

MATHEW BUCHAN JAMIESON, fourth son of the Rev. Dr. Jamieson, senior minister of St. Machar Cathedral, Old Aberdeen, and younger brother of Professor Andrew Jamieson, of Glasgow, was born on the 16th of May, 1860. He was educated at "The Gymnasium," or Chanonry House School, and at Aberdeen University, and commenced his engineering career at an early age, for he was not yet fifteen, when, in November, 1874, he was apprenticed to Mr. William Boulton, the City Engineer of Aberdeen. On the termination of his pupilage, in 1879, he was appointed Chief Assistant to Mr. Boulton, which post he held for nearly five years. During that time he was engaged in the design and supervision of sewerage and waterworks, pumping machinery, bridges, and in preparing plans and valuing property in connection with an important City Improvement Scheme involving an expenditure of £133,000.

As a Student of the Institution, Mr. Jamieson prepared a Paper on "The Internal Corrosion of Cast-Iron Pipes," which was read at a Supplemental Meeting on the 11th of February, 1881, and was printed in the Minutes of Proceedings,¹ a Miller prize being awarded for it. Sir Robert Rawlinson, who presided at the meeting in question, was so favourably impressed that he took from that time a warm interest in Mr. Jamieson's career. That interest was practically displayed, when, in September, 1883, Mr. Jamieson was appointed—on the recommendation of Sir Robert Rawlinson—an Assistant Engineer in the Public Works Department of British Guiana. Three years later he became Chief Assistant Engineer, and, owing to the ill-health of his chief, was in responsible charge of the public works of the colony. These included some heavy up-country work in connection with the reclamation of land, but the most arduous part of his duties was the maintenance of the sea-board which extends for more than 300 miles. Owing to storms and to the land being below the level of the sea, this proved a difficult and even dangerous task; Mr. Jamieson had often to go at a moment's notice to a far distant part of the old Dutch works, with some 300 or 400 labourers and work night and day, until a breach was made good. He was frequently consulted as to reclamation schemes by the so-called "Sugar King of Demerara," the late Hon. William Russell, to whom he rendered great service. The work, however, was undermining his health, and mainly on this account, but partly also to be near

¹ Minutes of Proceedings Inst. C.E., vol. lxx. p. 323.

his brother William, who was engaged in mining operations and sheep-farming in New South Wales, he retired from the Public Works Department of British Guiana in the Autumn of 1888 and, proceeding to Australia, established himself in private practice at Melbourne.

William Jamieson had been a Mining Surveyor to the Government of New South Wales, and was largely instrumental in the starting of the Broken Hill Proprietary Company's Mine in 1885. His brother's influence and connection were placed at the disposal of Mathew, who, for the future, turned his attention mainly to mining engineering. He soon became engaged in the design and superintendence of crushing, concentrating, desulphurising, chlorodising, amalgamating and smelting plant. In New Zealand he designed and erected various water-races, large wrought-iron siphons for carrying water over gorges too high for bridges, Pelton wheels for driving machinery, an electric light plant, several miles of tramway rising to a height of over 2,000 feet above the works, for the purpose of bringing ore from the various mines, and a 60-stamp battery, with concentrating, desulphurising, smelting and amalgamating plant. He examined and reported upon the working and condition of several important mines, including those of the Broken Hill Proprietary Company in New South Wales. As an outcome of that connection he prepared, in conjunction with Mr. John Howell, the Company's manager, a valuable Paper entitled "Mining and Ore-Treatment at Broken Hill, N.S.W.," which was read before the Institution in May, 1893,¹ and was awarded a Telford medal and premium.

As one of a committee of two, Mr. Jamieson had charge of the carrying out of the Tarrawingee Railway (41 miles) and the Broken Hill water-supply, the two works costing considerably over £300,000. In conjunction with Mr. J. B. Mackenzie, he was engineer for two large and important schemes—one estimated to cost £280,000 and the other £72,000—for the supply of Melbourne with electricity by means of water-power taken from the Yarra Yarra river. Mr. Jamieson was also engineer to a similar undertaking in Tasmania, to provide the silver-lead mines at Zeehan with power for hoisting, pumping and ore-reduction at less than half the cost of steam-power. As one of the executive of the Mine Owners Association he had to deal with labour troubles in an acute form at Broken Hill. In the third and last strike the Association declared firmly that it would fight the Unions and, by

¹ Minutes of Proceedings Inst. C.E., vol. cxiv. p. 116.

establishing freedom of contract, be relieved from their tyranny once and for all. In this the Association succeeded after a serious strike lasting twenty-eight weeks. Previously no one but a unionist could obtain any kind of employment at Broken Hill, but now work is open to all on equal terms, and the 4000 men employed are, on an average, much better off than formerly. In place of the union, the funds of which were almost exclusively employed to maintain agitators and for fighting purposes, the owners and men have combined to form a benefit and sick fund, and for every pound subscribed by the men the owners subscribe another. The fund is managed free of cost by a committee elected from the employers and men.

Mr. Jamieson's promising career was cut short prematurely by a sudden illness on the 18th of August, 1895. He was engaged at Corryong, about 260 miles north-east of Melbourne, in examining some mines, in which he and his brother were jointly interested. He walked into the town of Corryong, some 4 or 5 miles, when, feeling unwell, he consulted a doctor, who prescribed for him and left him with the promise to return very soon. Before the doctor returned, however, Mr. Jamieson had expired.

Some idea of the energy and keen sense of duty which animated Mr. Jamieson may be gained from this brief account of his life. He showed great ability, and there can be no doubt that he would eventually have made a considerable name as a mining engineer in the Australasian Colonies. He leaves a widow (the youngest daughter of Mr. William Hall, Shipbuilder, of Aberdeen) and three young children. Mr. Jamieson was elected an Associate Member on the 1st of December, 1885, his interest in the work of the Institution showing itself in the presentation of the Papers referred to.

FREDERICK CHARLES PRESTON, second son of Mr. Frederick Walter Preston, of Burton-Latimer, Kettering, was born on the 21st of June, 1867, and was educated at Wellingborough Grammar School under Dr. H. E. Platt. He then studied for two years at the Technical College, Finsbury, where he obtained a qualifying certificate in chemistry, physics, mathematics, mechanical engineering and mechanical drawing, and laboratory and workshop experience. In 1886 Mr. Preston was apprenticed to Messrs. Black, Hawthorn & Co., of Gateshead-on-Tyne. He completed an