## William Jack, M.A., D.Sc., LL.D. By Professor G. A. Gibson, LL.D.

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WILLIAM JACK was born at Stewarton, Ayrshire, on the 29th of May 1834, and as a boy attended Irvine Academy, leaving it as dux of the school. In 1848 he entered Glasgow University, where he became one of the most distinguished students of his time, and held his own not merely in the class-room, but in the more informal gatherings of the students that included such men as John Nichol, Edward Caird, Donald Macleod, and James Brown, who attained to eminence in various walks of life. Thomson, who had been appointed to the Chair of Natural Philosophy in 1846, in handing to Jack his class prize, made the remark, "A very young and a very promising student"; the acquaintance begun in the class-room ripened into a lasting friendship that influenced Jack's career in many ways.

After graduating as M.A. in 1853, Jack had some hesitation about the choice of a profession, but finally decided to go to Cambridge, and in 1855 he took up residence at Peterhouse, Thomson's college. Of the impression Jack made on his associates in Peterhouse a striking account is given by the late Dr A. A. Ward in an obituary contributed to the magazine of the Peterhouse Sexcentenary Club (*The Sex*):—" He was slightly older in years than most of the seven admitted in that year, . . . and it is not impossible that this circumstance added to the ascendancy which, in judgment and in certain other qualities of mind and character, he from the first asserted (though 'asserted' is hardly the word) over some of the companions of his early Cambridge years. For myself, I speedily learnt the lesson that his precedence was to be a norm of my academical life, and in no decree of destiny have I ever found it easier to acquiesce." The "ascendancy" noted by Dr Ward can be easily traced at various stages in Jack's career.

In the Tripos of 1859 Jack was fourth wrangler, but he won first place in the competition for the Smith's Prize, and in 1860 he .was elected a Fellow of Peterhouse.

In 1860 he was appointed one of Her Majesty's Inspectors of Schools in Scotland (on the same day as his lifelong friend, the late Dr John Kerr), and during the period in which he held that post he gained an insight into educational matters that was of the utmost value when he was an Assistant Commissioner on the Primary Education (Ireland) Commission

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of 1878. A year or two later his eminence as an expert in advanced as well as in elementary education was recognised by his appointment to the Queen's Colleges (Ireland) Commission of 1882, of which the Majority Report was said to have been substantially written by him.

In 1866 he resigned the inspectorship to take up the duties of the Chair of Natural Philosophy at Owens College, Manchester. Though not specially fond of experimental work, he proved an efficient professor, and he took an active and beneficial part not merely in the affairs of the college but in the general life of the community; his services were recognised on the occasion of the jubilee celebrations in 1902 when the Victoria University conferred on him the degree of D.Sc.

From 1870, when he retired from Owens College, to 1879, when he was appointed Professor of Mathematics in Glasgow University, he withdrew from direct University work, but as editor of the Glasgow Herald from 1870 to 1876 and as a member of the publishing house of Macmillan & Co. from 1876 to 1879 he rendered indirectly great service to popular education and to general culture. But his chance came with his appointment to the Chair of Mathematics in Glasgow, and the work he did in that position stamps him as one of the great reformers of University education in Scotland. At the date of his election the curriculum for degrees in Arts made little provision for advanced study, the course in mathematics was meagre, and the classes were overcrowded. He greatly improved the teaching by well-designed subdivisions of the classes, introduced as far as circumstances permitted the element of tutorial instruction, and, by the institution of higher courses, extended the range and raised the standard of the Honours degree. A new spirit was awakened among the students, and showed itself, not merely in the increased attendance at the advanced classes, but also in the importance attached to the work of the summer vacation. At that time there was no summer session in the Faculty of Arts, but summer classes were formed for the study of branches of higher mathematics that could not be overtaken in the winter session, and these classes became a feature of the mathematical department. The great improvement of the position of mathematics in the schools and Universities of Scotland that marked the closing years of last century was due in no small degree to Professor Jack's labours. Throughout his professorship his relations with the students were of the happiest kind, and he won both their respect and their affection. His devotion to his own department did not, however, imply neglect of general University administration; as a member of Senate and Court he took his full share of University work, and his ripe experience was greatly valued by his colleagues.

In 1910, the year after his retiral, his numerous friends presented to the University his portrait, painted by Sir James Guthrie, P.R.S.A., together with the sum of £300 for the institution of a prize, to be called the William Jack Prize and to be awarded at intervals for the best thesis on a mathematical subject.

Professor Jack married a daughter of Dr J. P. Nichol, professor of astronomy, who predeceased him. He is survived by two sons, Dr W. R. Jack and Professor A. A. Jack, who holds the Chair of English in the University of Aberdeen.

He was elected a Fellow of this Society in 1875 and served on the Council from 1888 to 1891.

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