The New Zealand Graphic And Leadies' Journal.

NO. 10

SATURDAY, MARCH 7, 1891.

Vor VII.

S,S. EMPRESS OF INDIA.

THIS is the first of three twin-screw steel steamers built to the order of the Canadian Pacific Railway Company. It forms a necessary link between two important parts of our colonial empire, and will enable the Canadian Pacific Railway Company to carry passengers for China and Japan with great speed and comfort. The Canadian Pacific Railway, which was commenced in 1880, and, under contract with the Government of the Dominion of Canada, was to be completed in October 1890, was actually finished, and had trains running through from Halifax and Quebec to Vancouver in November, 1885. The Imperial Government called for tenders for a mail-service by first-class steam-ships between Vancouver and Japan and China, specially constructed to carry troops and guns. The three vessels now building by the Naval Construction and Armaments Company, Limited, at Barrow-in-Furness, are contracted to do 18 knots on the measured mile, and 164 knots on a 400-miles sea trial. Their engines indicate about 10,000 horse power, and they are propelled by twin-screws, the engine-room being divided by a fore-and-aft bulkhead, and the propeller, or tail-end shaft, being carried within the structure of the hull to the very extremity, thus doing away with the external support known as the 'A' bracket principle. The hull is subdivided by twelve transverse watertight bulkheads. Of these, three forward and two ait are without doors of any kind, while the remaining seven have specially constructed watertight doors, and all sluice doors in the bunkers are provided with screens to prevent falling coal blocking the doors. The four boilers supplying the engines with steam are placed in two compartments divided by a cross bunker, and are fully protected by wing bulkheads and Arrangement is also made for the protection of the engines by coal in the event of the vessels being taken up as armed cruisers.

The dimensions of the vessels are: Length over all, 485ft; between perpendiculars, 440ft; breadth, moulded, 51ft.; depth, moulded, 36ft.;

tonnage, 5700 tons gross. They are lightly rigged with pole masts and fore-andaft canvas, and their form, both under and above water, is of such symmetry and fineness as to insure their easily attaining the high speed required. The steering



V. J. Moir, H. S. Cocks. J. F. Grierson. D. Wood. CHRISTCHURCH REPRESENTATIVES. Auckland Champion Meeting, February 13-14, 1891.

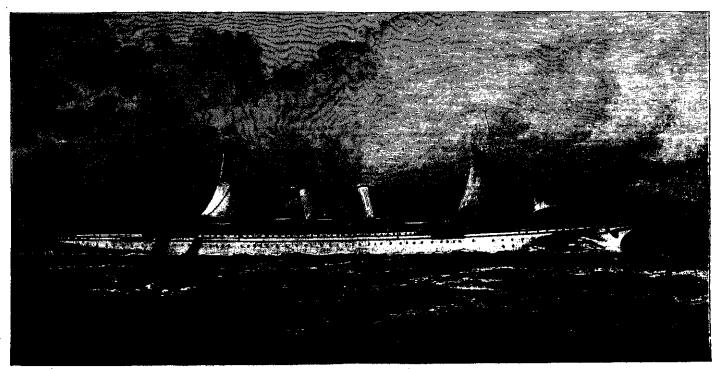
engines, which are of the best and strongest make, are connected with a drum working on the rudder head, which is again controlled by a patent hydraulic brake. The arrangements and fittings for passengers are of the most complete

and luxurious kind. The vessels are lighted throughout by electricity, and are thoroughly ventilated by a series of electric fans, each three feet in diameter and delivering about 400,000 entic feet of air per hour. The vessels will carry, in addition to passengers, about 4000 tons of tes, and are specially designed with side ports and side hatches, arranged with a view to the speedy reception and delivery of cargo.

The armament of the ships will consist of the latest type of 4.7-in. guns, which will be stored at Vancouver and Hong-Kong, so that the ships can be fully armed and made ready for their cruiser duties in the space of a few hours.

LONG LIVES.

More women attain greater ages than men on an average, although more of the latter attain the utmost extent of longevity.' Hufeland thus endeavoured to account for this important fact : - The equilibrium and pliability of the female body seem for a certain time to give it more durability, and to render it less susceptible of injury from distinctive in-fluences. But male strength is without doubt necessary to arrive at a very great More women, therefore, become old, but fewer very old. In the first half of a man's age, an active, even a fatiguing, life is conducive to longevity; but in the last half a life that is peaceful and uniform. No instance can be found of an idler having attained to a remarkable great age. Rich and nourishing food, and an immoderate use of flesh, do not prolong life. Instances of the greatest age are to be found among men who, from their youth, lived principally on vegetables, and, in some cases, had never tasted flesh.' Moreover, let those who will not marry take heed. There is not one instance of a bachelor having attained a great age, and that the fact was as applicable to the female as to the male sex. Many examples illustrative of this sensible theory will occur to



S. S. EMPRESS OF INDIA.