OBITUARIES

Prof. James Ritchie, C.B.E.

BORN in 1882 at Port Elphinstone, Aberdeenshire, the son of the local schoolmaster, James Ritchie, emeritus professor of natural history in the University of Edinburgh and president of the Royal Society of Edinburgh, died suddenly in Edinburgh on October 19 at the age of seventy-six. He had a notable career. Educated at Gordon's College and then at the University of Aberdeen, he joined the staff of the Natural History Department of the Royal Scottish Museum in 1907. Assistant keeper in 1919, he succeeded Dr. Eagle Clarke as keeper of the Department in 1921, but nine years later was appointed to the regius chair of natural history in the University of Aberdeen, following Sir J. Arthur Thomson, under whom he had been trained. In 1936 he returned to Edinburgh as professor of natural history, retiring in 1952. He was elected president of the Royal Society of Edinburgh in 1954.

It was highly fitting that the posts James Ritchie occupied were all designated, as largely remains the custom in Scotland, 'natural history'. He was, above all else, a naturalist, and no one had a better knowledge of the fauna of his country, both in the present and in the past, and more concern for its future. He published extensively and over an exceptionally wide field, ranging from marine hydroids and polyzoans to birds and mammals, and also made notable contributions to archæology, an interest he gained from his father, an earlier James Ritchie and a well-known amateur archæologist. He wrote three books, "The Influence of Man on Animal Life in Scotland" (1920), "Beasts and Birds as Farm Pests" (1931) and "Design in Nature" (1937).

The first of these represents his major contribution—and it is a great one—to knowledge of animal life in Scotland. It may be described as a work of scholarship written by a born naturalist. Ritchie had the advantage, which he stressed, of dealing with a small country and with the changes in the purely post-glacial fauna which neolithic man found when, some 9,000 years ago, he followed the northward migration of these animals into Scotland. He had the further advantage of the recorded observations of many generations of Scottish naturalists, of whom he was the worthy successor and ideal interpreter. This book had great influence on the growth of the youthful science of animal ecology, with its applications in conservation. It won international recognition for its author, including an award of a silver medal by the Société Nationale d'Acclimatation de France.

His investigations and advice were largely responsible for measures of protection for both seals and birds in Scotland. He found, by examination of the contents of caves near Inchnadamph in Sutherland, evidence of an arctic fauna with indications of the presence of palæolithic man. In archæology, his long and extensively illustrated account of the lake dwellings in Loch Treig is a classic description, and he was engaged on further work of this type at the time of his death.

Ritchie's activities were as wide as his interests. From its first inception in 1909, he took a great part in the development of the Royal Scottish Zoological Society, of which he became vice-president; he was

secretary and later president of the Royal Physical Society; vice-president of the Scottish Marine Biological Association; chairman of the Council of the Royal Scottish Geographical Society; president of Section D (Zoology) of the British Association in 1939. He was for fourteen years editor of the Scottish Naturalist and was the natural choice as chairman of the Scottish Wild Life Conservation Committee which prepared the way for the establishment of the Scottish Committee of the Nature Conservancy, of which he was an initial member. Elected to the Royal Society of Edinburgh in 1916, he served many times on its Council, being secretary, later a vice-president and finally, in 1954, president. He was awarded the Keith Prize of the Royal Society of Edinburgh in 1944, was created C.B.E. in 1948 and received the honorary doctorate of laws from his own University of Aberdeen in 1952.

By his writings, his lectures to university students and to a wider public, and by his charming water-colour paintings of the Scottish landscape, James Ritchie was widely known, and his loss will be felt far beyond the circle of his friends and colleagues. He married Miss Jessie J. Elliot, who died in 1933, and is survived by his son, Prof. A. E. Ritchie, Chandos professor of physiology in the University of St. Andrews, and by his two daughters.

C. M. YONGE

Dr. T. A. Sprague

Dr. Thomas Archibald Sprague, well known as a taxonomic botanist and an authority on plant nomenclature, died at his home in Cheltenham on October 22, at the age of eighty-one

He took the degree of B.Sc. at Edinburgh, under Prof. Bayley Balfour. In 1898, he undertook, with Captain H. W. Dowding, R.N., an expedition to Venezuela and Colombia, and the first set of the plants he collected are at Kew. Sprague was appointed to the staff of the Herbarium of the Royal Botanic Gardens, Kew, in 1900, and for about two decades was in charge of the Thalamiflorae and Disciflorae (in the system of Bentham and Hooker). The division of work was, however, not strictly adhered to, and some of Sprague's best taxonomic work concerned the Loranthaceae of tropical and south Africa, for the "Flora of Tropical Africa" and the "Flora Capensis", respectively, and the Bignoniaceae. Later, he was in charge of the American He made, with Mr. (later Dr.) John collections. Hutchinson, a botanical excursion to the Canary Islands in the summer of 1913. He served with the artillery in the First World War and was stationed in India and did some plant collecting in the Punjab. Sprague was awarded the degree of doctor of science by the University of Edinburgh in 1930 and was, the same year, appointed deputy keeper of the Herbarium. He was a fellow of the Linnean Society of London from 1903, and on May 12, 1937, was presented with the Coronation Medal of George VI. He retired from his post at Kew on October 31, 1945.

