engaged in turning out heavy machinery not so distinctively connected with marine work.

The largest and in some respects the most interesting of the firms in this district is Sir William Arrol & Co., which was founded at Dalmarnock in the early seventies of the last century by the head of the firm, who afterwards sat in the House of Commons. These great works are a monument to his personal skill and industry. He began life as a working man, founded a small business as a boiler maker, and with saved money in a few years found himself the owner of a flourishing iron works, afterwards turned into a limited company. The firm built some of the principal Caledonian railway bridges. It built the Forth Cantilever Bridge, on which, from 1883 to 1890, between 3,000 and 5,000 men were constantly employed, and which is the greatest engineering work of the kind in existence. Forty-two thousand tons of steel were worked into the superstructure and 12,000 tons of iron were used in the foundations, at a total cost of £3,500,000. At the same time the firm was engaged upon the new Tay Bridge, which took the place of that blown down in the storm of 1881. The Tower Bridge over the Thames in London was constructed by the same firm.

More than half of the locomotives produced outside the railway companies' own works in these islands are made in or near Glasgow. The North British Locomotive Co., one of the two locomotive firms in the district, is the largest engine-building firm in this country, if not in Europe. It was a combination, formed in 1903 under a board of ten expert directors, of the three well-known firms of Neilson, Reid & Co., of Hyde Park Locomotive Works, Glasgow; Dubs & Co., of Glasgow Locomotive Works, and Sharp, Stewart & Co., of Atlas Works, Glasgow. The origin of Neilson, Reid & Co. has been referred to in another chapter. The capital of the combine is £2,000,000 in