

Bolivar Railways in South America, returning to England in 1876. Three years later he proceeded to Spain as Engineer and Manager of the Carthagena and Herrerias Steam Tramways, an undertaking of which he eventually became Managing Director in London.

After having resided in Spain for some 7 years, Mr. Torrens retired from the active pursuit of his profession, but continued to take the deepest interest in Spanish affairs, and particularly in the development of public works in that country. He was for many years an active director of the Barcelona Tramways, urging its electrification at a period when such installations were still looked upon with doubt. He also served on the Boards of the Great Southern of Spain and the Zafra and Huelva Railway Companies, and as Chairman of the former company for many years, he conducted the affairs of that undertaking with ability and success through the many difficulties which it encountered.

Mr. Torrens acted for several years as Chairman of the Conde d'Eu Railway before that enterprise was taken over by the Brazilian Government, and at the time of his death he was also a Director of the Shelton Bar and Iron Company and of the United Railways of Havana. He died on the 26th May, 1905, aged 53.

Mr. Torrens was elected an Associate of the Institution on the 5th February, 1878, and was subsequently placed in the class of Associate Members.

JOHN TUNSTALL, born in 1838, commenced his professional career as a pupil of Mr. Joseph Witty, Surveyor, of City Road, London. In 1856 he joined the engineering staff of the Great Northern Railway under the late Mr. Walter Marr Brydone, then Engineer-in-Chief, and remained in the Company's service under Mr. Brydone and his successors, Mr. Richard Johnson and Mr. Alexander Ross, until his death, at 141 Lordship Road, Stoke Newington, on the 6th March, 1905, a period of nearly 50 years. During the greater part of this time, as chief of one of the offices, he superintended the preparation of the parliamentary and other plans; and in addition to surveying and parliamentary work, he from time to time prepared designs for bridges, and was entrusted by Mr. Johnson with the design and execution of the goods warehouses at Farringdon Road and at Bread Street. In private life, Mr. Tunstall was known as an accomplished musician and organist.

He was elected an Associate of the Institution on the 28th May, 1878, and was subsequently placed in the class of Associate Members.

EDWARD COTTAM died at Hanwell, Middlesex, on the 17th July, 1904, in his eighty-eighth year. The son of the late George Cottam, a former Associate, he was born on the 18th October, 1816, 2 years before the foundation of the Institution, which he joined as a Graduate in 1839. He was educated at the London High School and the Athénée, Bruges, and studied at the Royal Institution under Faraday, of whom he was an enthusiastic admirer. In 1833 he became a pupil to his father, whom he subsequently assisted in his business until 1852, when he entered into partnership with Mr. F. Robinson, as successors to Bramah, adding to the old business the founding of statues. The statues of the Duke of Wellington at Manchester, of George Stephenson at Newcastle, of Sir Isaac Newton at Grantham, and many others, were cast at the firm's Pimlico Works upon an improved process introduced by Mr. Cottam. On the removal of the foundry to Battersea, where the cylinders for the piers of the Albert Bridge were cast, the firm was formed into a limited company, and undertook the manufacture of horseshoes by machinery of Mr. Cottam's design. Mr. Cottam served as Managing Director of the company until its liquidation in 1875, when he retired from the active pursuit of business, only acting occasionally in a consultative capacity.

Mr. Cottam was the inventor of a breech-loading rifle, and of an intercepting trap for house-drainage. He also made improvements in the hydrostatic press and the cotton-packing press, and perfected the Vandenbrough volley gun, an early form of the mitrailleuse.

He was elected an Associate of the Institution on the 6th December, 1859.

* * The following deaths have also been made known since the 11th September, 1905:—

Members.

CARBUTT, Sir EDWARD HAMER, <i>Bart.</i> ; <i>died</i> 8 October, 1905.	MORCOM, ALFRED ; <i>died</i> 16 October, 1905.
DEAN, WILLIAM ; <i>died</i> 24 September, 1905.	SHELFORD, Sir WILLIAM, K.C.M.G. ; <i>died</i> 3 October, 1905.
DICK, GAVIN GEMMELL ; <i>died</i> 23 August, 1905.	SLESSOR, FREDERIC GEORGE ; <i>died</i> 15 October, 1905.