

Glamorganshire, and he sat as a Conservative for Poole from 1868 to 1874. In April, 1867, he married Adele Mary, daughter of Mr. David Barclay Chapman, of Downshire House, Roehampton.

Mr. Guest was elected an Associate on the 2nd December, 1879.

GEORGE FREDERICK WHITE, for many years a member of the firm of John Bazley White and Brothers, cement manufacturers, died at Wimborne on the 11th August, 1898. He was the second son of the late Mr. John Bazley White, and was born at Kennington on the 24th December, 1816. He had intended to become an architect, and served articles with the late Mr. Roberts, the architect of the Fishmongers' Hall. Circumstances, however, made an opening for him in the business which was carried on by his father and Mr. Francis, under the name of Francis and White, at Nine Elms. At that time, and until the year 1837, Roman cement formed the staple of their trade; and meanwhile the partnership between Mr. Francis and Mr. White, sen., having been dissolved, the works were transferred to Swanscombe in Kent, where Portland cement, from the time of its invention, was manufactured by Messrs. White.

It is unnecessary to dwell on the development and extension given to this trade as the hydraulic properties of that cement came to be recognised by the engineering and building world. Mr. G. F. White is believed to have originated, in conjunction with Messrs. Walker and Burges, the method, since universally adopted, of testing the strength of Portland cement by the rupture of briquettes. He prepared and presented to the Institution in 1852 a Paper entitled "Artificial hydraulic, or Portland cement, with an account of the testing of the brick beam erected at the Great Exhibition, Hyde Park,"¹ for which he was awarded a Telford medal. In 1865 he contributed in the course of the discussion upon Mr. John Grant's Paper on "The Strength of Cement," valuable information as to the specific weight and testing of that material.² Indeed, it may be said that no small amount of the improvement in the quality of Portland cement which has taken place in the sixty years since it was invented, is due to the stimulus given by these and similar discussions at the Institution.

¹ Minutes of Proceedings Inst. C.E., vol. xi p. 478.

² *Ibid.*, vol. xxv. p. 117.

The Administration of the *Ponts et Chaussées* in France was among the first to use Portland cement in large quantities in the construction of the harbours and dockyards at Havre, Cherbourg, Brest, Lorient, La Rochelle and other ports. These important works necessitated frequent visits by Mr. White to those places, which brought him into close relation with the leading engineers of France; and gradually English cement obtained a great hold on the French markets. This was before the manufacture had developed in France, and before the days of exclusive dealing on the part of the French administration, which now only allows English cement to be used for public works when French cement cannot be obtained.

Mr. White took a great interest in the well-being of the work-people of his firm until he retired from business in 1892. He was in many ways prominently associated with charitable and good works, in connection with which his judgment, ability and liberality earned for him the esteem and respect of all his colleagues. He was a Lieutenant of the City of London and a magistrate of the County of Surrey.

Mr. White for some months before his death was the "Father" of the Institution, of which he was elected an Associate on the 15th March, 1838.

* * * The following deaths have also been made known since the 10th August, 1898:—

Members.

ASHMEAD, FREDERICK; <i>died</i> 23 August, 1898.	HOPKINSON, JOHN, JUN., M.A., D.Sc., F.R.S., <i>died</i> 27 August, 1898.
GZOWSKI, Sir CASIMIR STANISLAUS, K.C.M.G., Colonel Canadian Engineers, Hon. A.D.C.; <i>died</i> 24 August, 1898.	MARTIN, HENRY DANIEL; <i>died</i> 25 September, 1898.
	WILLIAMS, WILLIAM LAWRENCE; <i>died</i> 28 August, 1898.
WILSON, WILLIAM; <i>died</i> 20 September, 1898.	

Associate Members.

EVINGTON, HERBERT; <i>died</i> 26 September, 1898.	NAPIER, GEORGE; <i>died</i> 11 March, 1898.
THOMASSON, LUCAS; <i>died</i> 3 October, 1898.	

Information as to the career and characteristics of the above is solicited in aid of the preparation of Obituary Notices.—SEC. INST. C.E., 6 October, 1898.