

**Sir Robert William Boyce, Kt., M.B.,  
F.R.S.**

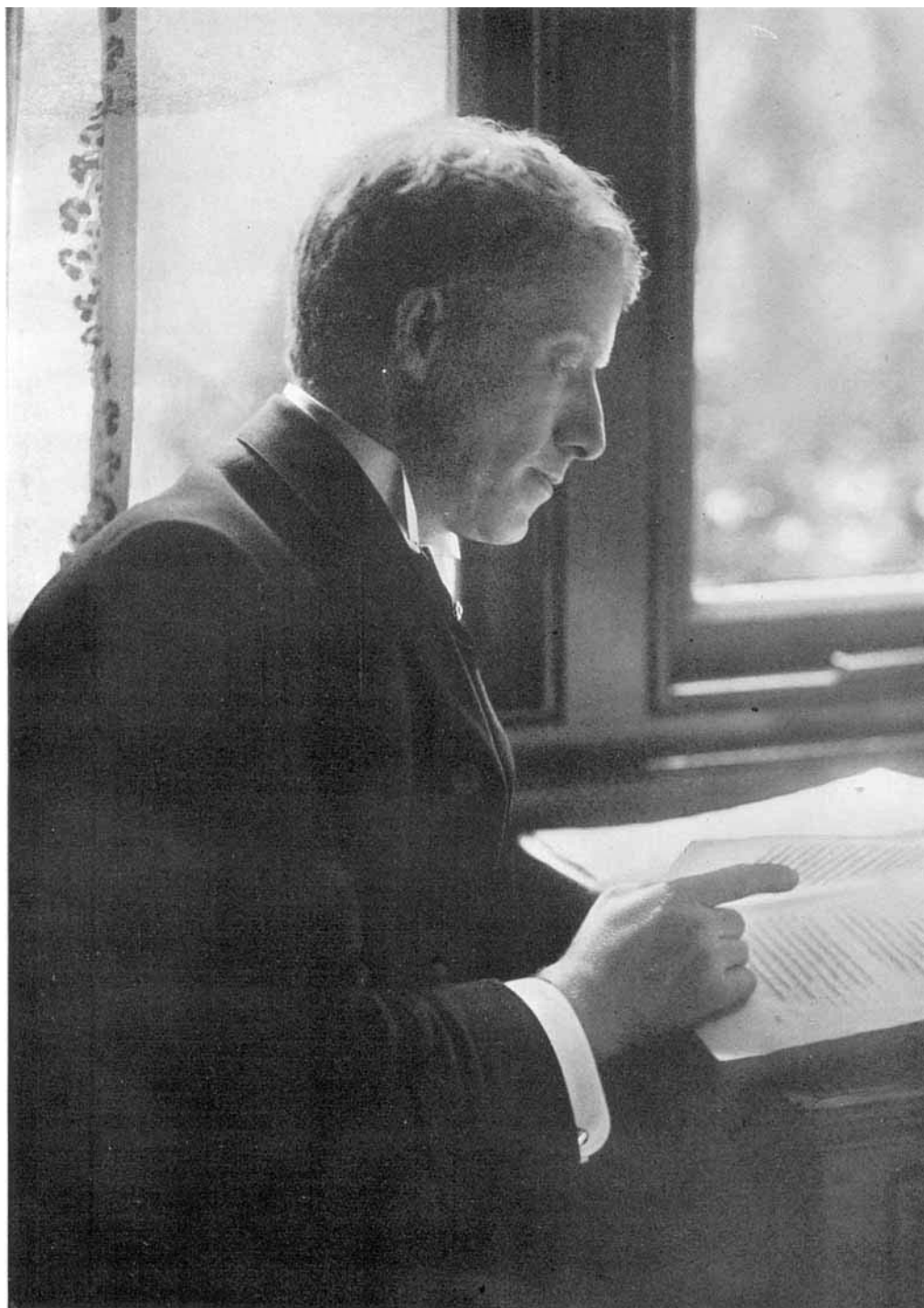
BORN 22ND APRIL 1863—DIED 16TH JUNE 1911.

