

He was a man of refined taste and elegant pursuits, of much originality of design, and careful consideration of the details of his plans, which the practical character of his early life enabled him to lay down with great minuteness. His professional career was not one of excitement, and he was particularly fortunate in his undertakings. He was universally respected by his brother Engineers, and his decease, which occurred on the 22nd of September 1852, in his sixty-ninth year, after a lingering illness, caused deep regret to a large circle of attached friends.

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MR. FRANK FORSTER was born in the year 1800, in the neighbourhood of Newcastle-upon-Tyne, and was placed at an early age with Mr. Fenwick, to learn the business of a colliery viewer, or mining agent. After some years, so spent, in that district, he was intrusted with the management of some extensive mining works, near Swansea, and subsequently was engaged in a similar capacity in Lancashire. While in this employment, about the year 1830, he made the acquaintance of Mr. Robert Stephenson (M.P., V.P.), then embarking in the arduous undertaking of the London and Birmingham Railway, who at once perceived in him the precise qualities for a valuable assistant. Thenceforth they became intimate friends, and Mr. Forster was at the right hand of his chief, both in the severe parliamentary struggle, to obtain the Act of Parliament and in the more congenial professional duty of carrying that Act into execution. The section of the work confided to Mr. Forster's immediate superintendence, included the Kilsby Tunnel, and the Blisworth Cutting, and in these difficult and novel services, his energy and skill were conspicuous. He continued, from that time, to be the trusted associate of Mr. Robert Stephenson in his chief enterprises, up to the completion of the Chester and Holyhead Railway, on which he was the Resident Engineer of the portion from near Conway to Holyhead, embracing all the masonry and the general arrangements of the Britannia Bridge, besides the troublesome tunnels, sea-walls and other works, through the Welsh hills and ravines and along the coast.

During this period of his career, an Engineer of sound expe-

rience being required for the examination of an important coal-field, near Richmond in Virginia, United States, on the joint recommendation of Mr. R. Stephenson and the late Mr. Buddle, (M. Inst. C. E.) the well-known mining Engineer, Mr. Forster was selected, and he performed the task with which he was intrusted in a masterly manner and with all the energy of his nature; indeed it may be remarked, that mining was, to the last, his favourite pursuit.

He was, however, soon to move on a more public scene of usefulness. On the formation of the Metropolitan Commission of Sewers, he was, under the highest auspices of the profession, unanimously appointed Chief Engineer to that body, and forthwith entered on the laborious duties of the post. This is not the place to detail the prejudices that had to be encountered, the contending interests to be conciliated, the acrimony to be submitted to, the interferences to be put up with, and even the slanders to be refuted. All these he bore, outwardly, with his habitual equanimity, although his sensitive nature keenly felt the sting; but his good sense convinced him, that much allowance was to be made, for the impatience of a public long and often disappointed of improvements, which they had been almost taught to believe could be effected at a blow, and for the jealousies of those, whose importance had been suspended, or whose projects were not at once adopted. A little more kindness out of doors, and a more general and hearty support from the Board he served, might have prolonged a valuable life, which as it was, became embittered and shortened, by the labours, thwartings, and anxieties of a thankless office. Worn out by annoyances, Mr. Forster resigned his appointment, and died a few weeks afterwards. His reports and plans for the general drainage of London, north of the Thames, remain on record, and of his talents and acquirements in his profession, the estimation in which he was generally held must be the best evidence. The characteristics of our deceased friend were clear-sightedness, integrity and disinterestedness in professional matters, and combined with these he disclosed, in private life, a character, simple, truthful and affectionate; to which rare qualities were added the resources of a well-stored memory, and the refinements of a cultivated literary taste.

His decease occurred suddenly on the 13th of April 1852,

in his fifty-second year ; and when his remains were consigned to the tomb, in Highgate Cemetery, they were met by a large number of his professional brethren, who had spontaneously resolved thus to demonstrate their sense of the public and private virtues of their deceased friend, and by the erection of a monument, to exhibit their heartfelt sympathy for the premature loss of so good and talented a man.

He was not an old member of the Institution, having only been elected in 1845, and his engagements, being chiefly in the country, precluded his giving much personal attendance at the meetings, but he took part in some discussions in so able a manner as to cause regret that he could not more frequently be present.

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MR. THOMAS GRAINGER, of Craig Park, Mid-Lothian, was born on the 12th of November 1794, at a farm, then tenanted by his father, at Gogar Green, Ratho, near Edinburgh, and in the classes of the University of that city his education was completed.

At sixteen years of age he entered the office of Mr. John Leslie, who enjoyed some reputation, at Edinburgh, as a Land Surveyor, and on quitting that position, after six years of active labour, he commenced business on his own account in 1816, as a Civil Engineer and Surveyor, and soon obtained considerable employment in laying out and improving public roads.

About the year 1823, when railways, as means of conveyance, were first brought before the public, Mr. Grainger conceived a very just view of their probable importance, and strongly advocated their adoption, chiefly for the purposes of the mineral districts ; this probably influenced the survey of the Monkland and Kirkintilloch railway being confided to him, and when, in 1824, the Act of Parliament had been procured, the execution of the line was intrusted to him. This railway is stated to have been the first, in Scotland, on which ' edge rails ' were used, and it proved to be so good an investment, that it induced the construction in the same district, of the Ballochney, and the Glasgow and Garnkirk lines, in 1826, and of the Wishaw and Coltness railway in 1829.