

by a senior bursary from the South African Council for Scientific and Industrial Research.

Dr. Barnard was awarded many honours during his life-time, including being elected a Fellow of the Royal Society of South Africa in 1920, and a Fellow of the Linnean Society of London in 1921. He received the Gold Badge of the Mountain Club of South Africa in 1924, the King George V Silver Jubilee Medal in 1935, the Senior Captain Scott Medal of the South African Biological Society in 1936, the Medal and grant of the South African Association for the Advancement of Science in 1945, the Queen Elizabeth II Coronation Medal in 1953. He was made an Honorary Fellow of the Royal Society of South Africa in 1956 and president of the Conchological Society of Southern Africa in 1962.

Dr. Barnard was recognized as a world authority in several fields, and it was often with astonishment that specialists in one of these subjects would discover his accomplishments in other fields. Dr. Barnard's world-wide reputation was built up on his unceasing and prodigious work over a long and active life. He was always willing to help his scientific colleagues or casual enquirers in his quiet, unassuming way. Despite his achievements, he remained a shy and modest man.

Our sympathy is extended to his wife and two children who survive him.

JOHN R. GRINDLEY

Prof. F. H. Garner, O.B.E.

FREDERIC H. GARNER, emeritus professor of chemical engineering in the University of Birmingham, died suddenly at the age of seventy-one at his home at Wymeswold, Leicestershire, on September 19. Born in 1893, he attended the Market Bosworth Grammar School, going on to study chemistry at the University of Birmingham, and then proceeding to the Mellon Institute, Pittsburgh, for postgraduate studies.

After his return to England he was actively associated with the petroleum industry for many years, rising to become director of research of the Esso European Laboratories from 1935 until 1942.

He will be remembered particularly, however, for the enthusiasm he brought to bear in building up the Department of Chemical Engineering in the University of Birmingham. When in 1942 he was appointed to succeed A. W. Nash as professor and head of the Oil Mining Department, the latter was small and rather static; the undergraduate intake was only five students that year, and even fewer men were able to come as the Second World War progressed.

In 1946 Garner changed the name to the Department of Chemical Engineering, and began the programme of diversification and expansion that, in a little over a decade, transformed a small Department of Oil Mining into one of the largest Chemical Engineering Departments in the world. The academic staff increased from 3 to 28 and undergraduate admissions from 3 or 4 a year to about 80; postgraduate lecture courses were established both in chemical engineering and also (with remarkable foresight) in biological chemical engineering. The research school, too, increased in size and prestige, to an intake of about 23 new students each year. It was inevitable that the Department that he built up with such enthusiasm should become a dominant factor in his life. Inevitable also, perhaps, was Garner's role as the watchful, sometimes strict, father to his staff.

In his own research, he was particularly interested in later years in the surface phenomena associated with mass-transfer, and he was one of the pioneers in investigations of the circulation within falling drops and in the visualization of interfacial turbulence. Even after his retirement in 1960 he used to come into the Department to continue his experiments in these fields.

His death marks the end of an era—an era not only of the establishment of chemical engineering in British universities, but also of the benevolent-dictator type of professor who could, by his endeavours and by the impact of his personality, build up a large Department as his personal creation. Until the moment of his retirement it was *his* department in a very real sense, and he will long be remembered for his devotion to its interests and to those of his many students.

J. T. DAVIES

NEWS and VIEWS

The Royal Society of Edinburgh: Elections to Council

At the annual statutory meeting of the Royal Society of Edinburgh, held on October 26, the following were elected to the Council of the Society for the 182nd session: *President*, Prof. J. N. Davidson; *Vice-Presidents*, Dr. H. R. Fletcher, Prof. G. L. Montgomery, Prof. C. F. Davidson, Dr. Mowbray Ritchie, Prof. J. Allen and Dr. G. H. Mitchell; *General Secretary*, Prof. N. Feather; *Secretaries to Ordinary Meetings*, Prof. A. E. Ritchie and Dr. A. F. Brown; *Treasurer*, Dr. J. R. Peddie; *Curator of Library and Museum*, Dr. R. Schlapp; *Councillors*, Prof. R. B. Fisher, The Rev. A. M. Gillespie, Prof. A. Robertson, Prof. P. A. Sweet, The Rt. Hon. Lord Balerno of Currie, Dr. J. M. Jackson, Prof. I. N. Sneddon, Prof. P. E. Weatherley, Dr. N. Campbell, Prof. P. L. Pauson, Prof. J. R. Raeburn and Prof. J. D. Robertson.

Director of Smithsonian's Museum of History and Technology: Mr. John C. Ewers

MR. JOHN C. EWERS has been appointed director of the new Smithsonian Museum of History and Technology in succession to Mr. Frank A. Taylor, who has been serving as both acting director of the Museum and director of the U.S. National Museum. Mr. Taylor will continue in the latter post. A native of Cleveland, Ohio, Mr. Ewers began his service with the Smithsonian Institution in 1946. For the past six years he has been assistant director of the Museum of History and Technology, serving as planning

officer for the new building. He was responsible for the design, construction, and installation of exhibits, which made it possible to open the building to the public in January 1964, a few months after its completion. Before joining the Smithsonian Institution, Mr. Ewers was a member of the Bureau of Indian Affairs, serving as the first curator of the Museum of the Plains Indian at Browning, Montana. He also has acted as museum planning consultant to the Historical Society of Montana, the Bureau of Indian Affairs, and the National Park Service. Recently he was consultant for the Canadian National Museum in planning its new museum of history and anthropology. A graduate of both Dartmouth College and Yale University, Mr. Ewers is a member of several professional societies, including the Washington Academy of Sciences, American Association of Museums, American Anthropological Association, Sigma Xi, Western History Association, and the American Indian Ethnohistoric Conference. He is also past-president of the Westerners, a Washington group interested in the history of the American West.

Environmental Design and Engineering at University College, London: Prof. R. G. Hopkinson

DR. R. G. HOPKINSON has been appointed to the new chair of environmental design and engineering in the Bartlett School of Architecture, at University College, London. The establishment of this chair has been made