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RUBERT WILLIAM BOYCE, entirely Irish by origin, was the son of a well-known public servant, an Architect and Director-General of Public Works in China—Robert Henry Boyce, C.B.

He was educated for a short time in Rugby and in Ireland and afterwards in France. He studied Medicine at University College, London, qualifying at the age of 25 in 1888, and obtaining the M.B. a year later. He then proceeded to Heidelberg and Paris to continue his studies. On his return to University College, London, he worked with Sir Victor Horsley, and at once began to show promise of his real powers. He became Assistant Professor of Pathology in 1892, and in that year published his Text-book on Morbid Anatomy, a volume of 400 pages. It was never very popular with students, for, as stated in the preface, "little stress was laid upon the ordinary methods of classification." It was an original book in many ways. The illustrations were excellent. Its publication four years after the author had qualified was an early indication of his extraordinary capacity and energy. During this and the subsequent two years he contributed several papers to the *Journal of Pathology and Bacteriology*, notably upon the Hypophysis Cerebri; and upon Aspergillar Pneumomycosis, and with Surveyor to the *Transactions of the Royal Society*, upon Madura Disease.

In 1894, at the age of 31, he was appointed to the newly endowed Chair of Pathology at University College, Liverpool. Almost his first act was the complete reorganisation of the Pathological Museum, and the publication with Dr. Hill Abram, his Assistant, of an entirely new printed catalogue. Then followed contributions on "The Degenerations of the Nervous System" published in the *Transactions of the Royal Society*. Next he devoted himself to the founding of a School of Hygiene, early recognising the increasing importance of Preventive Medicine. The success of the school has more than realised the hopes of the founders. This school is one of the many



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links between the University and the city, and affords scientific training to those engaged in some of the most important branches of the public health service—sanitary inspectors, engineers, and plumbers. Boyce's keen interest in the work of public hygiene, especially as applied to a great city, were largely due to his early and lasting friendship with Dr. Arthur Newsholme, whom he used frequently to meet at Brighton. In 1898 he became Bacteriologist to the city of Liverpool, one of the first positions of its kind in the country, and organised a systematic bacteriological examination of water and food materials, which numbered at the time of his death 5000 specimens per annum. In his municipal work he had the advantage of the able co-operation of the Medical Officer, Dr. Hope. At this time he was a member of the Royal Commission on Sewage Disposal, a considerable amount of the work was carried out in his laboratory with the assistance of Drs. Grünbaum, MacConkey, and Hill, and also later of Miss Harriette Chick. At the conclusion of this work he published a very complete report on the River Severn in the Shrewsbury District and its purification.

About this period the University Club in Sandon Terrace was founded, one of the main objects of which was to help in the establishment of a University. Boyce was a pioneer, and eventually became its president. It started on next to nothing, and here his practical gifts, even to the house furnishing, were invaluable, and as a capable bricklayer he built with his own hands a wall in the club yard. When the movement began for separating University College, Liverpool, from the federal Victoria system, and for establishing it as an independent University, Boyce, with his untamable energy, was found in the forefront, and as one of the secretaries personally collected large sums of money for the movement.

In 1901 Boyce was elected a Fellow of the Royal Society, largely for his work on Nervous Diseases. The same year he married Ethel, daughter of William Johnston, a Liverpool shipowner; but after a brief and happy period of married life a great shadow darkened his life, for his wife died at the birth of her first child. To commemorate her life, her father founded an "Ethel Boyce Fellowship in Gynæcology," and later, by a magnificent gift, provided the University with a Chair in Bio-Chemistry and with new laboratories, dedicated to his father and mother; these became the home of the School of Tropical Medicine, Bio-Chemistry, Cancer Research, and Comparative Pathology. Boyce was largely instrumental in bringing Professor Benjamin Moore—the present occupant of the Chair of Bio-Chemistry—from University College, London, to Liverpool.

