

21215 Iron

## LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

## ENGINES.

Rev 11/7/78

Description *2 Cylinder Compound Inverted S.E.*  
 Made by *Messrs R. W. Hawthorn*  
 When *June 1878* At *Newcastle on Tyne*  
 Diameter of cylinders *32" x 62"* Length of stroke *42"*  
 No. of revolutions per minute *60*  
 Point of cut off *7/8<sup>th</sup> of stroke*  
 Diameter of screw shaft *10 1/2"*  
 Diameter of crank shaft journals *10 3/4"*  
 Diameter of screw, ~~on of paddle wheel~~ *15 feet*  
 Pitch of screw *14 to 18 feet*  
 No. of blades, *(14)* Total surface *62 4 feet*  
 No. of bilge pumps *(2)* and sizes *3 1/4" dia, 20" stroke*  
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *(2)* and sizes *3 1/4" dia, 20" stroke*  
 What gauges are there attached to the engines and boilers ... *1 Steam Eng. Room, 1 do each hold, 1 do each stokehold, 1 Vacuum, 1 compound*  
 Description and size of Donkey Pumps ... *"Ballast" 8" dia, 14" stroke S.A. "Biler" 3 1/2" dia, 8" stroke S.A.*  
 Where do they pump from ... *"Ballast" from Tanks, Sea, and all compartments "Biler" from Sea, Hotwell, Tanks*  
 No. of bilge injections *(1)* and sizes *4" dia*  
 Are they connected to air, or circulating pumps *circulating*  
 Is there a hand pump in the engine room *No Small Donkey to use as hand pump*  
 Can it be worked by the main engines *use as hand pump*  
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes along with line Piping.*

## MAIN BOILERS.

Number *(2)* Description *Steel cylindrical tubular*  
 Made by *R. W. Hawthorn*  
 When *June 1878* At *St. Peter's Newcastle*  
 Working pressure *15th. valves set to 4 1/2 lbs*  
 Tested by hydraulic pressure to *150 lbs*, Date *23. 5. 78*  
 Description of super-heating apparatus *Superheater 1/4 in uptake*  
 Can each boiler be worked separately *Yes*  
*Except valves Biler built of London Furness Steel*

Can the super-heater be shut off and the boilers worked separately *No*  
 Description and area of safety valves on each boiler ... *Two Spring Valves by R. W. Hawthorn - 25 sq inches*  
 No. of square feet of fire-grate surface in each boiler *43.5 sq feet*  
 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. *all except roses in holds*

## DONKEY BOILER.

Description *Cylindrical tubular 3 cross tubes*  
 Where fixed *Stokehold*  
 Working pressure *57 lbs*

Tested by hydraulic pressure to *100 lbs certificate*, Date *4. 5. 78*  
 Description and area of safety valves *dead weight 3 3/8" - 8.8 sq inches*  
 No. of square feet of fire grate *15.9 sq feet.*

*J. H. Wilson & Co. Liverpool*

## 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 ... *2 Kingston valves rest are common cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *Yes.*  
 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 the stern tube, propeller, screw shaft, and all connections examined in dry dock *Now*  
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes. by master cocks*  
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Appears water tight and fitted with sluice door*  
*Safety valves eased 17 1/2 lbs lifted accumulated to 17 1/2*

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 *"Mary Louisa"* owned by *James Elliot & Co. & Co. Dundee*  
 of the Port of *LONDON* of *1207.24* Tons Register, and *200* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *Newcastle & Low Walker on Tyne*  
 and found to be at this date, viz., *June 24<sup>th</sup>* 1878 in good order and safe working condition.

Amount of Fee for Survey ... £ *15. 20. 0* Paid by *George W. Mansel*  
 (Travelling Expenses, if any, £ *0. 0. 0*)  
*1000-1/9/76.]*

Engineer Surveyor to Lloyd's Register of Shipping.

*North Shields*

Engines & Boilers worked satisfactorily on trial, Biler kept at after trial, space between Biler & Bunker 8 inches, Port Newcastle No. 140-9

Dimensions of tanks and valves same as S. S. of London, valves 100 x 192, tracing enclosed.



This is one of the vessels fitted with  
the steel boilers which were  
approved of on Dec 4<sup>th</sup> 1877  
It is submitted that she is  
eligible to have the  
notification Lloyd's MC  
recorded and a  
certificate granted

M 11/7/78



© 2019

Lloyd's Register  
Foundation

Copy retained