

OBITUARY.

SIR JOSEPH DALTON HOOKER.

O.M., G.C.S.I., M.D., D.C.L., LL.D., F.R.S., F.G.S., ETC.

BORN JUNE 30, 1817.

DIED DECEMBER 10, 1911.

At the advanced age of 94 there has passed away at his home, The Camp, Sunningdale, in Berkshire, the most eminent of British botanists. By extended observation in all quarters of the globe and prolonged research he threw light on many difficult problems in natural history, aiding and supporting Darwin and Lyell on the origin of species, and on the causes which have influenced the geographical distribution of plants and the production of insular floras. He was the second son of Sir William Jackson Hooker, who, born at Norwich, married the eldest daughter of Dawson Turner, F.R.S.; botanist, antiquary, and also banker, of Great Yarmouth. Other daughters of Turner were married respectively to Sir Francis Palgrave, the Rev. John Gunn (Rector of Irstead, Norfolk), Bishop Jacobson of Chester, and T. Brightwen of Yarmouth. Having independent means Sir William Hooker settled at first at Halesworth in Suffolk, where his son Joseph was born. Afterwards he removed to Glasgow on being appointed Professor of Botany in the University, and subsequently he became Director of the Royal Gardens at Kew.

J. D. Hooker was educated at the High School and University at Glasgow, where he qualified as M.D. in 1839. He inherited his father's tastes for Natural History, and Botany in particular, and was fortunate in being appointed assistant-surgeon and naturalist on board H.M.S. *Erebus* in the great expedition conducted by Sir James Clark Ross to the Antarctic regions during the years 1839–43. The botanical observations made in the course of that voyage were published in six volumes (1844–60), and dealt with the plants of New Zealand and Tasmania, as well as those of Antarctic lands. The philosophic conclusions bearing on the causes of the geographical distribution of the plants were published in 1859, in a now classic memoir *On the Flora of Australia, its origin, affinities, and distribution, being an Introductory Essay to the Flora of Tasmania*.

In 1846 Hooker was appointed Botanist to the Geological Survey of Great Britain, under Sir Henry De la Beche. His attention was now directed to the plants of past ages, and in particular to those of the Coal-measures; and he published an essay *On the Vegetation of the Carboniferous Period, as compared with that of the present day*, and two more special papers on the structure of *Stigmaria* and of some *Lepidostrophi* (Mem. Geol. Surv., vol. ii, pt. ii, 1848).

In 1847 Hooker resigned his appointment on the Geological Survey for the purpose of studying the botany of India, spending the years 1847–51 mostly in the higher mountain regions of that country, and publishing the general results in his famous *Himalayan Journals* (two vols., 1854). Interesting observations were therein included on the delta of the Ganges, and on the parallel terraces in the Himalayas, the formation of which was attributed to the barring of glacier lakes by ice and moraines.

In 1855 Hooker was appointed Assistant Director of Kew Gardens, becoming Director on the death of his father in 1865. Meanwhile he made an expedition to Syria and Palestine in 1860, and apart from his special botanical work made observations on the moraines of extinct glaciers on which some of the ancient cedars of Lebanon grow. In later years he explored parts of Morocco and the Great Atlas in company with John Ball, F.R.S., and George Maw (1871), and visited the Rocky Mountains and California in 1877. In 1885 he resigned his Directorship of Kew Gardens. Hooker was elected a Fellow of the Geological Society in 1846, and served as a member of Council during the years 1852–6 and 1860–2. To that Society he contributed several papers on fossil plants. He became F.R.S. in 1847, and was President of the Royal Society and ex officio a Trustee of the British Museum from 1873 to 1878. In recognition of his distinguished services he received a Royal Medal in 1854, the Copley Medal in 1887, and the Darwin Medal in 1892. He was President of the British Association at the Norwich meeting in 1868. Hooker married (1) the daughter of the Rev. J. S. Henslow, and (2) the daughter of the Rev. W. S. Symonds (Rector of Pendock) and widow of Sir W. Jardine (7th Baronet).

After his retirement from Kew he continued to labour diligently at work connected with his favourite studies. He gave much time to the great *Index Kewensis*, which was prepared under his direction by Dr. B. Daydon Jackson; and he edited, with life of the author (1906), the *Journal of Sir Joseph Banks*, which was kept during Captain Cook's first voyage.

Sir Joseph Hooker was buried in the old churchyard at Kew on December 15.

H. B. W.

ROBERT DAVIES ROBERTS, M.A., D.Sc., J.P., F.G.S.

BORN 1851.

DIED NOVEMBER 14, 1911.

WE regret to record the death of Dr. R. D. Roberts, who was Registrar of the Board for the Extension of University Teaching in the University of London. He was born at Aberystwith, educated at University College, London, and Clare College, Cambridge, where he took a high position in Natural Sciences, geology at the time claiming his chief attention. He was University Lecturer in Geology in 1884, and in 1893 published *An Introduction to Modern Geology*. During later years his time was given to more general educational work and administration. He was High Sheriff of Cardiganshire in 1902–3.

MISCELLANEOUS.

FLINT IMPLEMENTS.—The *Morning Post* of December 26, 1911, devotes a column to "Flint Implements", "The Flint Collector", "Flints which are not genuine", and "The means by which to distinguish genuine implements from false ones". We fear so long as a clever and dishonest 'flint-knapper' lives and makes *good forgeries* there will always be found simple folks to buy them.