Soon after his return from military service, Sprague devoted a large proportion of his official and private time to botanical nomenclature and to the study of certain herbals. Those who knew his careful critical researches on the systematics of various groups

tended to regret that he did not concentrate on herbarium taxonomy in the form of monographic However, he was mentally and temperamentally well equipped to deal with modern revisions of old herbals and with the intricacies of nomen-clature. His accounts of "The Herbal of Otto clature. His accounts of the lieuw. Sec. Bot., 48, 79; 1928) and, with E. Nelmes, of "The Herbal of Leonhart Fuchs" (loc. cit., 48, 545; 1931) are models of their kind. For a good many years Sprague was in charge of compilers engaged in preparing the supplements (usually quinquennial) of the "Index Kewensis". There is no doubt that his training of these to the degree of accuracy on which he insisted greatly raised the standard of this important work. It is probable, too, that this supervision of an index to plant names directed his attention to botanical nomenclature in general and to various weaknesses in the International Rules. He attended the Inter-

national Congress of Plant Sciences, held at Ithaca,

New York, in August 1926 and read a paper there

under the title "Principles and Problems of Plant Nomenclature". This clearly written paper (published in the Proceedings, 2, 1422; 1929) might be read with advantage by modern nomenclaturists. Sprague became a leader in plans for revision of the rules and largely directed the meetings and debates on this subject at the International Congresses of Cambridge (1930), Amsterdam (1935), and Stockholm (1950). His lucid mind and his undoubted liking for legal form enabled him to enjoy discussions which were sometimes prolonged and sometimes heated.

Sprague was very helpful in training young systematists at Kew, and, though he sometimes flared up rather quickly, he was always kind and painstaking, and anger died quickly and left no malice in him. He was twice married and leaves three children and a widow. After his retirement to Cheltenham he devoted a good deal of time to his hobby of collecting certain special makes of British ceramics and to the Cotteswold Naturalists' Field Club, of which he became president. W. B. TURRILL

NEWS and VIEWS

Jodrell Bank Radio Telescope Appeal

An appeal was launched by the University of Manchester at the recent meeting of the Court of Governors for subscriptions to a fund for the radio telescope at Jodrell Bank. The appeal has now been issued over the signatures of Sir Raymond Streat (chairman), Mr. L. P. Scott (deputy chairman), Mr. A. V. Symons (treasurer), Mr. R. B. Barclay (deputy treasurer), and Prof. W. Mansfield Cooper (vicechancellor). In consequence of the Russian Sputnik and the American Explorer satellites and lunar probe, all the world knows that the University of Manchester has pioneered in the construction of this 250-ft. steerable radio telescope capable of scientific research on a vast cosmological scale as well as studies of immense practical importance in radio communications and the tracking of satellites used for space exploration. When the building of the instrument was originally proposed, the Council of the University gave enthusiastic support to the ideas of the scientists. Undismaved by the large sums of money involved according to the first estimates—and the difficulties of estimating are obvious—the University embraced the project. The Nuffield Foundation and the Department of Scientific and Industrial Research agreed each to find £200,000. Later it was found essential to revise the first estimates and the Department contributed a further £130,000 on the assumption that the University would find donors willing to cover the balance. It now appears that the University will require at least £150,000 to relieve the telescope from debt and to set scientists free to pursue, without financial anxieties, work of the first order of importance and urgency. If a larger sum were obtainable, further and better work could be done. It is hoped to receive contributions not merely from firms whose products give them a technical and perhaps commercial interest in the work of the Telescope but also from firms, institutions and individuals who would not wish that the result of the University's courage in this matter should be to leave it with unsolved financial problems.

The radio telescope is an immense achievement whether viewed as a stupendous piece of scientific

equipment conceived by Prof. A. C. B. Lovell, an unparalleled feat of engineering designed by Mr. H. C. Husband or a fine accomplishment by the many firms engaged on the project, especially the main contractors, the United Steel Companies, Ltd. increases over the earliest estimates have been accepted as necessary in all the circumstances by both the Department of Scientific and Industrial Research and the University. Indeed, when the University first realized that heavy additional costs were involved, it was nevertheless decided to proceed with the instrument. In reaching this decision, the University relied on the most expert external advice, scientific and technical. As a consequence the instrument was ready to play the part it did in the International Geophysical Year and the developments which have stemmed therefrom. Had the University failed to proceed, Great Britain's contribution to recent world scientific events of great international importance would have been sensibly lessened. The ultimate costs would also have been greatly enhanced. The result of the University's courage is that Britain is first in the field with a telescope of fantastic quality at a cost far below what others will soon be paying for Before opening the appeal, similar instruments. £10,000 was received from Henry Simon, Ltd., and an offer of a further £10,000 from Simon Carves, Ltd. Several small subscriptions have been received from individual donors after Press accounts of the Court meeting. Contributions in the form of seven- or tenyear covenants will be especially welcome. Bursar of the University will acknowledge donations or supply information to those considering alternative methods of giving support.

The National Research Development Corporation

THE Development of Inventions Bill, which received its second reading in the House of Commons on November 14, extends the power of the National Research Development Corporation to make advances by a further ten years from June 1959 onwards, and raises the limit on the amount of advances from £5 million to £10 million. In moving the second reading,