In 1902 Boyce was the principal organiser of the Liverpool Institute of Comparative Pathology, situated at Runcorn, in the country, twenty miles from Liverpool. In his own words, he wished it to "advance our knowledge of the pathology and means of preven-

tion of human disease by the study of diseases of lower animals in their relation to those of man." He begged a sum of £300 per annum for three years from the leading steamship companies to finance the Institute, which prepared the ground for the future Veterinary School, which in 1904, at Boyce's suggestion, was transported bodily from Edinburgh to the University of Liverpool. He himself, together with four other friends, made themselves responsible for the salary of a Professor of Veterinary Medicine for a period of five years, and in 1906 he had the satisfaction of seeing a Professorship in Comparative Pathology established for five years in the University largely owing to his own exertions.

Boyce was appointed a Member of the Royal Commission on Tuberculosis in 1904, and had authorised the secretary to append his signature just before he died.

The most conspicuous of Boyce's services, not only to Liverpool and its University, but to the world at large, was the inspiring part he took in the foundation of the School of Tropical Medicine. The story of its inception is worth retelling, and is characteristic of the man. One day in 1898 a letter came to the Faculty from Mr. Chamberlain, who was then Colonial Secretary, pointing out the heavy toll of life and health taken by the trade with the tropics, in which Liverpool as a port was so much concerned, and suggesting that its School of Medicine might well establish a department devoted to the special study of tropical diseases. It is no secret that at first the suggestion was not well received by the Faculty. It was regarded as a rather presumptuous piece of official interference. But Boyce's mind at once took fire from the new idea. If the Faculty would not help, he declared, he would do the thing himself. He set apart three of his own rooms for the new work, and raised the necessary money to carry it on. By that happy conjunction of circumstances which to big ideas are so often vouchsafed, he was able to secure the co-operation of a kindred spirit in Sir (then Mr.) Alfred Jones. Boyce was responding to a toast at a Southern Hospital Dinner, November 12, 1895, when Sir Alfred Jones was in the chair, and seized the opportunity to enlarge upon his cherished project. Jones used to tell with much relish how, before that dinner was over, Boyce got three hundred and fifty pounds out of him. The subscription was for three years—thus the Tropical School was founded, and Boyce was its first dean. For the last eighteen months before his death he was a Member of the Colonial Office West African Advisory Board, and thus brought increased influence to bear upon Tropical Medicine. It was Boyce who was largely responsible for the appointment of Major Ross as Lecturer in the School, and he also took an active part in securing a permanent endowment for a Chair in Tropical Medicine, which bears the name of its chief founder, Sir Alfred Jones. It was Boyce, who, after Dutton's death in Africa whilst on an expedition of

the School, collected the money to endow the Dutton Memorial Chair of Entomology, to which Professor Newstead has recently been appointed.

In 1905 an outbreak of yellow fever occurred in New Orleans. He quickly availed himself of the opportunity offered by the American authorities to take part in the campaign. He then laid the foundation of that experience which later was to bear fruit. At the same time, at the request of the British Government, he visited British Honduras, where also yellow fever had broken out.

One morning in September 1906, while staying at Harrogate with some other friends as the guests of Sir Alfred Jones, where they had gone to open a sanatorium, Boyce was found by his friend, Dr. J. L. Todd, lying helplessly on the floor of his room stricken with a left-sided hemiplegia, from which he very nearly died. Whilst still in a critical condition at Brighton, in November 1906, he was made a Knight Bachelor for his services in Tropical Medicine. The University granted him leave of absence for a year, but with indomitable courage he returned to the laboratories in May 1907, and resumed some of his work. He never regained complete power of his arm and leg, but was able to ride a tricycle.

