OBITUARY NOTICE.

JOHN ALEXANDER MILROY.

(1871–1934.)

JOHN ALEXANDER MILROY, one of the Original Members of the Biochemical Society, died at Belfast after a brief illness on September 19, 1934, having just passed his sixty-third birthday. Born in Wigtownshire, he received his school and university education in Edinburgh, obtaining in 1893 the degree of M.A., in 1896 that of M.B. and in 1902 that of M.D. While still a medical undergraduate he spent a winter in Salkowski's laboratory in Berlin, and at a later date he was for a time a student under Emil Fischer. After graduation he acted as Demonstrator of Physiology first in Owens College, Manchester, and then in Yorkshire College, Leeds. In 1902 he accompanied his elder brother, Prof. T. H. Milroy, to Queen's University, Belfast, where the latter had just been appointed to the Chair of Physiology. At Belfast he held at first the post of Lecturer in Physiology, but in 1909 was appointed Lecturer, and in 1922 Reader, in Biochemistry. In 1924 he was promoted to the newly-founded J. C. White Professorship of Biochemistry. It had been his intention to terminate his tenure of the Chair after one more year of service, and to retire from active academic work at the same time as his brother in 1935. An association, which had endured already for thirty-two years, would thus have found an appropriate and felicitous conclusion.

In 1902 Milroy submitted to the University of Edinburgh a thesis for which he was awarded the degree of M.D. with the added distinction of a gold medal. The title of this thesis—"A contribution to the knowledge of the products of the reduction of haematin"—indicates his early interest in a field, to which in succeeding years he made a variety of important contributions. He had already, as a matter of fact, presented to the Physiological Society (*J. Physiol.*, 1901) a preliminary account of the matters dealt with in his thesis, and in 1904 he communicated through the same channel a paper on "Products of the distillation of haematin with zinc dust" and another on "Reduced acid haematin and some of its derivatives." In 1909 he described a remarkably stable derivative of haemochromogen, in which iron had been largely replaced by nickel, and also reported a careful measurement of the specific CO-capacity of reduced acid haematin (*J. Physiol.*, 1909). The last paper of this series (*Biochem. J.*, 1918) describes the preparation, the absorption spectra and the properties of a number of metallic compounds of haematoporphyrin, some of them previously unknown. Notable among these was the stannous compound, which was found to be remarkably stable and to show a spectrum of singular intensity. Upon this observation Milroy based a new test for blood pigment, exceeding in delicacy any other known test of specific character.

The group of papers just cited embodies in itself a substantial contribution to Biochemistry. Milroy's other publications show that he took a lively and productive interest in many widely different topics. They include papers on albumosuria (*J. Path.*, 1901), on the staining of protein crystals (*Proc. Scot. Microscop. Soc.*, 1902), on the estimation of urea (*Biochem. J.*, 1913), blood sugar (*Biochem. J.*, 1925) and blood fat (*Biochem. J.*, 1928), and on sublimation *in vacuo* as a method of separating certain chemical constituents of the body.

(with S. Andrews, *J. Physiol.*, 1930). Latterly he had turned his attention to the pentose compounds of the animal organism; and in his last paper, planned as the first of a series, he dealt (again in collaboration with S. Andrews) with the micro-determination of free and combined pentoses (*Biochem. J.*, 1933).

John Milroy was joint author with his brother Thomas of a well-known text-book on Practical Physiological Chemistry, first published in 1904. A revision and extension of this book, leading to the issue in 1921 of a third greatly enlarged edition, was to a preponderating extent the individual work of the younger brother. The task was one which he performed in the spirit rather of the investigator than of the compiler; and the book incorporates much that must be credited to him as original work. The improvement of practical instruction in his Department was indeed an object in the pursuit of which Milroy spared himself no pains. The thoroughness of his methods was appreciated even by junior students, still more by the many graduates, both in Science and Medicine, who attended his advanced course.

Those fortunate enough to have known John Milroy are aware that his gifts of intellect were not more conspicuous than the charm of his personality and the mingled strength and sweetness of his character. The vivid smile that lit his face in conversation reflected a mind and a disposition at once eager and ingenuous. His modesty, his sociability, his kindly courtesy endeared him to all, young or old, with whom he came in contact. The interests of others always claimed his attention more readily than his own, and to any colleague who called upon him for information or advice he offered his time and his knowledge with prodigal liberality. Happy in his daily work, happy in his many friendships, he was happiest of all in the family life which he shared with his two brothers and two sisters—all, like himself, unmarried. All those—and they are many—who have been admitted to that closely-knit but hospitable household will understand, and share, the sorrow of its surviving members.

A. HUNTER.