

17425. Iron

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Recd 4/12/76

Report (if any) on Hull of Vessel. Port Greenock No. 4118

Description *Compound Inverted Direct Acting*  
 Made by *James Blackwood & Gordon*  
 When *1876* At *St. Glasgow*  
 Diameter of cylinder *24" x 44"* Length of stroke *33"*  
 No. of revolutions per minute *Not ascertained*  
 Point of cut off *3/8"*  
 Diameter of screw shaft *9"*  
 Diameter of crank shaft journals *9"*  
 Diameter of screw, ~~main~~ *10" x 6"*  
 Pitch of screw *16" x 0"*  
 No. of blades *Two* Total surface *31 ft*  
 No. of bilge pumps *Two* and sizes *3 1/4" dia x 15" stroke*  
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *Two* and sizes *3 1/4" x 15" stroke*  
 What gauges are there attached to the engines and boilers ... *Two Steam, One Vacuum, & One Compound.*  
 Description and size of Donkey Pumps ... *Double acting 4 1/2" x 9" stroke*  
 Where do they pump from ... *From the sea, bilge & Hotwell.*  
 No. of bilge injections *One* and sizes *3"*  
 Are they connected to air, or circulating pumps *to 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 *Two* Description *Round Horizontal*  
 Made by *Blackwood & Gordon*  
 When *1876* At *St. Glasgow*  
 Working pressure *65 lbs*  
 Tested by hydraulic pressure to *130 lbs*, Date *Sept 19/76*  
 Description of super-heating apparatus *None*  
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *Yes*  
 Description and area of safety valves on each boiler ... *Two Direct Spring each 10.32" area*  
 No. of square feet of fire-grate surface in each boiler *33 ft*  
 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 *Round, Vertical*  
 Where fixed *On Main Deck enclosed in Space forward of stoke hold.*  
 Working pressure *65 lbs*

Tested by hydraulic pressure to *130 lbs*, Date *Sept 19/76*  
 Description and area of safety valves *Two Direct Spring each 3.14" area*  
 No. of square feet of fire grate *12 ft*

### 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 ... *Screw down Valves & Cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *Yes all fitted above turn of bilge*  
 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 *Bilge pipes to fore hold*  
 How are they protected *By wood casing*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *On ship previous to being launched*  
 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*

*Blackwood & Gordon* 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 "*Omni*" owned by *H. W. Osborne & others* of the Port of *Adelaide* of *392* Tons Register, and *95* Registered Horse Power, and that they have been carefully inspected and examined by me at *Port Glasgow* and found to be at this date, viz., *Dec 2<sup>nd</sup> 1876* in good order and safe working condition.

Amount of Fee for Survey ... £ *4:15:0*  
 (Travelling Expenses, if any, £ ...)

*James Hollison*  
 Engineer Surveyor to Lloyd's Register of Shipping.