

would doubtless have turned his really great abilities to better practical account, but he could not have left to all who knew him a more honoured memory or one to be preserved with more tender and affectionate regard.

Mr. Perkins died on the 27th of April, 1891. He was elected a Member of the Institution on the 31st of May, 1881.

WILLIAM COUPAR RENNIE was born at Kinross on the 3rd of December, 1843, and was educated at Dollar Institution, N.B. In 1862 and 1863, when serving with Messrs. Bell and Miller, of Glasgow, he attended the classes of the late Professor Rankine at Glasgow University, in which he gained some distinction. In 1863 he passed the necessary examination in London for an appointment in the Indian Public Works Department, and on the 24th of June of that year was appointed a Probationary Assistant Engineer. On arrival in India he was posted to the Berar Division, in the province of Hyderabad, Deccan, where he remained till the 23rd of February, 1865, when he resigned the Government service. For the next two years he was employed by Messrs. Lee, Watson and Ayton, contractors, as one of their agents on the construction of the Nagpur branch of the Great Indian Peninsula Railway.

In April, 1867, Mr. Rennie was re-appointed to the Public Works Department of the Government of India, and was again posted to Berar. In Berar, which at that time was a new and backward province, and which, owing to its capacity for growing cotton, had come into prominence by the breaking out of the American Civil War, he did much good work in laying out and constructing roads, and in the erection of the many new public offices and buildings which were required for the civil administration of the district.

In June, 1868, Mr. Rennie was prostrated with sickness, and had to take leave to Europe. On his return to India in November, 1869, he was posted to the Nizam's State Railway, on the survey and construction of which he did much good work. For first-class execution of work he received the acknowledgments of the Governor-General in Council. In December, 1873, he was trans-

ferred to the Scindiah State Railway, where he remained as an Executive Engineer of one of the divisions during the survey and construction of the line. In May, 1879, Mr. Rennie was sent to Bombay as Superintendent of Works, under Mr. Alexander Izat, to lay out and construct the Bhavnagar-Gondal Railway, 193 miles in length. The funds for this line were provided by the native states of Bhavnagar and Gondal, and, besides opening out the peninsula of Kathiawar, it was intended to give employment to the people who had suffered during the famine which then existed. The survey was begun in the middle of the hot weather in May, 1879, and by the end of May, 1880, 103 miles of the line had been laid and were in running order, and the remainder was ready for the rails. During the hot weather and monsoon of 1879 the staff had to live in tents, and had a trying time, most of them suffering from a malignant form of fever. It was in a great measure due to Mr. Rennie's good management that the works were laid out and pushed forward so rapidly. In November, 1880, he took furlough to Europe.

On his return to India in December, 1882, Mr. Rennie was placed in charge of the survey of the proposed line from Dacca to Chittagong. For the energetic way in which it was carried out he received the thanks of the Lieutenant Governor of Bengal. On the 4th of June, 1883, he was appointed Superintendent of Works on the Northern Bengal State Railway. The climate of Bengal, however, did not suit him, and he was, on application, transferred to the Jhansi-Manickpur State Railway, which now forms part of the Indian Midland Railway.

On the formation of the Indian Midland Railway Company, Mr. Rennie's services were placed at the disposal of that company, with which he remained, in the capacity of Deputy-Agent, till May, 1887, when he again took furlough. On his leaving for Europe and breaking his connection with the Company, Mr. A. C. Cregeen, the Agent and Chief Engineer of the Company, wrote as follows: "I take this opportunity of placing on record my high appreciation of the services rendered by Mr. Rennie since the date of his connection with this railway. It is mainly due to his wide professional experience and his business habits that, in the carrying out of the works connected with this railway, a considerable reduction of rates, which were prevalent in the Jhansi district at the time when the company commenced operations, has been obtained, and which will result in large savings to the company in the cost of works at Jhansi itself, and on the Jhansi-Bhopal section of this railway system."

Mr. Rennie retired from the service of the Government of India in 1890, and his friends thought that, with his robust constitution, he had before him many years of life. His heart, however, was affected, and he died at Dollar on the 5th of April, 1891, after a short and painful illness.

Mr. Rennie was of a sanguine and energetic temperament, and had great capacity for organizing and carrying out works and for managing men. His shrewd common sense and genial disposition endeared him to many people and made him a large circle of friends.

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EDWARD SLAUGHTER was born in London, on the 1st of December, 1814, and was educated partly at the school of Dr. Nicholas at Ealing, and partly in Paris. He served a pupillage of five years to Mr. John Seaward of the Canal Ironworks, Limehouse. After some two years of travel (1836 and 1837), he joined Mr. I. K. Brunel in 1837 as Assistant Engineer, and took part in the construction of the London end of the Great Western Railway, especially in laying the permanent way over a large portion of the line, building stations, and general work. Mr. Slaughter's ability was highly esteemed by Mr. Brunel, who subsequently gave him a post at the Bristol end of the line. Upon the opening of the line to Hay Lane, near Swindon, in December, 1839, he accepted the offer of Messrs. Henry Stothert and Co. of Bristol, who had recently started engineering works, to join their firm as managing partner, specially with a view to the manufacture of locomotive engines. The partnership was formed early in 1840 under the style of Stothert, Slaughter, and Co., which was changed in 1856, when Mr. Henry Gruning was admitted, to that of Slaughter, Gruning, and Co. The concern developed into a large business under the personal management of Mr. Slaughter, and was carried on with great success for many years. In the year 1866 the business was converted into the Avonside Engine Company, Limited. Mr. Slaughter retained the engineering and general management, taking the title of Managing Director, which post he held until 1873, when failing health induced him to abandon active work. During this period he was much abroad,