

One hundred years of Fairfield

JOHN ELDER was the founder of the Fairfield Shipbuilding & Engineering Company which celebrates its centenary this year. He joined the Glasgow firm of millwrights run by the partners Charles Randolph and Richard S. Cunliff, in 1852, with the urge to produce an improved marine engine. Steamships of the time had to carry so much coal for fuel that they lost valuable cargo space, and, in his first patented engine in 1854, Elder halved the amount of coal used on a voyage. His compound engine expanded steam successively in two cylinders instead of in one only, a system tried unsuccessfully by others earlier. In six weeks, he had his engine placed in the screw steamer *Brandon*, built for the London and Limerick trade. On the trial run the coal consumption was 3½ lb. per I.H.P. per hour, but this was later reduced to 2 lb. per hour.

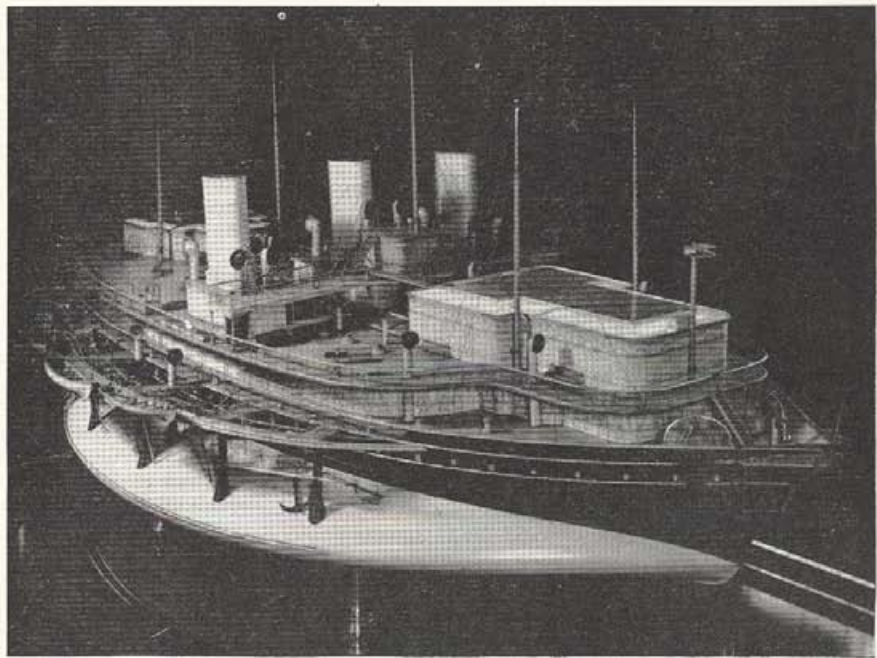
By 1860, Elder and his firm had moved into shipbuilding in a leased yard in Govan, and four years later he was building his own yard on Fairfield Farm, very near Govan village. There he established works for shipbuilding and engineering, with a wet dock adjacent. Before he died in 1869, he and Fairfield had made their mark in the shipbuilding world. Four ships had gone down the ways and, while waiting for the new yard to take shape, he had invented useful devices including a watertube boiler, paddle floats, triple- and quadruple-expansion engines, surface condensers, self-propelled floating docks, a system for heating feed-water with waste gases, valve gear of various sorts and a circular warship.

But outside his business hours he had schemes for promoting the sciences

Outstanding leadership and a wide variety of production have maintained this Govan shipyard's reputation through peace and war, boom and depression

of naval architecture and engineering, and, in his memory, his widow endowed the John Elder chair of naval architecture in the University of Glasgow.

pany was formed with John Francis Ure (Mrs. Elder's brother) as senior partner, J. K. L. Jamieson as engineering partner and William Pearce as



Model of the Czar's steam yacht "Livadia"

The first occupant of this chair was Dr. Francis Elgar, later to be chairman and managing director of the Govan company.