During the next eighteen months he was comparatively inactive, but gradually recovering his physical power and emotional balance. At this time he interested himself in the foundation of the University of Bristol, and when asked, freely gave, the benefit of his experience, and delivered a characteristic inaugural address to the Medical Faculty in October 1908. In February 1909, at the request of the Colonial Office, he left for the West Indies at a few hours' notice, to report upon the outbreak of yellow fever. Not content simply with compiling official reports of these expeditions, he determined to impress the importance of the subjects, of which yellow fever was only one, on the public. The result was in two years the publication of two popular works, "*Mosquito or Man*," "*Health Progress and Administration in the West Indies*," giving in forcible language the bearing of the fruits of scientific investigations on the health and prosperity of the community. The success of these works was immediate, and now three editions of the first book and two editions of the second have been published, and the name of Sir Rubert Boyce has become a household word to every European in the tropics. At Easter 1910 he again visited the West Indies, partly to collect photographs for a book upon yellow fever, and in June, at the request of the Colonial Office, proceeded to investigate the outbreak of yellow fever on the Gold Coast, where he remained for three months.

In January 1911 he published "*Yellow Fever and its Prevention*," and dedicated the work to the late Sir Alfred Jones, "whose intense sympathy with the sufferings of his fellow-men, vivid imagination, and great grasp of affairs stimulated the author to travel and to acquire knowledge in the distant parts of the tropical world." The thesis of

this book is the endemicity of yellow fever in West Africa, a thesis which has met with considerable opposition, but Boyce advocated it with all his customary energy, courage, and skill. Shortly before his death he had the satisfaction of establishing in Liverpool a Bureau for the Study of Yellow Fever, collecting from personal friends the sum of £500 per annum for a period of three years.

On Tuesday, 2nd May, whilst on his way to a meeting of the African Advisory Board, he had a second mild seizure, but refused to cancel his appointment. He returned to Liverpool, and was unable to get about for three weeks, but made a marvellous recovery. With characteristic determination he underwent a course of gymnastic exercises, by which he hoped to recover the power of his limbs more quickly. On 7th June he attended a banquet of the School of Tropical Medicine given in honour of Professors Todd and Wolbach (Montreal) and of Professor Newstead, and responded to the toast of "Tropical Medicine and Commerce," pleading with his customary vehemence for the support of the cause which lay so near his heart. In spite of his extraordinary activity he realised the precarious condition of his health, for on 14th June, while conversing with the writer, he remarked, half in jest perhaps, "I have one foot in my coffin." On the morning of 15th June he finished the first number of the Bulletin of the Yellow Fever Bureau. It was sent to the press less than an hour before his final seizure, which took place at lunch. He died next day.

Sir Rubert Boyce in figure was small, fair, light, and active. He had great mental capacity, indomitable energy, and unbounded courage, he was a born organiser with a clear and far-seeing vision; he was impetuous, quick tempered, and intolerant of opposition, but withal possessed exceeding humour. He knew how to handle men, especially business men, and to interest them with his schemes; when a new post was created he usually found the right individual to occupy it. His success at collecting money to promote any particular project was remarkable; he did it with shrewd and infinite humour, and, as his friend Mackay remarked, none were more amused than the wealthy and generous men who meant to be close fisted, and found that they had subscribed handsomely. Boyce was wont to remark that "the word 'cash' will be found written across my heart."

His cerebral seizure exaggerated his Irish temperament and his intolerance of opposition, especially of antiquated methods. In his last years he controlled his emotional instability and renewed old friendships. Apart from occasional lapses of memory at first, his intellect was practically unimpaired. The publication of his three books in two years was indeed a remarkable achievement.

Boyce was artistic; his house was full of old furniture and decorated with priceless Persian tiles. In this home he entertained with wide hospitality his friends and visitors from all parts of the world.

To conclude in the words of Professor Annett: "It was not for the purely scientific value of his work that Sir Rubert was renowned, but rather for that particular insight and perception which enabled him to foresee along what lines the different branches of his subject could be developed to lead to the greatest practical utility and application,—in some instances purely scientific, in others commercial, municipal, colonial, or tropical,—and always towards the relief and prevention of human and animal disease."

ERNEST GLYNN.

