OBITUARIES

Prof. F. Debenham

PROF. FRANK DEBENHAM had been a colleague, friend and helper to so many that his death on November 23, 1965, at the age of eighty-one brings sadness to all. His was a life of vigour and indeed of vision, for he constantly looked ahead to new organizations and new methods which should be improvements on those already in being. Into old age he retained his enthusiasms, his friendships and his continued interest and writing on a variety of small but always practical topics in the realms of cartography and survey. Not least he remained fascinated by those frozen fishes which appeared so mysteriously on the surface of the Ross Ice Shelf and which excited such interesting hypotheses about the nourishment of ice shelves by the freezing of sea-water.

Born in Australia in 1883, Debenham was of the right age and training to become geologist to Scott's second Antarctic Expedition between 1910 and 1913. There he did much valuable work and forged the links of friendship with Sir Raymond Priestley and Sir Charles Wright, which later bore such excellent fruit in the foundation of the Scott Polar Research Institute in Cambridge. Intervening war service and wounding in Salonika preceded his return to Cambridge and his appointment in 1919 as Royal Geographical Society lecturer in cartography. There he soon succeeded Philip Lake as reader in geography, and not long afterwards had the distinction of being appointed the first holder of the new chair of geography in the University of Cambridge. His activities were such that by 1936 the new Department had been built and was well on the way towards that distinction which it possessed by the time of his retirement from the chair in 1949.

Yet many will think of 'Deb' primarily as the 'architect' of the Scott Polar Research Institute, of which he was part-founder and director from 1925 until 1946. The death of Scott and his companions returning from the South Pole in 1912 had stirred Britons perhaps more than any other peacetime event in centuries. They rallied nobly to Scott's last appeal to "see that those who are dependent on us are properly provided for". The subsequent Mansion House Fund reached a total of £76 500, a large sum at that time.

When the Mansion House Fund had fulfilled its dual task of providing for dependants and of publishing the scientific reports, there still remained a sum of £15,000 set aside as a 'Polar Research Fund'. It was in the early 'twenties that Debenham, before ever he was professor, put forward proposals which sprang from discussions a decade before in Antarctica with Raymond Priestley and Charles Wright. Their practical idealism was now to bear fruit. Debenham was able to show convincingly that often hard-won experience of polar expeditions in the past had been lost when their members dispersed, and that the techniques of life and travel in cold regions had been inadequately recorded. To ensure that future expeditions might fully profit from the past, on the sure basis of recorded experience, Deb proposed the foundation of an institute for polar research. That was the origin of the Scott Polar Research Institute in Cambridge—first an idea; then a tiny beginning in an attic room in the Sedgwick Museum of Geology in 1920; later, the construction, with the residue of the Mansion House Fund, of a particularly beautiful small building opened in 1934; and gradually the growth of the Institute to its present position of international repute. Deb happily lived to

know of the recent munificent bequest from the Ford Foundation which will now allow the Institute, which was so close to his heart, to expand anew some 40 years after he had laid the first foundation.

G. C. L. BERTRAM

Prof. José María Albareda

PROF. JOSÉ MARÍA ALBAREDA died in Madrid on March 27, within a few days of his sixty-fourth birthday. Albareda was born in Caspe. He studied at the University of Madrid, where he graduated in pharmacy, obtaining his doctorate in 1927. He then studied chemistry in the Faculty of Science in Zaragoza and obtained his doctorate in chemistry in 1931. He immediately embarked on his career of soil research, at first under Prof. Rocasolano and Rius Miró in the University of Zaragoza. Between 1935 and 1936 he developed a course in soil science while holding the Conde de Cartagena chair of the Royal Academy of Science of Spain.

He was the first director of the Instituto Ramiro de Maeztu of Madrid, and in 1940 was appointed to the chair of geology and zoology in the Faculty of Pharmacy in the University of Madrid, where he remained until his retirement in 1959. He helped towards the development of the new University of Navarra at Pamplona, and was appointed rector in 1960, a position he held at the time of his death. In 1959 he was ordained a priest.

Albareda was a leader in the field of pure and applied research, and with considerable foresight he, in collaboration with various university professors, planned the development of research in Spain, particularly through his service to the Spanish Research Council. After the foundation of the Consejo Superior de Investigaciones Científicas in 1939 he was appointed general secretary, and remained so until his death. Albareda directed much of his attention towards the development of soil science and to the problem of development of agriculture in Spain. He was in charge of the Instituto de Edafología from its formation in 1942 until his death. During this period the work performed by Albareda and his colleagues covered a wide field of soil science and had important practical applications. During the 26 years in which Albareda was general secretary in the Council he built up an extensive research programme with a great number of centres in Madrid and other cities entirely dedicated to research, and he established the foundation of a new era in the history of Spain.

The work of Prof. Albareda received international acclaim and he was elected corresponding, foreign or honorary member of a number of European societies. He was awarded a great number of distinctions, including his election as a member of the Spanish Royal Academy of Science in 1941, of Pharmacy in 1941, and of Medicine in 1952, of the Pontifical Academy of Sciences of the Vatican in 1948, and also of the Royal Academies of Science of Barcelona and Zaragoza.

