

and served zealously for thirteen years, earning the respect of his fellow vestrymen by his good sense, experience, and courtesy.

With endless humour and perpetually overflowing spirits, John Boileau, during his Indian career, was widely known for his eccentricities and practical jokes. Men would believe him capable of any joke that was not unkind. But he always had the confidence and regard of all who came in contact with him. Sir Henry Lawrence was among his companions at Addiscombe, and was his intimate friend to the last, while, in a long residence of seventeen years at Simla, he was brought into close contact with the rulers of India during that time without making any but friends; and so it would seem to have been after his settling in England. His fellow vestrymen, the members of the boards with which he was connected, and the staff and pupils of the schools he managed were all represented among the mourners at his funeral.

General Boileau was elected a Fellow of the Royal Society in January 1840. He served on the Council of the Royal Society, and was their representative on the governing body of Christ's Hospital. He died on November 9 last, after an illness of about six months.

He was elected a Fellow of this Society January 10, 1840.

WILLIAM WAKELING BOREHAM was born at Haverhill, in Essex, on March 3, 1804, and received his early education at Saffron Walden, where he soon displayed great talent for mathematics and music.

Following his father's tastes, he at first became a brewer, and was in business in London and afterwards in Manchester; he subsequently returned to Haverhill, where he erected an observatory, and devoted himself industriously to observations of comets and minor planets. Many of his observations were published in the early volumes of the *Monthly Notices*.

Mr. Boreham was an ardent admirer of all science, and in his early life tried hard to promote the higher education of those in his native place. In later life he devoted his energies to education in all its branches.

He was for many years a Fellow of the Anthropological Society.

He was elected a Fellow of this Society April 11, 1845.

GEORGE HAMILTON was born in Belfast in 1813. Removing to Liverpool at an early age, he was apprenticed to Mr. Bartain Haigh, builder. Soon after completing his term he was offered an appointment as architect, which he declined, having found his vocation to be that of a teacher. In 1836 he was appointed master of Mount Pleasant Schools, and amongst the children of the poor he worked out for several years his ideal course of instruction, which included, in addition to the usual branches, algebra, as far as quadratic equations, geometry, including the

first and second books of Euclid, and weekly lectures on chemistry and natural philosophy to both boys and girls.

While thus engaged he was appointed assistant and afterwards head master of the mathematical department of the evening school of the Liverpool Institute. From this class sprang "The Working Men's Science Association," to which Mr. Hamilton lectured nearly every week for two years to a working-class audience averaging 400 persons. In 1844 Mr. Hamilton lectured in Liverpool, Leeds, Bradford, and Chorley on "The Use of Science to Working Men," his aim being to establish free public evening lectures in every town in the kingdom, and to organise science teaching in every elementary school. But public opinion was then against the innovation. Mr. Hamilton was associated with the Liverpool Institute from 1840 to 1879 (when a serious accident obliged him to resign all his professional duties), successively holding the appointments of Teacher of Architectural Drawing and Building Construction, Teacher of Mathematics, Lecturer on Chemistry and Natural Philosophy in both Blackburne House and the High School, and in 1856 Professor of Chemistry in Queen's College (in connection with the London University).

In 1850 he was appointed first Lecturer on Chemistry and Teacher of Practical Pharmacy to the Liverpool Chemists' Association.

In 1856 he was elected a member of the Liverpool Compass Committee, to investigate the causes of deviation of the compass in iron ships.

He designed a self-registering compass, for recording the course of a ship at sea, indicating every change of tack and the exact time of change for the whole voyage. He also invented a self-registering thermometer, and a gas transferrer, or siphon, for transferring small quantities of gas for accurate measurement.

Mr. Hamilton was widely known as a teacher of science, and for many years successfully carried out a scheme for delivering a regular and systematic course of scientific instruction in middle-class schools—a task attempted by many before him, and rendered arduous from the expense and delicacy of much of the apparatus required, the difficulty of conveying it from place to place, the mental strain entailed by an average of twelve lectures weekly, and by the diversity of subjects, the course embracing astronomy, chemistry, geology, and natural philosophy. Nor, in his zeal for science, were the languages forgotten, each day having its apportioned task of classics and modern languages.

For several years, until prevented by failing health, he conducted the examinations for the Science Department of the Liverpool Council of Education.

Mr. Hamilton was a member of the Chemical Society and of the Society of Arts. He wrote "Glimpses of Nature," "Social Science," "Gravitation," "Physical Science," "On the Con-

servation of Force," "On Iron," "The Chemistry of the Gases," "On Dr. Medlock's Process of Filtering and Purifying Water," "The Gyroscope and Rotary Motion," "Note on Strychnine," "Chemistry in its Relation to the other Sciences," "Suggestions for a New System of Chemical Nomenclature," "Gaseous Exhalations and Miasmata as Causes of Nuisance and Disease," "Progressive Changes of Form in Rotating Spheroids," "High Tides and Colliery Explosions," "A Law of Elliptic Motion," &c.

Mr. Hamilton had the satisfaction, in the closing years of his life, of witnessing the adoption, in modified form, by the Liverpool Council of Education and the Liverpool School Board, of that system of scientific education which he had at the beginning of his career as a teacher regarded as a necessary part of primary instruction; and in the department of higher education his later years were cheered by the establishment of University College, Liverpool.

From his earliest years Mr. Hamilton had advanced views on education, but he was no theorist. In the face of opposition and many difficulties, he practised what he believed. Others have now entered into his labours, and the cause is making rapid progress. Mr. Hamilton's courteous manners, his devotion to duty, and his high intellectual attainments won for him the affection and esteem of all who knew him.

He was elected a Fellow of this Society January 12, 1855.

ROBERT JAMES MANN was born in Norwich in January 1817. At an early age he evinced a great love of, and aptitude for, physical science. Botany was his first pursuit, and, while still a student, he published an excellent list of the flowering plants of the Norfolk district.

He was educated for the medical profession, and studied at University College. He took the M.R.C.S. and L.S.A. degrees in 1840, and for some years practised in Norfolk, continuing his scientific pursuits, and beginning to occupy himself with literary undertakings also. It was during this time that he published his first book, "The Planetary and Stellar Universe."

In 1853 domestic circumstances, connected with health, caused him partially to abandon the practice of his profession. In 1854 he became an M.D. of St. Andrews, and about this time was employed in assisting his old teacher and attached friend, Dr. C. J. B. Williams, in the revision and publication of his "Principles of Medicine," assistance, the value of which was generously acknowledged in the work itself, and again in the much more recently published "Memorials of Life and Work" of that eminent physician.

In 1857, on the invitation of Bishop Colenso, Dr. Mann left England for Natal, where he resided nine years, during seven of which he was Superintendent of Education for that colony; an office established by the then Governor, Mr. (now Sir John)

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