

## George Alexander Gibson, M.A., LL.D.

GEORGE ALEXANDER GIBSON, who passed away on 1st April 1930, was born at Greenlaw, Berwickshire, on 19th April 1858. His father, the late Mr Robert Gibson, was highly respected in the district as a leader in ecclesiastical and political affairs. George Gibson was educated at the local Free Church School, straight from which, in 1874, he proceeded to the University of Glasgow. At Glasgow he won many distinctions in Classics, English Literature, and Philosophy, as well as in Mathematics. His intention to take an Honours degree was unfortunately frustrated by a prolonged illness, which made it impossible for him to take the degree examination within the limit then in force of five years from the date of first matriculation. Nothing daunted, however, in 1882 he presented himself for the Honours Examination and duly gained the Euing Fellowship in Mathematics and Natural Philosophy. In connection with this Fellowship he engaged for some time in research work under Lord Kelvin; but his interests were mathematical rather than physical, and his opportunity came in 1883 when he was asked by Professor William Jack to join the Mathematical Staff. In the following year he became Senior Assistant, and as it was Professor Jack's custom to leave most of the higher work to his assistants, Mr Gibson became, during the following twelve years, an outstanding personality in the teaching and administration of the department. In particular, to him were mainly due the initiation and conduct of numerous courses in Mathematics, pure and applied, which were of great service to the honours students.

In 1895 he was appointed to the Chair of Mathematics in the Glasgow and West of Scotland Technical College. Here he had full opportunity to show his talent as an administrator, not merely in his own department, with, in addition to the day classes, evening classes of 800 students, but in the general affairs of the College. During his period of service there the work of the College was reorganised and the scheme of courses was remodelled. A large share of the success attending these changes was undoubtedly due to him, as was gratefully recognised by the Professors and Governors of the College.

In 1909 Professor Gibson was recalled to the University as successor to Professor Jack. He at once proceeded to reorganise the teaching in the department. Tutorial instruction was provided for all the students, both

ordinary and honours, and the curriculum was widened and extended. After the war the number of students rose to 900, but in spite of all difficulties the high standard of the work was maintained.

Professor Gibson was a great teacher, who loved his work and for whom the interests of his students were paramount. He was also an eager and tireless student, with a remarkably wide and thorough knowledge of mathematical literature. In his early days as a University Assistant he spent an interesting and stimulating summer session at Berlin University, where he attended lectures by Kronecker and Weierstrass. To the Edinburgh Mathematical Society he was indebted for much inspiration and encouragement. This Society was founded on 2nd February 1883, its first president being John S. Mackay. Most of the founders were engaged in school-teaching, but from the beginning Chrystal, Tait, Knott, and other university workers took a large share in its activities. Gibson's first paper was read on 13th March 1885, and from then on he was a constant contributor to the *Proceedings* and a leading figure in the Society. There he formed close friendships, among others, with J. S. Mackay, from whom in all probability he acquired his lifelong interest in the history of mathematics, and with Professor Chrystal, who also exercised a powerful influence on his mathematical outlook and development. Professor Gibson became a recognised authority on certain parts of the history of mathematics, and published numerous papers on the origins of the calculus, on the history of Fourier series, and on the great Scottish mathematicians. He is most widely known, however, as a writer of mathematical text-books. The first of these was his *Elementary Treatise on the Calculus*, first published in 1901, which has become a standard work with a very wide circulation. Later books were *An Elementary Treatise on Graphs* and *An Introduction to the Calculus based on Graphical Methods*, both published in 1904, and *Elements of Analytical Geometry*, written in collaboration with Dr Peter Pinkerton and published in 1910. After his resignation in 1927 he prepared a large and comprehensive treatise on *Advanced Calculus*, which is about to be published. Younger workers found him ever ready to place, in the most generous manner, his wide stores of reading and his long teaching experience at their disposal, and many books, written by members of the Mathematical Department of Glasgow University, have owed much to his encouragement and help.

Professor Gibson was endowed with an enthusiasm for administrative work, and rendered important services to education in Glasgow. He was one of the original members of the Glasgow Provincial Committee for the Training of Teachers; after returning to the University he became a

Governor of the Technical College; for a long period he acted as Chairman of the Governors of the Park School Company; and in the Senate and University Court his sound and forceful counsels carried great weight with his colleagues.

From 1917 to 1920 he held office as Vice-President of the Royal Society of Edinburgh, to which he was elected a Fellow in 1890. The Universities of Edinburgh and Glasgow both conferred on him the degree of LL.D.—the former in 1905, and the latter in 1927. On the occasion of his retirement his friends and students combined to show their respect and admiration by raising a fund for the endowment of lectures on the History of Mathematics, the lectures to be given at intervals in the University of Glasgow and to be known as the George A. Gibson Lectures.

Professor Gibson was a man of wide intellectual interests, an omnivorous reader, and a fluent linguist. His classical attainments stood him in good stead in his reseaches into mathematical history. He was a keen Liberal, and took an active interest in the affairs of Wellington Church, especially in connection with the Temperance Society, of which he was President.

An indefatigable worker, in spite of frequent attacks of heart trouble he was busy, almost to the end, with the proofs of his last book. He is survived by his widow, two sons, both in the medical profession, and a daughter.

T. M. M.