

Obituary.

SIR W. T. THISELTON-DYER, K.C.M.G.

WILLIAM TURNER THISELTON-DYER, son of Dr. W. G. Thiselton Dyer, was born in Westminster on July 28, 1843. At King's College School, where his contemporaries included Prof. Saintsbury and the late Dr. Henry Trimen, Dyer was first mathematical scholar: as school-boys Trimen and he were companions on botanical excursions near London. Matriculating in the University of London, Dyer entered King's College, meaning, like Trimen, to study medicine: in Dyer's case the intention only went far enough to qualify him for eventual admission to the Society of Apothecaries as a 'member by apprenticeship.' At King's College his contemporaries included Sir Charles Lyall, whose participation in Dyer's botanical pursuits made them companions in a vacation walking tour, and provided Lyall in after life with relaxation from the tasks of an Indian official and the studies of an Oriental scholar. This friendship, and the fact that relatives of his father were resident in Madras, while his maternal uncle, T. A. C. Firminger, author of the classic "Manual of Gardening in India," was a chaplain in Bengal, may have induced the idea of an Indian career under which Dyer, at twenty, went up to Christ Church, Oxford, as a Junior Student whose mathematical aptitude and classical proficiency had left unimpaired his early botanical interests.

At Oxford, where Dyer took his degree in mathematics, any thoughts of an Indian career disappeared. He came under the influence of Profs. Rolleston and Daubeny, and formed intimate friendships with his contemporary Prof. H. N. Moseley and their junior, Sir Ray Lankester, who migrated from Cambridge to Christ Church in 1866. His friend Trimen, who had graduated as M.B. London in 1865, at once adopted a botanical career, and in 1866, Dyer collaborated with him in the preparation of their "Flora of Middlesex," which was published in 1869. In 1867, Dyer obtained a first class in the Oxford final Natural History School, and in 1868 became professor of natural history in the Royal Agricultural College, Cirencester. Here he found in Dr. A. H. Church, professor of chemistry, a colleague on whom the influence of Daubeny had also been marked. Impressed by the Yale text-book, "How Crops Grow," Dyer assisted Church to prepare an authorised edition of Prof. S. H. Johnson's work, adapted to English conditions, which appeared in 1869. In 1870, Dyer graduated as B.Sc. London, and was appointed professor of botany in the Royal College of Science, Ireland. Early in 1872 he was again in London: on Jan. 17 he was appointed professor of botany to the Royal Horticultural Society, and assumed office on Feb. 13. Two days later he was elected a fellow of the Linnean Society.

While working for the Horticultural Society at Chiswick and South Kensington, Dyer gave assistance to the director of Kew, the delegates of the Clarendon Press, and the professor of biology in the Royal College of Science. His work at Chiswick in-

cluded plant identification. This entailed contact with Kew, and brought him an invitation to assist in preparing the "Flora of British India," the first part of which appeared in May 1872. By 1873, Dyer had described the Indian species of six natural families of flowering plants: his contribution, which includes an emendation of the "Genera Plantarum" of Bentham and Hooker, was issued in January 1874. The Clarendon Press had undertaken to publish an English edition of a 'Text-book of Botany' by Prof. Sachs: Mr. A. W. Bennett was employed to translate, Dyer was engaged to edit this work, which was published in 1874. The transfer of the School of Mines from Jermyn Street to South Kensington enabled Prof. Huxley to initiate his laboratory course of biological instruction. Dyer became one of Huxley's demonstrators, and was left to organise and conduct the botanical part of the course, which began on June 24, 1873, and was much appreciated: in May 1874 he was elected to the Council of the Linnean Society.

When Dr. J. D. Hooker became director of Kew in 1865, the assistant-directorship he had held during 1855-65 was suppressed. In 1875 the assistant-directorship was revived: Hooker was asked to select an incumbent. That year Dyer began his share of Huxley's course on Mar. 6: on June 16 he informed the Horticultural Society that he had been appointed assistant-director of Kew, and resigned their service. Dyer's duties under Hooker at Kew did not deprive Huxley of his help at South Kensington; in 1876, Dyer's South Kensington course opened on June 24; in 1880 it began on July 7.

