.E. Returning

to St. Mary's as senior demonstrator in pathological chemistry, he was made head of the Department in 1926 and continued so until he retired in 1954. Willcox had him appointed junior to him as Home Office analyst in 1924 and he succeeded to the senior appointment four years later.

Roche Lynch was undoubtedly happiest at work in his somewhat untidy-looking laboratory at St. Mary's where, surrounded by the stalagmitic accumulation of what seems years of specimens, he never failed to find room for another 'most interesting case', to display a penetrating grasp of its nature and to keep orderly hand-written notes which were good enough to survive defending counsel's scrutiny on many an occasion. It was from this laboratory that he made literally thousands of appearances in coroners' and assize courts between 1924 and 1954 to give his findings in evidence. In this he was superb, for he had mastered the art of extraction without loss of accuracy, and, though precise, he gave sufficient hint of thoroughness of method and of painstaking laboratory care to deter defending counsel from pressing him far. He was a fine

analytical chemist of the older school whose work in cases like that of Duff and Sydney, Violette Kaye, Vera Page and Sidney Fox was so sound that it acquired a remarkable reputation and gained him the respect of both the Bench and the Bar. Affection he did not encourage, and the Savage Club was virtually his sole excursion into social life.

He examined for Branch E for the fellowship of the Royal Institute of Chemistry—of which he was president during 1946–49, and he also examined for the London M.B. and the D.P.H. He became president of what is now the Society for Analytical Chemistry in 1936–37, of the Medico-Legal Society in 1939–41, and master of the Society of Apothecaries in 1950–1, filling these distinguished posts with a strong practical authority and with disarming humility. He was both liked and respected, and his long era of service to medicine and science, to the field of chemistry—in which he wrote many papers—and to university life in London will mark him as one of the distinguished figures of twentieth century medical science.

KEITH SIMPSON

NEWS and VIEWS

Civil Engineering in Trinity College, Dublin:

Prof. John Purser

PROF. JOHN PURSER, a member of a family whose name has been synonymous with that of Trinity College for many years, will retire from the chair of civil engineering in the University of Dublin on September 21. Prof. Purser graduated in engineering in Dublin in 1907, and decided to make his career as a teacher. He joined the Navy in the First World War, serving first in motor torpedo boats and later with a team working on paravanes. After the War he taught in the City and Guilds College in London, and later in the University of Birmingham. His research interests were the deterioration of structures in sea water, and the flow of rivers. He returned to Dublin in 1933, and devoted himself to teaching and to guiding the growth of the School of Engineering. After the Second World War, the premises of the School were reconstructed and enlarged, and a fourth year has recently been added to the course. The School is for civil engineering only, and Prof. Purser has had the satisfaction of seeing his graduates sought for by works departments all over the world. He has given freely of his time to the general affairs of the College, to the Institution of Civil Engineers in Ireland and to the Commission of Irish Lights, and all these bodies look forward to continuing to draw on his experience and advice.

Prof. W. Wright

DR. W. WRIGHT, who is succeeding Prof. John Purser, has been senior lecturer and head of the Civil Engineering Department in the University of Southampton since 1954. His main fields of interest have been structural engineering and hydraulics. In structures he has been particularly concerned with applications of the relaxation method. In hydraulics

he will be remembered at Southampton for the design and commissioning of a large tidal model of the Solent and Southampton Water. Because of the need for two separate tidal generators at the two entrances to the Solent, this model proved exceptionally difficult to bring under control, so that the complex local tides could be correctly reproduced. Dr. Wright was successful in overcoming these difficulties in the short time available to provide the necessary information for a proposed dredging project.

Nuclear Physics at Oxford:

Prof. D. H. Wilkinson, F.R.S.

DR. D. H. WILKINSON has been appointed to the professorship of nuclear physics (established with the late Sir Francis Simon's support after he had succeeded Lord Cherwell as Dr. Lee's professor of experimental philosophy) at the Clarendon Laboratory, Oxford. Dr. Wilkinson graduated at Cambridge in 1943 and became a Fellow of Jesus College in 1945. For a short time he worked with the first heavy-water reactor at Chalk River in Canada; however, in the course of this or his previous work he had become exposed to more radiation than was good for him, and back in Cambridge after the War he accepted, for a time, a medical injunction to keep away from penetrating radiations and hence from nuclear physics. It was during that time that he started to work on how homing birds find their way, and he made some valuable contributions by exploding some untenable hypotheses and by inventing a simple radioactive clock for measuring the time a bird spends on the wing (*Nature*, 161, 997; 1948, and 165, 188; 1950). Fortunately, his health fully recovered and soon he was back in nuclear physics. His numerous contributions range from the development of ingenious new measuring techniques to the