

father's College, St. John's College, Cambridge, and graduated in 1892. From the first his interests in archæology were divided between Biblical archæology and the prehistoric and early historic archæology of his native Ireland. He worked under the auspices of the Palestine Exploration Fund and dug at Gezer and elsewhere. From the last decade of the nineteenth century until the mid-twenties of the present century, his excavation and publication were equally divided between Palestinian and Irish archæology; but from the middle twenties onwards he confined himself to the archæology of western Britain and more especially the prehistory and the early Christian monuments of Ireland, where during 1909-42 he held the chair of Celtic archæology at University College, Dublin. Among his main published works were "Studies in Irish Epigraphy" (1897-1907), "A History of Civilization in Palestine" (1912), "The Excavations at Gezer" (1912), "The Philistines" (1913), "The Archæology of Ireland" (1928), and "Tara" (1931). The enumeration of these few from the two dozen or more books which he wrote suffices to indicate the wideness of his interests, his industry and his devotion to the cause of scholarly exposition. His scholarship earned him appropriate recognition in the world of learning; he held senior doctorates of the Univer-

sities of Cambridge, Dublin, Glasgow and Wales, and was in his time president of the Royal Irish Academy, the Royal Society of Antiquaries of Ireland, and the Cambrian Archæological Association.

He was, indeed, at the time of his death, unquestionably, the grand old man of Irish archæology. But he did not spend the years of his retirement in Cambridge, from 1942 onwards, in looking back over the record of a long career of original work. He always had several books on hand, and he was busily engaged in writing and revising up to the time of his last illness. He will long be remembered as a teacher, a prodigious worker and an energetic and discursive talker. He was a pioneer of the interpretation of Ireland's past in terms of the comparative archæology of western Europe, and every worker in this field must take his work into account, although his theories were sometimes of an originality which few could follow. Macalister was also a musician of no mean gifts; an associate of the Royal College of Organists, he was for many years organist of a church in Dublin and wrote, among other works, a suite for piano and violin. His humanity, his enthusiasm and his breadth of interests testify to his stature even more than any single contribution to learning.

GLYN E. DANIEL

NEWS and VIEWS

Natural History at St. Andrews: Mr. H. G. Callan

MR. H. G. CALLAN, of the Agricultural Research Council's Animal Breeding and Genetics Research Organisation, has been elected to the chair of natural history in the University of St. Andrews, which has been vacant since the death of the late Sir D'Arcy Thompson. Mr. Callan is one of the brilliant group of zoologists who were trained in Oxford shortly before the Second World War. His own interests have lain mainly in the fields of cytology and marine biology and to the Oxford tradition he has been able to add those of two other world-famous centres of biology—the Stazione Zoologica at Naples and the John Innes Horticultural Institution at Merton. After a few years of work mainly devoted to classical nuclear and chromosomal cytology, Mr. Callan, like so many others, suffered the prolonged interruption of the War, during which he spent five years as a radar officer. In his case, the experience seems not to have been without value for his physiological work, and, since the War, he has been prominent among those who have been applying the new technical devices made available by physics to the study of fundamental biological problems. Selecting the germinal vesicle of the amphibian egg as a suitable material, he has, with the aid of a number of collaborators, attacked the problems of its structure and composition from several different angles. This work, which is not yet fully published, has aroused considerable interest at scientific meetings at which it has been expounded. His colleagues will wish Mr. Callan every success in the opportunities he will now have to develop this most promising and important field of biology.

Engineering at Southampton:

Prof. T. R. Cave-Browne-Cave, C.B.E.

WING-COMMANDER T. R. CAVE-BROWNE-CAVE, who retires this summer from the chair of engineering in University College, Southampton, received his early training in the Royal Navy, and served as an

engineer officer until 1913. In that year he was seconded to the Royal Naval Air Service, later absorbed into the Royal Air Force, and for the next eighteen years devoted himself to the design, construction and operation of airships. The three non-rigid types, *S.S.*, *Coastal* and *N.S.* (North Sea), which did good service in patrolling the coasts of Great Britain during 1915-18, were designed and built by him and his staff; and he was responsible for the machinery and mooring arrangements of the British rigid airships, until the tragic crash of *R 101* caused the abandonment of airship construction in Britain. Wing-Commander Cave-Browne-Cave became professor at Southampton in 1931, and the school of engineering has grown sturdily under his direction, including a Department of Aeronautical Engineering which will have its own chair this year. A large range of workshops, a new block of classrooms, and a wind tunnel has been built during his tenure of the chair.

Wing-Commander T. R. Cave-Browne-Cave has also found time and energy for many other interests. Since 1935, he has taken an active part in solving technical problems of noise abatement; and he served during 1938-39 on the committee for structural air-raid precautions of the Ministry of Home Security. On the outbreak of the Second World War, the Royal Air Force claimed him, until in 1941 he was appointed director of camouflage and chairman of the inter-Services camouflage committee; but although away from Southampton most of his time, he was able to supervise, in the College, a number of researches on special problems for the fighting Services. Since the War he has developed a supersonic wind tunnel driven by steam, the cost of which is trifling compared with that of the conventional high-speed tunnels using compressed air; and as a result of a study of the flow of air in motor buses, he has developed a new system of heating and ventilating these vehicles, using warm air from behind the radiator. He has served on the Council of the Institution of Mechanical