Hooker assigned to Dyer, as assistant-director, the conduct of the colonial activities of Kew: almost the first of his tasks was to have historic consequences. It was thanks to Dyer that in the autumn of 1875, Peradeniya received the young *Hevea* plants, the progeny of which now stocks the rubber plantations of Ceylon and Malaya. It was Dyer who in 1880 sent his friend Trimen, then director of the Peradeniya garden, the selected varieties of Cacao from Trinidad still grown in Ceylon. When, in 1877, Dyer became Hooker's son-in-law, he was given charge of a laboratory for original investigation by workers of any nationality, erected at Kew by a private donor in 1876: under Dyer's management it became, in American judgment, "the best botanical laboratory in Europe." When, in 1882, another private benefaction gave Kew a rock-garden, its design and construction were entrusted to Dyer. In 1880, Dyer's work for Huxley at South Kensington secured his election to the Royal Society: his work for the Colonial Office was recognised by his being created C.M.G. in 1882. In 1884 he was again elected to the Council of the Linnean Society; in 1885, when Hooker retired, Dyer was appointed director of Kew.

As director Dyer at first experienced many calls on his time. He served as vice-president of the Linnean Society, 1885-87; on the Council of the Royal Society, 1886-88; as vice-president of the

Horticultural Society, 1887-89; as a fellow of the University of London, 1887-90. He now resolved to avoid such distractions from official duty, carrying his resolution so far as to decline nomination as president of the British Association; the only exception to his self-imposed rule of 1890 was his service as vice-president of the Royal Society in 1896-97. This rule could not apply to official commands: he had served as a Royal Commissioner for the Melbourne Centennial Exhibition in 1888; he served in the same capacity for the Paris International Exhibition in 1900, and for the St. Louis Exhibition in 1904. Nor did he decline service on committees appointed by the Royal and other societies to deal with specific matters of public importance. Perhaps his most valuable work of this kind was that connected with the Chelsea Physic Garden. As a member of the Corporation to which, since 1673, the Chelsea Garden belonged, and as director of the younger sister institution that public apathy in 1837 had placed in equal jeopardy, Dyer took the initiative in the movement which in 1899 saved the Chelsea Garden from impending destruction.

The intercourse between Kew and India of 1778-1815 was renewed when Kew became a national institution in 1841. Though India Office councillors and secretaries were but rarely botanists like Dyer's friend Lyall, they were usually acquainted with India and its peoples, and could appreciate the bearing of the work at Kew on economic questions with which they were familiar. This intercourse Dyer maintained: in 1892 he was created a C.I.E. As assistant-director, Dyer had induced a similar appreciation of Kew at the Colonial Office, where personal knowledge of our many tropical possessions was necessarily less general. As director, Dyer was now consulted as regards policy. The advice he gave was simple and effective. From 1887 onwards colonial administrators copied the course followed by the East India Company from 1778 onwards. Botanic stations were set up, under competent curators in direct correspondence with Kew: to assist these stations Dyer in 1887 founded the *Kew Bulletin*. The success of this policy was explained to the House of Commons by the Colonial Secretary on Aug. 2, 1898: in 1899, Dyer was created K.C.M.G. The satisfaction felt by overseas correspondents of Kew was shared by Christ Church: Dyer was elected an honorary Senior Student. But a sacrifice was exacted. The assistant-director of Kew, Dr. D. Morris, became Imperial Commissioner, West Indian Agricultural Department: history repeated itself; the assistant-directorship again fell into abeyance.