Prof. George Humphrey

THE death of George Humphrey at the age of seventy-six on April 24 has removed one of the last surviving links in Great Britain with the pioneer psychological laboratory of Wilhelm Wundt at Leipzig. He acquired at Leipzig a

profound knowledge of the methods and the content of the German psychology of his day, which was to serve him as the basis for much of his later work. From Germany he moved to Harvard, where he completed his postgraduate studies under another eminent pioneer in experimental psychology, Raymond Dodge. Humphrey spent most of the next thirty years in North America, settling in 1924 in Canada as professor at Queen's University at Kingston, Ontario. He helped with many of the applications of psychology during the Second World War, and from 1938 to 1944 was successively secretary and president of the Canadian Psychological Association. At Queen's, too, he wrote one of his most important works, *The Nature of Learning* (1933). The experimental demonstration of the phenomenon of habituation in snails, and the discussion of the fundamental importance in all organisms of learning not to respond to stimuli, was a notable contribution to the psychology of learning.

In 1947 Humphrey returned to Britain as first professor of psychology in the University of Oxford. He was then fifty-eight years of age, and it was a bold decision to undertake to establish a school of psychology in a university that had been conspicuously resistant to it. The present size and standing of the Oxford school is a tribute to the skill with which Humphrey laid the foundations. While at Oxford he completed his second major book, *Thinking: Its Experimental Psychology* (1951).

Humphrey retired in 1956 and moved to Cambridge, where he continued to write almost to the end of his life, his last book on *The Chemistry of Thinking*, written in collaboration with C. R. Coxon, appearing in 1963. Right up to the end he campaigned for the need to experiment in psychology. "When any branch of knowledge can experiment, it must experiment, or it will die a dreary death" he maintained in one of his last essays. And this applied, he believed, not only to the conventional field of experimental psychology, but to the more dangerous areas of social psychology.

L. S. HEARNshaw

Mr. H. W. Simmonds

MR. H. W. SIMMONDS died in Auckland, New Zealand, on March 16, 1966, at the age of eighty-nine.

He was born in Kent, but left England in 1902 to go to New Zealand. Throughout his life he was a devoted

lover and observer of Nature, his interests covering a wide field of natural history, though the study of insects was his main concern, particularly the biological control of insect pests.

In 1920 he joined the Colonial Service as Government Entomologist in Fiji, and it was during his period of Government service, from 1920 to 1937, that the greatest successes in biological control of insect pests and weeds in Fiji occurred. A team of entomologists—Tohill, Taylor and Paine—successfully controlled three serious pests which threatened the coconut-growing industry of Fiji. Simmonds worked in association with the team throughout, and, in the course of this work, travelled extensively in the South Pacific and the East Indies. One result of his travels was the publication of his bulletin on insect pests and diseases of the coconut palm in Melanesia and Southern Polynesia.

Undoubtedly the two successes in biological control for which Simmonds will be chiefly remembered by the people of Fiji are those which brought about control of the weed Koster's Curse and the insect housefly. In 1930 Simmonds brought back from Trinidad a thrips which was successful in controlling the weed. In 1938 he brought in a predatory beetle from Java which is said to have reduced formidable housefly populations to the reasonable level which exists to-day.

After retirement, Simmonds continued to work in the field of entomology, and in 1938 and 1945 made overseas trips on behalf of the Government of Western Samoa, seeking parasites of the coconut rhinoceros beetle, and in 1945 he introduced the parasite *Scolia ruficornis* to Samoa, where it is now well established. In 1963, when the coconut rhinoceros beetle was first discovered in Fiji, Simmonds joined the Coconut Pests and Diseases Board, with which organization he was still working at the time of his death, most of his time having been occupied with work on *Scolia ruficornis*, which is now established in Fiji.

Simmonds was a talented illustrator of insects, a student of mimicry in insects, an enthusiastic worker for Nature conservation and a devoted and gifted gardener and orchid-grower. He was awarded the O.B.E. for his services while employed by the Government and was made an Honorary Life Member of the Fiji Society in recognition of his work for Nature conservation and the establishment of nature reserves.

B. A. O'CONNOR

NEWS AND VIEWS

Theoretical Physics in the University of London:

Prof. R. K. Eisenschitz

PROF. R. K. EISENSCHITZ retires this year from the chair of theoretical physics in the University of London at Queen Mary College. He is well known for his contributions to statistical mechanics and the theory of liquids, made over a number of years at the Royal Institution under Sir William Bragg, at University College, London, under Prof. Andrade, and at Queen Mary College. His early career in Germany at the Kaiser Wilhelm Institute was notable for his work with F. London on the quantum-mechanical calculation of van der Waals forces but, like many of the theoretical physicists who moved to Britain, he had begun as an experimenter and worked for a time in industry. In his theoretical studies Prof. Eisenschitz moved naturally from general problems in statistical mechanics and the theory of elastico-viscous properties of matter to the fundamental problems of liquid theory. In recent years he has paid special attention to Kirkwood's approach and to approaches implying ideas of collective motion. More recently he has studied properties of elec-

trons in liquid metals. Many of Prof. Eisenschitz's research students are now in important positions and owe much to his thorough and rigorous training. Before his appointment to Queen Mary College there was no theoretical research school in physics and no theoretical option for final-year undergraduate physicists; the new professor will find about a dozen students in each. Prof. Eisenschitz's many friends and colleagues at the College and in the University will miss his kindly interest and judgment.

Conservation Unchanged

THE British Nature Conservancy, now incorporated into the newly formed National Environment Research Council, seems not to be suffering from the association. The Research Council for the past year has been responsible for the Conservancy, the Geological Survey, the Institute of Oceanography and for research in fisheries and hydrology. Dr. Duncan Poore, the new director of the Conservancy, calls them "uneven bedfellows", but expects to gain from the association through co-operation on research with the other similarly oriented organiza-