

17075 Ln

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Recd 2/10/76

Port North Shields No. 1273

Description *Inverted Compound Surface Condensing*
 Made by *Messrs Pattison & Atkinson*
 When *Sept 1876* At *Muchroom near Newcastle*
 Diameter of cylinders *15 x 25* Length of stroke *18*
one of each
 No. of revolutions per minute *About 100*
 Point of cut off *5/8th of stroke*
 Diameter of screw shaft *5 1/4*
 Diameter of crank shaft journals *5 1/4*
 Diameter of screw, or of paddle wheel *7' 0"*
 Pitch of screw *8' 0"*
 No. of blades, *3* Total surface *14 1/2 sq. feet*
 No. of bilge pumps *one* and sizes *2 1/2 dia. x 9 stroke*
 Do they pump from each compartment *from Engine room*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *one* and sizes *2 1/2 dia. x 9 stroke*
 What gauges are there attached to the engines and boilers ... *1 steam gauge on boiler*
1. Vacuum
 Description and size of Donkey Pumps ... *one inverted double acting*
3 dia. x 6 stroke
 Where do they pump from ... *from the sea tanks & bilges of engine room*
 No. of bilge injections *1* and sizes *2 1/2 dia*
 Are they connected to air, or circulating pumps *to circulating pump*
 Is there a hand pump in the engine room *No (Donkey can be used)*
 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 *one* Description *Cylindrical & Multitubular*
 Made by *J. Eltingham*
 When *Augt 1876* At *South Shields*
60 lbs per sq inch
 Working pressure to *120 lbs*, Date *Aug 14th 76*
Mr Bain was present
 Description of super-heating apparatus *none*
 Can each boiler be worked separately *only 1 boiler*

Can the super-heater be shut off and the boilers worked separately }
 Description and area of safety valves on each boiler ... *Two spring safety valves*
3 dia. = 14 sq. ins Area
 No. of square feet of fire-grate surface in each boiler } *21 1/2*
 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. *None*

Tested by hydraulic pressure to _____, Date _____
 Description and area of safety valves _____
 No. of square feet of fire grate _____

Tested by hydraulic pressure to _____, Date _____
 Description and area of safety valves _____
 No. of square feet of fire grate _____

PIPES, COCKS, AND CONNECTIONS.

Connections with the sea on the skin of the ship } *yes*
 Kingston valves } *Stop Valve & Cocks*
 Common cocks ... }
 fixed sufficiently high on ship's side to be seen without lifting the stoke hold } *yes*
 Discharge pipes above or the deep water line } *Above*
 Each fitted with a discharge on the plating of the vessel } *all (except the Donkey discharge) which is well up*
Pattison & Atkinson Manufacturers

What pipes are carried through the bunkers *None*
 How are they protected _____
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock } *new*
 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. The Engines are in the after end of the vessel.*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel "*William*" owned by *W. Rutter & Co* of the Port of *Bristol* of *44.36* Tons Register, and *25* Registered Horse Power, and that they have been carefully inspected and examined by me at *Low Walker on Tyne* and found to be at this date, viz., *22nd Sept 1876* in good order and safe working condition.

Amount of Fee for Survey ... £ *1:5:0*
 Certificate *2:6*
 (Traveling Expenses, £ *1-10*) *Received at Shields*
£1-4-6 by T. Young 29/9/76
 William Allison, Esq. *Mr Bain*
 Engineer Surveyor to Lloyd's Register of Shipping.
 (1000/31/76.)
 best written Feb. 3. 10. 76.
 Lloyd's Register Foundation
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