

20399 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rev 24/3/18

Report (if any) of Hull of Vessel. Port Glasgow No. 224

Description *Compound*
 Made by *Messrs John Elder & Coys*
 When *1878* At *Glasgow*
 Diameter of cylinder *84 8 3/4* Length of stroke *60*"
 No. of revolutions per minute *37*
 Point of cut off *.6*
 Diameter of ~~shaft~~ *Paddle* shaft *16 1/2*"
 Diameter of crank shaft journals *15*"
 Diameter ~~of paddle wheel~~ of paddle wheel *14 ft*
 Pitch of ~~shafts~~ *Wheels*
 No. of blades, *9* Total surface *256 1/2 ft*
 No. of bilge pumps *Three* and sizes *6" dia x 20" stroke*
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *Two* and sizes *6" dia x 20" stroke*
 What gauges are there attached to the engines and boilers ... *Five Steam, One Circumferential One Compound*
 Description and size of Donkey Pumps ... *Double Acting*
 Where do they pump from ... *From the sea, bilge and Hotwell*
 No. of bilge injections *One* and sizes *6"*
 Are they connected to air, or circulating pumps *Circulating*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *No*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Four* Description *Round Horizontal*
 Made by *John Elder & Coys*
 When *1878* At *Glasgow*
 Working pressure *80 lbs*
 Tested by hydraulic pressure to *160 lbs*, Date *January 23rd 1878*
 Description of super-heating apparatus *None*
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately
 Description and area of safety valves on each boiler ... *Two Direct Spring each 12.5" area at 80 lbs 10.32" area*
 No. of square feet of fire-grate surface in each boiler *48 ft. in each of two boilers & 36 ft. in each of the other two*
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*

DONKEY BOILER.

Description *Round Vertical*
 Where fixed *Between Forward Boilers*
 Working pressure *80 lbs*

Tested by hydraulic pressure to *160 lbs*, Date *Jan'y 23rd 1878*
 Description and area of safety valves *Direct Spring 7" area*
 No. of square feet of fire grate *4.6 ft.*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes*
 Are they Kingston valves or common cocks ... *Screw down Valves & Cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *All fitted above the turn of the bilge*
 Are the discharge pipes above or below the deep water line *Above*
 Are they each fitted with a discharge valve on the plating of the vessel *Yes*

What pipes are carried through the bunkers *None*
 How are they protected
 When were ~~examined~~ *examined* in dry dock *Cocks & Valves on the previous being launched*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *No Tunnel*

By *John Elder & Coys* Manufacturer.
Archd. Ryrie

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the ~~Iron~~ *Steel* (~~or Wood~~) *Brighton* owned by *The London, Brighton & South Coast Railway Coy* of the Port of *Newhaven* of *315.8* Tons Register, and *300* Registered Horse Power, and that they have been carefully inspected and examined by me at *Glasgow* and found to be at this date, viz., *March 15th 1878* in good order and safe working condition.

Amount of Fee for Survey ... £15:00:00 *paid*
 (Travelling Expenses, if any, £)

James Mollison
 Engineer Surveyor to Lloyd's Register of Shipping.

1878-476-0437

