He was a great headmaster to whom science owes a considerable debt. He had no time for 'frills'; he got on with the job. The present headmaster, Mr. W. E. Page, writing to me recently, said: "We buried him, as he wished, with a minimum of ceremony and in the presence of scarcely a dozen people. It was moving in its stark simplicity." L. J. F. BRIMBLE

Mr. J. Hornell

MR. JAMES HORNELL, who died at Hastings on February 24 at the age of eighty-three, was a pioneer. He was one of the first marine biologists and fishery naturalists to be employed as such, and his experience of the fisheries of warmer seas placed him in a unique position for many years. Educated in Scotland and at the University of Liverpool, his early experience was gained on a fisheries survey of the Channel Islands, where he met his wife. Shortly after this he left England, and in 1904 was appointed marine biologist to the Government of Ceylon and four years later in the same capacity to the Government of Madras. Here he began a connexion with tropical seas which occupied the greater part of his working life.

In those years his efforts were mainly directed to the practical application of his investigations, and his elucidation of the cause of a decline in the Ceylon pearl oyster fishery, recommending action which brought back a substantial measure of prosperity, is an outstanding example of his achievements in this direction. Later, he made many other attempts at fishery development, among which may be mentioned his plea for the culture of fish in ponds and lagoons. In urging work of this sort, he produced a report on the conditions under which fish are farmed or cultured at Arcachon and Commachio, recommending similar action in India. The time for what we recognize as developmental and operational research was not yet, however, and the will and resources to implement his schemes were not forthcoming in a way that was worthy of his proposals. In addition to the presentation of development schemes and the day-to-day distractions of administration which became his lot when he was promoted to director of fisheries in 1918,

he managed to do a considerable amount of descriptive biology. It is, indeed, a matter for remark that, living so far away from the academic contacts that might have helped him, he dealt with these studies so competently. There is no doubt that, had he remained in England, his contribution to more fundamental fishery research would have been outstanding.

A rather special aspect of his scientific outlook arose from the application of a fisheries ecology which included men and gear in relation to the fish they pursued. This led him to produce interesting descriptions of fishing boats and gear before he retired from the Madras Government service in the early 'twenties, and which culminated in his classic "Water Transport, its Origins and Early Development", published only two years before his death. After he left India, he made many visits to British Colonial Dependencies and Mandated Territories, from which emerged a series of short fishery surveys of great value. In 1934 he went to live in Hastings, which remained his home for the rest of his life. Here he entered into the scientific life of the town, studying and describing the structure of local fishing boats and giving his welcome assistance to the Sussex Sea Fisheries Committee.

Hornell was gifted with a power of lucid exposition, evident in all his many publications, making them both a pleasure to read and models of style to those who come after him and regret his passing.

R. S. WIMPENNY

WE regret to announce the following deaths:

Sir Wyndham Dunstan, K.C.M.G., F.R.S., director during 1903-24 of the Imperial Institute, on April 20, aged eighty-seven.

Prof. E. S. Kipping, F.R.S., emeritus professor of chemistry in University College, Nottingham, on April 30, aged eighty-five.

Dr. W. J. Perry, lately reader in anthropology in the University of London, on April 29, aged sixty-one.

Sir Robert Robertson, K.B.E., F.R.S., formerly Government chemist, on April 28, aged eighty.

NEWS and VIEWS

Prof. Doris Mackinnon

PROF. DORIS L. MACKINNON, who retires from the chair of zoology at King's College, London, at the end of the present session, has held the post since 1927, when she succeeded Dr. Julian Huxley. She joined the staff of King's in 1919 when the late Prof. A. Dendy was head of the Department, and endeared herself to generations of students by her professional competence and her sympathetic, wise and helpful guidance. Prof. Mackinnon has published many noteworthy papers on her work, which deals almost entirely with parasitic Protozoa (especially flagellates and Sporozoa). During the First World War she joined the team of workers engaged in the diagnosis of amoebic dysentery and intestinal protozoal infections for the War Office and Medical Research Committee (now Council). When she went to London after the War, she soon established a centre of research in protozoology—for years the only zoological (that is, non-medical) centre of the kind in Britain. By

her teaching and research and the work of her pupils, she has thereby done much to advance the subject; and her publications include many solid and permanent contributions to protozoology. As too frequently in academic appointments, the responsibility of administration tends to make inroads on time for research; but Prof. Mackinnon kept up a constant flow of publication and gave intercollegiate lectures of characteristic lucidity and thoroughness. In paying tribute to her gifts as a teacher, it would not be out of place to mention the admirable series of broadcast talks on natural history given to schools. Her services on the University and College Boards and Faculties were particularly appreciated, as she brought to them a breadth of outlook, sound judgment, scrupulous thoroughness and an altruistic approach not invariably observed on such bodies. Fortunately her retirement does not mean that she will cease her zoological work, and her colleagues and friends will still be able to enjoy her urbane and delightful companionship.