

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

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

## ENGINES.

Rev 1577/16

Description *Vertical Compound surface Cond*  
 Made by *Mr W. B. Thomson*  
 When *June 1876* At *Dundee*  
 Diameter of cylinder *20 + 36* Length of stroke *22 1/2 in*  
 No. of revolutions per minute *105*  
 Point of cut off *2/3*  
 Diameter of screw shaft *6 1/2 inches*  
 Diameter of crank shaft journals *6 1/2*  
 Diameter of screw, ~~or of paddle wheel~~ *8 feet*  
 Pitch of screw *11 1/2*  
 No. of blades, *Four* Total surface *20 feet*  
 No. of bilge pumps *one* and sizes *2 1/2" Diam x 22 1/2" Stroke*  
 Do they pump from each compartment *yes*

Are all the bilge suction pipes fitted with roses *yes*  
 No. of feed pumps *one* and sizes *2 1/2" Diam 22 1/2" Stroke*  
 What gauges are there attached to the engines and boilers ... *one each Pressure Compound & Vacuum Vertical direct acting*  
 Description and size of Donkey Pumps ... *5" Steam Cyl 5" Stroke 2 1/2" Diam Pump*  
 Where do they pump from ... *Holds, Bilge, Sea on deck*  
 No. of bilge injections *one* and sizes *2 1/4" Bore*  
 Are they connected to air, or circulating pumps *circulating suction*  
 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 *one* Description *Circular Tubular*  
 Made by *Mr W. B. Thomson*  
 When *June 1876* At *Dundee*  
 Working pressure *65 lbs*  
 Tested by hydraulic pressure to *130 lbs*, Date *27 March 76*  
 Description of super-heating apparatus *Vertical Domb*  
 Can each boiler be worked separately *— — —*

Can the super-heater be shut off and the boilers worked separately *— — —*  
 Description and area of safety valves on each boiler ... *Two Adams Spring Valves each 3" Diam = 14.13 inches*  
 No. of square feet of fire-grate surface in each boiler *24.5 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. *yes*

## DONKEY BOILER.

Description *Vertical Circular 7.8 High x 4.9 Dia*  
 Where fixed *Engine Room*  
 Working pressure *50 lbs*

Tested by hydraulic pressure to *100 lbs*, Date *27 March 76*  
 Description and area of safety valves *Lever Weight 4.9 lbs*  
 No. of square feet of fire grate *14 feet*

## 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 ... *Valves & 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 *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 *June when on Patent Slip*  
 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 but not fitted with sluice door only fitted with gland in Engine Room*

*W. B. Thomson* 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 *Queen* owned by *Mr W. B. Thomson* of the Port of *Dundee* of *178.03* Tons Register, and *55 HP* Registered Horse Power, and that they have been carefully inspected and examined by me at *Dundee* and found to be at this date, viz., *21<sup>st</sup> June* 18 *76* in good order and safe working condition.

Fees £ *2.15.0*

*John Sturrock*  
 Engineer Surveyor to Lloyd's Register of Shipping.