

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

No. Report (if any) on Hull of Vessel. Port

Description *Two Cylinder compound inverted*  
 Made by *J. Math & Coop*  
 When *1873* At *Birmingham*  
 Diameter of cylinders *60 in* and *45* Length of stroke *48*  
 No. of revolutions per minute *45*  
 Point of cut off *1/3 of stroke F.S.*  
 Diameter of screw shaft *14*  
 Diameter of crank shaft journals *14 1/2*  
 Diameter of screw, ~~at~~ *paddle wheel* *17-9*  
 Pitch of screw *25-0*  
 No. of blades, *14* Total surface *91 sq feet*  
 No. of bilge pumps *11* and sizes *3 1/2 dia 48 stroke*  
 Do they pump from each compartment *Engin room & aft hold*

Are all the bilge suction pipes fitted with roses *Yes.*  
 No. of feed pumps *11* and sizes *3 1/2 dia, 48 stroke*  
 What gauges are there attached to the engines and boilers ... *1 Atom on each Boiler in stoke hole*  
*1 50 in Engin room*  
*1 Vacuum ditto & 1 Compound*  
 Description and size of Donkey Pumps ... *one vertical double action 4 dia 12 stroke*  
*one ditto " " 2 dia 12 stroke*  
*one horizontal " " 8 dia 12 stroke*  
 Where do they pump from ... *one sea and hold*  
*one sea and engin room*  
*one sea and all compartments*  
 No. of bilge injections *11* and sizes *9 1/8*  
 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 *3* Description *Cylindrical horizontal*  
 Made by *J. Math & Coop*  
 When *1873* At *Birmingham*  
 Working pressure *54 lbs per sq inch*  
 Tested by hydraulic pressure to *not ascertained*, Date *1873*  
 Description of super-heating apparatus *Two cylindrical*  
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *No.*  
 Description and area of safety valves on each boiler ... *2 dead weight each 3 1/2 dia*  
*area 47.5 sq inches*  
 No. of square feet of fire-grate surface in each boiler *90.*  
 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 *Vertical cylindrical*  
 Where fixed *Main Deck*  
 Working pressure *42 lbs per sq inch*

Tested by hydraulic pressure to *not ascertained*, Date *1873*  
 Description and area of safety valves *1 dead weight 3 dia 7.0 sq inches*  
 No. of square feet of fire grate *14.0*

### 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 ... *3 Kingston rest common - cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *No*  
 Are the discharge pipes above or below the deep water line *1 Bilge discharge above the rest below*  
 Are they each fitted with a discharge valve on the plating of the vessel *Yes*

What pipes are carried through the bunkers *Bilge suction pipes*  
 How are they protected *by 4" wood planks*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *8th August 1876*  
 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 *Yes.*

Manufacturer.

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 *Seine* owned by *Telegraph construction & maintenance Corp* of the Port of *London* of *2243* Tons Register, and *500* Registered Horse Power, and that they have been carefully inspected and examined by me at *London & Greenwich* and found to be at this date, viz., *26th Sept* 1876 in good order and safe working condition.

*G. W. Manuel*  
 Engineer Surveyor to Lloyd's Register of Shipping.

