honorary Sc.D. degree in 1925. He was an honorary member of the Botanical Society of Edinburgh, Scotland, a trustee emeritus of the Marine Biological Laboratory, and vice-president of the Long Island Biological Laboratory.

A former member of the editorial board of the *Journal of General Physiology*, he was the author of *Experiments with Plants*, published in 1905, *Injury, Recovery and Death*, in 1922, and *Nature of Life*, in 1924. His numerous scientific contributions numbered more than 250.

He was a member of the U.S. National Academy of Sciences, the American Philosophical Society, the American Physiological Society, a Fellow of the American Association for the Advancement of Science, and of scientific societies in Sweden and Germany.

## Mr. John Parkin

IN these days of intense specialization it is refreshing to think of the life and work of a man who was publishing botanical papers from 1898 until 1960 and who could include in the list papers of fundamental importance on the formation, storage and depletion of carbohydrates in monocotyledons, the science and practice of Para rubber cultivation, the carbohydrates of the foliage leaf of the snowdrop, the origin of Angiosperms, and the anatomical explanation of the unique glossiness of the petals of *Ranunculus*.

John Parkin was born on the family estate of Blaithwaite House, Wigton, Cumberland. He graduated from Trinity College, Cambridge, with first class in both parts of the Tripos in 1897. For a year he demonstrated in the University and then accepted the newly created post of scientific assistant to the Director of the Peradeniya Botanical Gardens in Ceylon, where he had the good fortune to work under Dr. J. C. Willis. At this time rubber production was in its infancy, while rubber was in rising demand for tyres in the new motor industry. Some years before, some trees of Para rubber (*Hevea braziliensis*) had been introduced into Ceylon and Malaya by Sir Henry Wickham from the Amazon region, and these were sufficiently established to serve as material for Parkin's investigations. In the one year that he spent in Ceylon, working under somewhat primitive conditions, he devised the 'acid' technique for coagulation of the latex (little altered in present practice), and also directed attention to the 'wound response' which increased flow of latex and enabled tapping to be carried out almost every other day. These two contributions were of great practical importance to planters and were remarkable achievements for a single year. The opportunity to work in the tropics was an advantage for his later work on flowering plants.

From 1899 until 1911 he studied at Cambridge, working mainly on biochemical lines, and the most important contribution was "The Carbohydrates of the Foliage Leaf of the Snowdrop (*Galanthus nivalis* L.) and their Bearing on the First Sugar of Photosynthesis" (*Biochem. J.*, 6, 1; 1911). This paper emphasized the importance of cane sugar. During this period he was also much interested in the problem of the flowering plants, and in 1907 he published, in collaboration with Dr. Newell Arber, "On the Origin of Angiosperms" (*J. Linn. Soc. Bot.*, **38**, 29; 1907). This paper gave considerable weight to the view that the Magnoliaceae and Ranunculaceae should be regarded as basic in a natural classification of Angiosperms, rather than the Amentiferae as in the German system; undoubtedly this paper had its influence in determining the pattern of more recent classifications.

A fascinating and original line of research was Parkin's anatomical investigations of the petals of *Ranunculus* species, in which he showed that the peculiar glossiness was due to the structure of a special starch layer which reflected the light. A curious outcome was that a plant listed in the New Zealand Flora as a *Ranunculus* and collected by Dr. W. A. Sledge, of the University of Leeds, proved to be the only species of *Anemone* in the Flora. The results were published in a joint paper (*J. Linn. Soc. Bot.*, **49**, 645; 1935).

From this time on, numerous papers appeared in botanical journals, many of them in the form of reviews of theories of the flower and classification. This was one of Parkin's deepest interests, and, had age permitted, he told me that he would have liked to express his views in a fuller paper on this subject. His last paper was a survey of "The Distribution and Role of Sucrose in Plants" (*J. Indian Bot. Soc.*, **39**, 104; 1960), written at the age of eighty-six.

Parkin took his place as a county councillor in Cumberland and on many local committees and governing bodies of schools, etc., but his interests were concentrated on botany and forestry. He derived great pleasure from an arboretum that he had planted in an old quarry on the estate at Wigton, and one is glad to hear that he was able to visit this as recently as last January. During the First World War, he served as a major in the Fifth Battalion of the Border Regiment, engaged on coastal defence. In the Second World War, he organized Civil Defence in the Wigton area. He kept in touch with botanists from many countries through learned societies, visits abroad and an extensive correspondence. He was unassuming in manner, but in conversation one soon realized what an excellent grasp he had of any subject under discussion; he frequently visited friends in the Department of Botany of the University of Leeds, and one's knowledge was always the richer for such contacts.

He died on March 29, 1964, at his home in Wigton, where he lived with his daughter, Miss Sylvia Parkin. I am indebted to her for supplying much of the information included in this account.

It is interesting that in his ancestry he was connected through his paternal grandmother with Bishop Ridley, martyred during the 1555–58 persecution. Through his maternal grandmother he was connected with Sir Lowthian Bell, of iron ore fame, and whose granddaughter was Gertrude Bell, the famous traveller and archæologist of the Middle East.

British botany owes much to John Parkin, and botanists of his generation, for their fundamental contributions to the subject and their great enthusiasm.

LORNA I. SCOTT

# NEWS and VIEWS

## The Royal Society of London : Special Election

UNDER the Statute of the Royal Society which provides for the election of persons who either have rendered conspicuous service to the cause of science or are such that their election would be of signal benefit to the Society, the Rt. Hon. the Earl of Iveagh has been elected a Fellow of the Royal Society.

## Chief Scientist (Royal Navy): Sir John Carroll, K.B.E.

SIR JOHN CARROLL retired on May 18 from the Admiralty Board as chief scientist (Royal Navy), having acceded to that newly created office on April 1, the vesting day of the new Higher Organization for Defence. After a distinguished university career during which he was a Research Fellow of Sidney Sussex College, an Isaac Newton student, University lecturer in astrophysics and