

18525 Iron.

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 26/5/77

No. 4453
Report (if any) on Hull of Vessel.

Description *Compound, inverted, direct acting* Are all the bilge suction pipes fitted with roses *Yes*
 Made by *Walter The London & Glasgow Engineering Coy* No. of feed pumps *Two* and sizes *3 1/2" dia & 22" stroke*
 When *1877* At *Glasgow* What gauges are there attached to the engines and boilers ... *Two Steam, One Vacuum & One Compound.*
 Diameter of cylinder *31" & 37"* Length of stroke *33"*
 No. of revolutions per minute *about 60*
 Point of cut off *not ascertained*
 Diameter of screw shaft *8 1/2"*
 Diameter of crank shaft journals *9 1/4"*
 Diameter of screw, or of paddle wheel *14 ft*
 Pitch of screw *15 ft 9"*
 No. of blades, *four* Total surface *48 ft*
 No. of bilge pumps *Two* and sizes *3 1/2" x 22" stroke* Can it be worked by the main engines *Yes*
 Do they pump from each compartment *Yes* Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Flat Sided Horizontal* Can the super-heater be shut off and the boilers worked separately *Yes*
 Made by *The London & Glasgow Engineering Coy* Description and area of safety valves on each boiler ... *Two Direct Spring each 4.62" area*
 When *1877* At *Glasgow*
 Working pressure *65 lbs* No. of square feet of fire-grate surface in each boiler *36 ft*
 Tested by hydraulic pressure to *130 lbs*, Date *March 9th 1877* Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
 Description of super-heating apparatus *None* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*
 Can each boiler be worked separately *Yes*

DONKEY BOILER.

Description *Round Vertical* Tested by hydraulic pressure to *100 lbs*, Date *Mar 9th 1877*
 Where fixed *On Upper Deck* Description and area of safety valves *One Direct weight 4" area*
 Working pressure *50 lbs* No. of square feet of fire grate *9.6" area*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes* What pipes are carried through the bunkers *None*
 Are they Kingston valves or common cocks ... *Screw down valves & cocks* How are they protected *None*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *The blow off cocks are under plates that are fitted as high up as possible for each compartment* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *On Slip previous to being launched*
 Are the discharge pipes above or below the deep water line *Blow off circulating pumps about level the ship above* Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*
 Are they each fitted with a discharge valve in the plating of the vessel *Yes* Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

Walter The London & Glasgow Engineering Coy 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 "*Perim*" owned by *N. W. Cousins & Others* of the Port of *London* of *1015.63* Tons Register, and *150* Registered Horse Power, and that they have been carefully inspected and examined by me at *Glasgow* and found to be at this date, viz., *May 25th 1877* in good order and safe working condition.

Geo L y. 10
James Molloy
 Engineer Surveyor to Lloyd's Register of Shipping.

