

him by the readiness of his replies, and by the full and lucid, but at the same time concise, manner in which he answered questions, whether from friendly or opposing counsel. Another direction in which he showed talent to a remarkable degree was in dealing with financial affairs, for which he evinced a special aptitude. Thus it frequently happened that he was able to effect considerable economies without in any way lessening the value of the final results.

In the year 1882, having fallen into ill-health, Mr. Muir was relieved from active duty, and accepted the post of Consulting Engineer to the Company. In the succeeding year he was elected a Director, and, notwithstanding that he then resided at Bourne-mouth, was unremitting in his attendance at the weekly Board Meetings until about Midsummer of the year 1888, when he was seized with the illness which, after a long and painful course, terminated in his death on the 4th of January, 1889.

Mr. Muir was most conscientious and scrupulous in all his dealings, and earnestly strove to imbue his subordinates with his own intense devotion to duty. He combined a kindly and gentle disposition, with great firmness and love of discipline. His judgment was much esteemed by those who were professionally associated with him, whilst his courteous manner and readiness to assist with judicious counsel made him respected and trusted by all who knew him. In private life he was always deeply interested in works of benevolence, to some of which he unobtrusively devoted himself, especially bestowing much time to the instruction and improvement of the young.

Mr. Muir was elected a Member of the Institution on the 1st of May, 1866.

---

FREDERIC MURTON was born at Chatham, on the 24th of March, 1817; his father was Colonel Murton, who for some time was Commandant of the Royal Marines in that garrison. Colonel Murton was enabled from his position to make several friends; amongst others was Colonel Landmann, of the Royal Engineers, who had recently retired, and was one amongst the engineers then rapidly rising into notice owing to the development of railways. Mr. Murton was educated first at a private school at Chatham, and afterwards at the grammar school at Rochester. In the year 1834 he was articled to Colonel Landmann, who was then constructing the London and Greenwich Railway, the first

railway built wholly upon a viaduct, the Preston and Wyre Railway, and other works. After being employed in the office for the first three years of his pupilage, where he became a good draughtsman, he was placed by Colonel Landmann on the works of the Preston and Wyre Railway, under the Resident Engineer, the late Mr. Julien. Upon a change being made in the engineers of this railway, by which George Stephenson became Engineer, he was employed by that gentleman for a short time; he occupied a portion of his time in practising surveying and levelling under General Pasley, who became Inspector-General of Railways. In 1840 Mr. Murton again entered the service of Colonel Landmann, and was employed in preparing the plans for the widening of the London and Greenwich Railway, and in superintending the execution of the works, under the direction of the late Mr. John Pinhorn, the Resident Engineer, for the accommodation of the traffic of the Brighton line. Upon leaving Colonel Landmann, in the year 1842, Mr. Murton was frequently employed upon the Parliamentary surveys of projected railways. He remained thus occupied until he became engaged by Mr. Joseph Locke, Past-President Inst. C.E., and Mr. Neumann, as Resident Engineer upon the Paris and Rouen, the Rouen and Havre, and the Dieppe Railways, where he made friendships which only terminated with life. Among these friends, who afterwards became distinguished in their profession, were Mr. Locke, Mr. Meek, Engineer to the Lancashire and Yorkshire Railway, and Mr. Buddicom. He was also fortunate enough, whilst engaged on the Rouen Railway, to form a lasting friendship with the late Mr. Brassey, whom he advised upon many of his most important contracts. It was owing in a great measure to Mr. Murton's advice, that Mr. Brassey with his partners undertook to complete the Paris, Lyons, and Mediterranean line, which went only from Paris to Lyons, and from Avignon to Marseilles. Mr. Murton was employed to represent Mr. Brassey on the portion from Lyons to Avignon, and gave such satisfaction that, upon its completion, he was presented by his employers with the sum of £5,000. Upon the completion of this railway he was engaged by Messrs. Peto, Betts and Brassey, as joint manager, with the late Mr. George Giles, upon some large works in connection with the Lyons and Avignon Railway, Mr. Murton representing Mr. Brassey. Upon the completion of these works, Mr. Murton resided for several years in Paris, and was much occupied in examining railway and other projects in the interest of Mr. Brassey. On his return to England, he was engaged by Mr. Brassey to examine a project for

a railway in Norway, from a port on the Gulf of Finland to the iron-mines of Gellivara; also in the carrying out of a railway contract from Gladbach to Venlo; upon the completion of this work, Mr. Murton went, for Messrs. Waring Brothers, to Hungary and Portugal, and for other parties to North America, to examine various railway projects, and to conduct negotiations in connection therewith.

Mr. Murton, for the last few years of his life, had not been actively engaged, beyond being Chairman, from 1875 to 1887, of the *Chemin-de-fer du Vieux Port et de la Banlieu Sud* in Marseilles.

He died on the 17th of January, 1889, in the seventy-second year of his age, at his residence in the Addison Road, Kensington, and was interred at Brompton Cemetery.

Mr. Murton was an engineer of considerable experience and ability; painstaking in what he undertook, and in every respect reliable; a thoroughly high-principled gentleman, a good son, and kind to his relatives; he was, moreover, a staunch comrade, devoted to his profession, in which he made many close friends.

Mr. Murton was elected a Member of the Institution on the 1st of March, 1864.

---

WILLIAM PARKES was born near Gloucester on the 6th of October, 1822. He was educated at Bristol College and at University College, London, and being at that time of a delicate constitution, the doctors advised him to adopt a profession which would give him as much outdoor life as possible. With this view he entered the office of Mr. Hemming, an engineer in Bristol, in 1838, and after being there for a certain time, he obtained employment under the contractor who was then constructing the Great Western Railway.

In 1845 he entered the office of the late Mr. James Walker, Past-President, Inst. C. E., and while with him assisted in the preparation of the surveys and plans for various large works.

In 1847 he was sent to Alderney by Mr. Walker to report on the proposed harbour there, and, on the commencement of the works shortly afterwards, he acted as Resident Engineer under Mr. Walker, holding the position for two years.

In 1849 Mr. Parkes returned to London, and early in 1850 he started an office of his own in Parliament Street. He still retained his connection with Mr. Walker, who employed him to make