# CONTRIBUTIONS TO LITERATURE.

Amongst Sir Rubert Boyce's early publications are the following:—

- "A Text Book of Morbid Histology," 1892.
- "The Pathology of the Hypophysis Cerebri," *Journ. Path. and Bacteriol.*, Cambridge, 1892.
- "Aspergillar Pneumonomycosis," *ibid.*, 1892.
- "The Enlargement of the Pituitary Body, Myxœdema, and Allied Affections," *ibid.*, 1892.
- "Geotropism in Bacterium Zopfi" (with Dr. A. E. Evans), *Phil. Trans.*, London, 1893.
- "Madura Disease" (with N. Surveyor), *ibid.*, 1893; "Eine neue Streptothrixart gefunden bei der meissen Varietät des Madurafusses," *Hyg. Rundschau*, 1894.
- "The Action of the Serum of Vaccinated Calves" (with Dr. Kramer), *Brit. Med. Journ.*, London, 1893.
- "The Cell Enclosures in Cancer" (with Dr. Giles), *Trans. Path. Soc. London*, 1893.
- "Degenerations of the Roots of the Fifth Nerve," *Journ. Physiol.*, London, 1894.
- "Descending Parts of Degeneration in the Brain and Spinal Cord and Absinthe Epilepsy," etc., *Phil. Trans.*, London, 1895.
- "Some of the Decussating Tracts of the Mid and Inter Brain, and of the Pyramidal System in the Mesencephalon and Bulb," *Phil. Trans.*, London, 1897.
- "On a Green Leucocytosis in Oysters associated with the Presence of Copper in the Leucocytes" (with Professor Herdman), *Proc. Roy. Soc. London*, 1897, vol. lxii.
- Thompson-Yates Laboratories Reports* (with Professor C. S. Sherrington), 1898–1905, vols. i.–vii.
- "Observations on the Anatomy, Physiology, and Degenerations of the Nervous System of the Bird" (with W. B. Warrington), *Phil. Trans.*, London, 1899.
- "Note upon Fungus Deposits in Unfiltered Water Mains," *Thompson-Yates Laboratories Reports*, 1902, vol. iv. pt. ii.
- "Pseudo-Actinomycosis of the Udder of the Cow," *Thompson-Yates Laboratories Reports*, 1902, vol. iv. pt. ii.
- "The Anti-Malaria Measures at Ismailia," Memoir XII., Liverpool School of Tropical Medicine, 1904.
- "The History of the Discovery of Trypanosomes in Man" (with Professor Ronald Ross and Professor Sherrington), *Lancet*, London, February 21, 1903.

- "Yellow Fever Prophylaxis in New Orleans," Memoir XIX., Liverpool School of Tropical Medicine, 1906.
- "Report to the Government of British Honduras upon the Outbreak of Yellow Fever in that Colony in 1905, together with an Account of the Distribution of the *Stegomyia Fasciata* in Belize, and Measures necessary to stamp out or prevent the Recurrence of Yellow Fever," Government Report, 1906.

Since his illness in 1906 Boyce published the following:—

- "Atoxyl and Trypanosomiasis" (with Anton Breinl), *Annals of Trop. Med. and Parasit.*, vol. ii. No. 1, March 1908.
- "The Progress of Tropical Medicine" (address before the Manchester Statistical Society, 1909).
- "Mosquito or Man," 1909, 1st Edit.
- "Health Progress and Administration in the West Indies," 1910.
- "Mosquito or Man," 1910, 2nd Edit.
- "The Effect of Mosquito Larvæ upon Drinking Water" (with F. C. Lewis), *Annals of Trop. Med. and Parasit.*, vol. iii., March 1910.
- "Proof of the Endemic Origin of Yellow Fever in West Africa," *Brit. Med. Journ.*, London, December 1910.
- "The Prevalence, Distributions, and Significance of *Stegomyia Fasciata* in West Africa," *Bull. Entomol. Research*, vol. i., December 1910.
- "Mosquito or Man," 1910 (Revised 3rd Edit.).
- "Health Progress and Administration in the West Indies," 2nd Edit., 1910.
- "Yellow Fever and its Prevention," 1911.
- "Note upon Yellow Fever in the Black Race, and its bearing upon the Question of the Endemicity of Yellow Fever in West Africa," *Annals Trop. Med. and Parasit.*, vol. v. No. 1, April 1911.
- "Bulletin of the Yellow Fever Bureau," No. 1, May 1911.