John T. Graves, M.A., F.R.S., was son of John C. Graves, of Dublin, Barrister-at-Law. He was born in Dublin on the 4th of December, 1806, and passed some years in the school of the Rev. Samuel Field, Westbury-on-Trym, Somersetshire. He entered Trinity College, Dublin, in 1823, and was a class-fellow of Sir William Rowan Hamilton, with whom, though living at a distance, he kept up a life-long friendship. In his undergraduate career he was distinguished in both Science and Classics, and at his Degree Examination in 1827 was awarded the Classical Gold Medal. He soon after took an *ad eundem* degree at Oxford, and was incorporated in Oriel College, where he resided some time, and proceeded to the degree of M.A. He was also M.A. of Dublin University. On the 10th of June, 1831, he was called to the Bar as a Member of the Inner Temple, and for a short time went the Western circuit. In the year 1839 he was appointed Professor of Jurisprudence in University College, London, in succession to Mr. Austin, and not long after was elected to be Examiner in Laws in the University of London. The records of his work as a lawyer are Twelve Lectures on the Law of Nations, published in the 'Law Times,' commencing April 25, 1845, and two elaborate articles contributed to the 'Encyclopædia Metropolitana,' on Roman Law and Canon Law. About this time he was a contributor to Smith's Dictionary of Greek and Roman Biography and Mythology. Among other articles from his pen are those on Cato, Crassus, Drusus, Gaius, and the Legislation of Justinian.

As a scientific author Mr. Graves commenced his labours in his twentieth year. It was in October 1826 that he was engaged in researches on profound and subtle questions in analysis; the results he obtained were communicated to the Royal Society of London in the year 1828, and published in the Philosophical Transactions for 1829, under the title "An attempt to rectify the Inaccuracy of some Logarithmic Formulæ." This paper gave rise to interesting and important discussions, with which the names of M. Vincent, Peacock, Ohm, De Morgan, Warren, Rowan Hamilton, and others are connected. It was by meditating upon the results of this memoir that Sir W. Rowan Hamilton was led to his ingenious theory of Conjugate Functions or Algebraic Couples, as may be learned from Sir W. R. Hamilton's abstract of a paper "On Conjugate Functions, or Algebraic Couples, as tending to illustrate generally the Doctrines of Imaginary Quantities, and as confirming the Results of Mr. Graves respecting the existence of two Independent Integers in the complete expression of an Imaginary Logarithm," as well as from an abstract of a "Memoir on the Theory of Exponential Functions," both published in the Report of the British Association for 1834. In continuation of the same and allied researches, Mr. Graves contributed a paper to the Philosophical Magazine for April 1836, "On the lately Proposed Logarithms of Unity, in reply to Prof. De Morgan;" and in November and December of the same year another, entitled "Explanation of a remarkable Paradox in the Calculus of Functions, noticed by Mr. Babbage." To the same journal were contri-

buted by him, in September 1838, a New and General Solution of Cubic Equations; in August 1839 a paper on the Functional Symmetry exhibited in the Notation of certain Geometrical Porisms when they are stated merely with reference to the arrangement of points; and in April 1845 a paper on a Connexion between the General Theory of Normal Couples and the Theory of Complete Quadratic Functions of Two Variables. A subsequent number contains a contribution on the Rev. J. G. MacVicar's Experiment on Vision; and the Report of the Cheltenham Meeting of the British Association contains abstracts of papers communicated by him on the Polyhedron of Forces, and on the Congruence $nx \equiv n+1 \pmod{p}$.

The above list of papers, itself incomplete, is far from representing adequately Mr. J. T. Graves's contributions to mathematical science. The Transactions of the Royal Irish Academy contain many traces of his intellectual activity; and by his long correspondence with Sir William Rowan Hamilton, commenced at an early period and maintained until death interposed, Mr. Graves may be said to have taken no small part in bringing to maturity the splendid conception of Quaternions, by which alone the name of Hamilton would have been rendered immortal. In his preface to the 'Lectures on Quaternions,' Sir William makes frequent allusion to the suggestive character of his correspondence with his early friend, and warmly expresses his indebtedness thereto.

Mr. Graves was one of the Committee of the Society for the Diffusion of Useful Knowledge. In the year 1839 he was elected a Fellow of the Royal Society, and he subsequently served upon its Council. He was also a Member of the Philological Society and of the Royal Society of Literature.

For many years past he had taken interest in forming a collection of mathematical works of all ages and countries, a collection which, though only to be appreciated by the few, is by those qualified, who are acquainted with it, considered to be almost unique for historical curiousness and completeness; and nearly every book composing it was bound under his direction with costly care and elegance. This portion of his library he bequeathed to University College, London, in remembrance of his former connexion as Professor with that Institution.

In the year 1846, soon after his marriage with the daughter of the late William Tooke, Esq., F.R.S., he was appointed Assistant Poor-Law Commissioner, and on the constitution of the present Board in 1847 was made Poor-Law Inspector. He served efficiently in that department till the past month, when he sent in his resignation, an act which he did not long survive. He died on the 29th of March, at his residence in Cheltenham, at the age of 63.