To take over the business in 1870 from the widow, John Elder & Com-

pany was formed with John Francis Ure (Mrs. Elder's brother) as senior partner, J. K. L. Jamieson as engineering partner and William Pearce as shipbuilding partner. Nothing indicated at that time that William Pearce, later to be knighted, was to become as famous in shipbuilding as John Elder. In 27 years he made a personal fortune of over £1,250,000 and gave Fair-



The present Fairfield yard as seen from the river

field world fame. He was full of unorthodox ideas and bringing some of them to fruition brought wonderful publicity to his firm. For example, he reasoned that a fast ship would not only advertise the skill of her builders but would show a profit for her owners. The natural "race track" was the North Atlantic, in his opinion, and passengers would pay for speed. Extra speed, he knew, would raise fuel costs so high that freight rates could not stand it. But on the North Atlantic there was ample room for ships that would carry passengers alone and could take on coal bunkers in both the U.K. and America, thus eliminating the need for so much bunker space.

So came a procession of fast Atlantic liners from Fairfield—the *Arizona*, under the Guion flag, which made the crossings in 7 days 10 hours and 7 days 12 hours respectively; the same company's *Alaska* (known as the "greyhound of the Atlantic"); and the Cunarder *Oregon*, built in 1883, which made the outward passage in 6 days 10 hours. Then came four famous Cunarders, the *Umbria* and *Etruria* of 1884 and 1885 and the *Campania* and *Lucania* of 1893. The first two cut the outward crossing to 6 days 1 hour 44 minutes and 24 years later they were

still steaming at 19 knots. The latter pair did the outward crossing in 5 days 7 hours and the homeward one in 5 days 8 hours.

Sir William Pearce also introduced speed into cross-Channel steamers. He guaranteed the owners that the paddler *Victoria*, which went into service in 1886, would not exceed 60 minutes per crossing between Calais and Dover for one month and kept the guarantee.

This chairman was an organiser as well as a salesman. During his regime, Fairfield supplied the War Office with 11 stern-wheelers for Egypt in six weeks, in 1881; built an Atlantic liner of 5,000 tons in 98 working days, and constructed the steam yacht *Livadia*, of near-circular shape and 14 knots, for the prone-to-seasickness Czar of Russia in 1881. Tens of thousands of people arrived to see the *Livadia* launched and her unusual design gained more publicity for Fairfield.

Sir William was the first M.P. for Govan in 1885 and celebrated his election by taking his steam yacht to the Thames, anchoring her off the Houses of Parliament and entertaining his friends there. After Sir William's death three years later, Fairfield was incorporated into a public company with his son, Sir William George

Pearce, as chairman. The latter was the head of Fairfield when the *Armadale Castle*, of 12,700 tons, was built for the Union-Castle Line. With a speed of 19 knots she made the passage from England to the Cape in 17 days which compares with the Elder-built *MacGregor Laird*, of 966 tons and 11 knots, which made the Cape in 35 days, 40 years earlier. In Sir William G. Pearce's time, up to 1907, Fairfield built passenger liners for the Orient, Castle, Union-Castle, Cunard and Canadian Pacific companies as well as such famous cruisers as the *Magicienne*, *Venus*, *Argonaut*, *Hermes*, *Cressey*, *Bedford* and *Cochrane*, the battleship *Commonwealth* and the armoured cruiser *Indomitable*.

From 1907 to 1909, the chairman was Dr. Elgar as mentioned above and his successor was Sir Alexander Gracie, another great shipbuilder whose reputation was high with the Admiralty. Under his guidance, several outstanding ships were built including notable liners for the Union-Castle and Canadian Pacific Lines.

Came the war and Fairfield was almost exclusively engaged on warship construction. The battle-cruiser *Renown*, of 28,200 tons displacement, which gave a good account of herself



A meeting of the Board of the Fairfield Shipbuilding & Engineering Company. At the head of the table is Sir John Erskine (chairman). On his right are Mr. James Lenaghan (managing director), Dr. William Davis (deputy managing director), and Mr. Arthur Nicholas. On his left are Mr. Daniel McPhie, Vice-Admiral E. W. Longley-Cook, and Mr. A. H. White