

WILLIAM INGLIS was born on the 10th of May, 1835, in Ottawa, Canada, of Scotch parentage, his father having settled in Canada about the year 1825.

In the year 1852 young Inglis was apprenticed to Mr. Gilbert, of the St. Lawrence Engine Works, Montreal, with whom he remained until 1856, when he came to this country and entered the works of Messrs. R. Napier and Sons, Glasgow. Here he remained for two years, and during that time, he attended the Engineering Classes of Professor Rankine, at the Glasgow University. On leaving Glasgow, in 1858, Mr. Inglis entered the locomotive works of Messrs. Robert Stephenson and Co., of Newcastle-on-Tyne, and in 1860 he returned to Canada, where he was engaged for two years in designing and erecting machinery, including a walking-beam paddle-engine, fitted with Corliss valves, for the river paddle-steamer "Montreal."

Mr. Inglis also superintended the building of the hull of the "Montreal," the first iron passenger steamer built in Canada, and which is yet running on the St. Lawrence.

In 1863 Mr. Inglis came back to England, opening an office in Edinburgh as a Consulting Engineer, and during his residence there he patented and erected an inclined water-tube boiler, which is still in good working condition. In 1864 Mr. Inglis removed his offices to Manchester, and designed an improved type of Corliss engine, with which his name is so closely and deservedly associated.

The large development of the Corliss valve and gear during the past twenty years is mainly due to the "Montreal" and to Mr. Inglis, and it may be worth recording the circumstances that support this statement. In 1861 Mr. J. F. Spencer, during a visit to Canada, met Mr. Inglis in the engine-room of the "Montreal," and was impressed with the efficiency of the Corliss valves and gear, and on his return to England patented what is known as the "double-clip gear." In 1862-64 two pairs of horizontal Corliss mill-engines, of 400 HP. each, and two high-speed Corliss vertical engines, of 100 HP. each, were started by Mr. Spencer at Bradford and Blackburn, fitted with the improved gear. This type of engine excited great controversy for many years, and its present success, and almost universal adoption for large mill-engines, is greatly due to the energy and pertinacity with which Mr. Inglis upheld its advantages.

During his residence in Manchester Mr. Inglis superintended the construction (on the Clyde), and shipment in plates to Canada,

of several large steamers. In December, 1867, he was appointed the engineering manager of, and ultimately a partner in, the Soho Iron-Works, Bolton, Messrs. Hick, Hargreaves and Co. being the first firm to manufacture the Corliss engine in this country under the Inglis and Spencer patents, and during the twenty-two years of Mr. Inglis's management he perfected many improvements in Corliss engines.

Nearly nine hundred Corliss engines were constructed at Soho for mills, &c., ranging in power from 50 to 10,000 HP., the latter being now in hand for the London Electric Supply Corporation, to indicate 5,000 HP. on each crank. This power (as developed on one crank) is unprecedented on land or sea.

Perhaps more than any one individual, Mr. Inglis was instrumental in bringing mill-engines to their present high state of perfection. He was an earnest advocate of high piston-speed, and high steam-pressure, and in fact of all the features which mark the most advanced practice in steam engineering. He was equally capable in designing other classes of machinery. His name is also well known in connection with cold-air machinery for the imported fresh-meat trade; and automatic Barring-engines for starting large engines, &c.

Personally Mr. Inglis was quiet and self-possessed in manner, kind and considerate, especially to those over whom he had authority. As a technical witness he was invaluable, many a case has been won largely owing to his evidence. In short, his death in the prime of his career, is a great loss to the profession.

Mr. Inglis died on April 22nd, 1890, after only a few days illness, of pneumonia, at his residence, Wilton Grange, Bolton. He was elected a Member of the Institution on the 5th of December, 1876.

---

FREDERICK JOPLING, born on the 11th of November 1855, was the third son of the late Thomas T. Jopling; after being educated at the Collegiate School, London, he entered the office of Messrs. Meik and Nesbitt, of Sunderland, as a pupil, serving a five years' term until 1876, during which time he was employed in preparing plans and surveying for many important works. Among these were the Hylton and Monkwearmouth Railway (on which work he was engaged until its completion), and a scheme for supplying the district of Bedlington with fresh water, which was subsequently carried out most successfully, Mr. Jopling acting as Resident Engineer. On the expiry of his pupilage, he entered the