Though it has been remarked that Dyer's success was largely due to "his intense feeling for the living plant," he realised that without a herbarium a botanic garden is like a rudderless ship: he described the Dipterocarps of India for Hooker the year he organised the botanical portion of Huxley's course. Dyer saw the Kew herbarium extended in 1877, and had to double it himself in 1902. As director he inherited the botanical survey of our overseas possessions undertaken by the elder

Hooker at the request of Government. A flora of South Africa, begun in 1859, was suspended in 1865; one of Australia, begun in 1863, was completed in 1878. A flora of tropical Africa, begun in 1868, was suspended in 1877; that of British India, begun in 1872, was still in progress in 1885. Dyer devoted the herbarium resources to furthering the Indian flora; only with the end in sight did Dyer resume the flora of South Africa in 1896; only when the Indian work was completed in 1897 did he resume the flora of tropical Africa. Dyer's competence as a descriptive botanist made him a perfect editor: abstaining from personal contribution to the text of either flora, he was able to edit both.

Dyer obtained relief, when he persuaded his friend, Dr. D. H. Scott, to assume honorary keepership of the Jodrell laboratory, which enabled him to reorganise the museum collections; to improve the lecture course for young gardeners; and to convert into a corps the groups of uniformed attendants at Kew on whose efficiency and courtesy the safety of the collections and the comfort of visitors depend. With the interests of this corps he associated himself; he made it a personal charge, and wore the uniform of its inspector.

Dyer's "intense feeling for the living plant" was shown in 1887 when he provided an Alpine house as an annex to the rock garden; was apparent in the energy with which he replaced outworn conservatories and modernised plant-houses structurally sound; and was especially manifest in his work on the outdoor collections. What Dyer accomplished is best appreciated by those who realise that Kew owes to Sir William Hooker, director 1841-65, its salient features such as the lake and the great vistas; that it owes to Sir Joseph Hooker, director 1865-85, the condition and arrangement of the collections of hardy trees and shrubs, as well as the avenues in the arboretum and the paths in the pleasure grounds that make the collections accessible. Dyer brought to bear on what his predecessors had provided, the care and skill of an artist able to produce landscape effects that "should be suave and ample." Again his method was simple and his success striking. Without any sacrifice of scientific interest he gave access to the glades, and laid open the informal vistas that induce at Kew a sense of space and bring into view objects that attract attention.

In 1899 the winter-garden, left unfinished since 1862, was completed: a Secretary of State indebted to Kew for scientific assistance had secured, in 1894, the review of a decision with which, for a generation, the public department in charge of the gardens had concurred. That department, admirably qualified to administer Kew as a place of public resort, now strove to control the official correspondence of Kew as a scientific centre. The difficulty as regards the department chiefly concerned was overcome when Dyer, in 1902, was appointed botanical adviser to the Secretary of State for the Colonies. To obviate its recurrence, Kew was transferred in 1903 for administrative purposes to a new department, sympathetic with the scientific activities of Kew, but without

experience as regards places of public resort: in 1905, Dyer retired from Kew, but retained his Colonial Office appointment until 1906.

At Witcombe, in Gloucestershire, where Dyer now settled, he took for a decade an active part in the business of the county, for which he became a justice of the peace. In 1908 he was appointed the representative for the University of Oxford on the County Education Committee, and in 1909 became a member of the Court of the University of Bristol. On behalf of Kew he continued to edit the "Flora of Tropical Africa" until 1913, and the "Flora Capensis" until it was completed. Meanwhile at Oxford it had not been forgotten that Dyer was a scholar as well as a biologist, to whom, in both capacities, Daubeny had imparted his own keen interest in the identity of classical plants: Dyer undertook to assist those engaged in revising the lexicon of Liddell and Scott. In 1916, Dyer reviewed his obligations much as he had done in 1890, and, as a result, resigned a position in the Royal Horticultural Society, to which he had been appointed when Hooker died in 1911; relinquished the seat on the County Education Committee which he had occupied since 1908; left the Athenæum, to which he was elected 'by the Committee' in 1885; and retired from the Royal Society. His work for the editors of the new Liddell and Scott had involved much careful investigation: from 1916 until his death on Dec. 23, 1928, Dyer's time, when health permitted, was largely spent in continuing his classical studies, and amassing material for a glossary of ancient plant names.

