OBITUARY.

WILLIAM CARRUTHERS, PH.D., F.R.S., F.L.S., F.G.S.

WILLIAM CARRUTHERS, the doyen of the botanical world, died on June 2; he had just entered his 93rd year, having been born on May 29, 1830, at Moffat, in Dumfries. Educated at Edinburgh for the Presbyterian Ministry his interests, however, were such that he decided on following a scientific career. An acquaintance with Dr. Robert Chambers led to his contributing the geological articles to the first edition of "Chambers' Encyclopædia." In 1859 he became assistant (the only assistant at the time) in the Department of Botany of the British Museum, filling a vacancy caused by the death of the famous Robert Brown. In 1871 he succeeded J. J. Bennett as Keeper of the Department, and in the same year was elected a Fellow of the Royal Society. Almost his first official duty as Keeper was to appear before the Royal Commission on Scientific Instruction and to make a successful defence for the continued existence of his department at the British Museum. It was during his tenure of office (1871 to 1895) that the Natural History Collection was removed to the new museum at South Kensington (1881), affording an opportunity for improvement and expansion of which Dr. Carruthers was not slow to avail himself. One may say, in fact, that the arrangement and equipment of the galleries assigned to Botany at the museum form a lasting memorial of his knowledge and skill. Under his care the Herbarium was arranged and increased by the addition of many valuable historical collections; in the Department of Cryptogamic Botany he had the assistance of Mr. George Murray. With the aid of a large grant from the Treasury, and with his knowledge and appreciation of botanical literature, he was enabled to form what is perhaps the finest botanical library in the world. The rearrangement of the valuable collection of original botanical drawings and manuscripts was carried out under his superintendence. To his initiation we owe a series of valuable botanical monographs, of which two, Crombie's "British Lichens" and Lister's "Mycetozoa," were issued under his editorship.

Dr. Carruthers was elected a Fellow of the Linnean Society in 1861; from 1886 to 1890 he was President, and his term of service included the centenary celebrations of 1888. He represented the Society at the bi-centenary celebrations of the birth of Linnæus in 1907, and his doctorate, Ph.D. of Upsala University, was conferred on that occasion. He was elected a Fellow of the Royal

Microscopical Society in 1880, and served in the office of President during the years 1900 to 1901, taking as the subjects of his Presidential Addresses the life and work of "John Ellis" (January 1900) and "Nehemiah Grew" (January 1901).

Carruthers was a botanist almost equally eminent in the systematic, palæontological and economic branches of the science. His most important contribution to pure science, "A Monograph of the Fossil Cycadean Stems of the Secondary Rocks of Britain" (published in the Transactions of the Linnean Society, 1870), from which the well-known genera *Williamsonia* and *Bennettites* date their origin, still remains a classic in palæobotany. In 1871 he was appointed Consulting Botanist to the Royal Agricultural Society, a post he held until 1910. His annual reports cover a wide field and form a valuable contribution to economic botany. When he began seed-testing on a very small scale in his own home in 1871 it was a real innovation in England, but under his hand it grew until now we have the important Institution at Cambridge of which he may well be described as the father. He devoted much time to the selection of grass for pasture and the guaranteed purity and germination of grass seed; he also conducted a classical series of observations on the vitality of farm seed.

He formed a fine collection of Puritan tracts, and continued to take a practical interest in the work of the Presbyterian Church in England, and for forty-six years edited their "Children's Messenger."

A. W. SHEPPARD.