Transparent honesty of purpose and rigid accuracy of statement were, in the case of Dyer, associated with clear vision, firm decision, and prompt action. Direct in speech and incisive in style, his intention could never be mistaken. To these qualities, which made him a wise adviser and a faithful friend, were added a mine of knowledge and a width of culture, that made social intercourse with him an intellectual feast. With these qualities, that were attractive, were associated two habits that, though only defects of his merits, at times interfered with his influence as a man of affairs. His instinctive dislike of ambiguity, which included aversion to any attempt at compromise of principle, induced a habit of which he was conscious, that endeared him to correspondents abroad, but was disconcerting to colleagues in Great Britain. The other habit, of which he was evidently unconscious, caused him to wound the susceptibilities of many of those whose views he found himself unable to accept. To this latter habit may be attributed Dyer's failure to find support for proposals that, when afterwards submitted by others, were accepted without debate. In his choice of men Dyer paid more regard to character, of which he was only a tolerable judge, than to capacity, in the assessment of which he was singularly successful.

The type of botanical teaching of which Dyer was the pioneer in Britain has induced an academic impression against which Dyer's administrative activities were an eloquent though silent protest: to that impression we owe the modification of his

colonial policy. Dyer's work for Kew will survive long after his precise share therein has been forgotten. Should it prove possible to make available the fruits of the labours of his later years, it may be that in these will be found an even greater claim to grateful remembrance. As it is, Dyer has placed mankind under two important obligations. His manhood was given to teaching science that the improvement of natural knowledge for use is a service as honourable as the improvement of natural knowledge for discovery: he used the leisure of his later years in reminding letters that the interest of science in the 'humanities' may be as great as that of scholarship. Both are lessons still badly needed.

THE story of Thiselton-Dyer's life as related above by another contributor is only half told if his wide knowledge of ancient botany and of classical literature be not recorded and appraised; for besides being an eminent botanist and a first-class man of affairs, he was a scholar of wide reading and meticulous accuracy.

Sooner or later men come back to what they loved as boys; and Dyer told me once that Martyn's "Georgicks" had been his favourite school-book. John Martyn, F.R.S., was professor of botany in Cambridge in the middle of the eighteenth century; his two books, one an edition of the "Georgicks," the other of the "Bucolicks," were school-books for a hundred years, and it is a pity that they are used no more. The very pictures in Martyn were delightful: the olive-tree and the 'hyacinth,' the *cerinthæ ignobile gramen* beloved of bees, the *flos in pratis cui nomen amello*, the figure and description of Virgil's plough, and the picture of the northern heavens with the Dragon winding like a river between the Great and Little Bears—one remembers them all. In the botanical chapter which Dyer wrote for Sir John Sandys' "Companion to Latin Studies," while nothing of moment is left out, yet Virgil always has the middle of the stage; and Martyn's two books head the long list of quoted authorities. Dyer was always fond of old books, and liked (as he said) to "take stock of the harvest of accurate and acute observation to be found in the writings of authors now almost fallen into oblivion, yet long recognised as classical." He bought a Clarke's Odyssey for half a crown when he was a schoolboy, in a small book-shop, "a mere open booth, in the purlieu of Leicester Square"; and he used it to the last, because it "gave the comments of Eustathius, which no modern editor will look at."

Thiselton-Dyer took his degree at Oxford in mathematics, a fact which I have not seen mentioned; he was proud of it, and prouder still that he had been a pupil of Henry Smith's. "Is it not recorded" (he says in one of his letters to me) "in the preface to the Cambridge edition of his works? That I think earned me more respect from L . . . r than he would have bestowed on what Augustine Birrell called a 'mere botanist.'"

Thiselton-Dyer's classical papers are few in number and represent imperfectly his vast stores