

20123 Iron

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Rec 1/2/78

Report (if any) on Hull of Vessel. Port Glasgow No. 4588

Description *Compound Inverted Direct Acting*  
 Made by *Wm. Wigham & Sons*  
 When *18 72* At *Glasgow*  
 Diameter of cylinder *55 1/2"* Length of stroke *39"*  
 No. of revolutions per minute *45*  
 Point of cut off *Variable*  
 Diameter of screw shaft *12"*  
 Diameter of crank shaft journals *12"*  
 Diameter of screw, or of paddle wheel *16 1/2"*  
 Pitch of screw *not ascertained*  
 No. of blades, *Four* Total surface  
 No. of bilge pumps *Two* and sizes *4 1/2" dia. 19" stroke*  
 Do they pump from each compartment *From Engine Room & Stokhold only*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *Two* and sizes *4 1/2" dia. 19" stroke*  
 What gauges are there attached to the engines and boilers ... *Four Steam, one Compound & one Vacuum*  
 Description and size of Donkey Pumps ... *Horizontal double acting 4 1/2" x 9" stroke*  
 Where do they pump from ... *From sea bilge and Hot Well*  
 No. of bilge injections *Two* and sizes *One 3 1/2" to Circulating*  
 Are they connected to air, or circulating pumps *One Cock 2" to Air Pump*  
 Is there a hand pump in the engine room *Yes*  
 Can it be worked by the main engines *Yes*  
 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 *L. Wigham & Sons*  
 When *18 72* At *Glasgow*  
 Working pressure *40 lbs*  
 Tested by hydraulic pressure to *not ascertained*, Date *when new*  
 Description of super-heating apparatus *No Superheater*  
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *Yes (Coe's Patent)*  
 Description and area of safety valves on each boiler *Two Direct Spring each 9.0" area (3 1/2" dia)*  
 No. of square feet of fire-grate surface in each boiler *40 sq 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 *Lat sided Horizontal*  
 Where fixed *In Stokhold, 2000 at middle line*  
 Working pressure *40 lbs*

Tested by hydraulic pressure to *40 lbs*, Date *Jan 15<sup>th</sup> 1878*  
 Description and area of safety valves *Direct Spring Two each 7" area*  
 No. of square feet of fire grate *16 sq ft*

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *The Blow off cocks are now fitted on gun metal stands.*  
 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 ... *All fitted on turn of bridge*  
 Are the discharge pipes above or below the deep water line *Near to load line*  
 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 *January 17<sup>th</sup> 1878*  
 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 *"State of Louisiana"* owned by *The State Steam Ship Coy Limited* of the Port of *Glasgow* of *1612* Tons Register, and *220* Registered Horse Power, and that they have been carefully inspected and examined by me at *Glasgow* and found to be at this date, viz., *January 25<sup>th</sup> 1878* in good order and safe working condition.

Amount of Fee for Survey *£2 : 2 : -* Paid *James Mollison*  
 (Travelling Expenses, if any, £ *10/0*) *Debit Glasgow Account*

James Mollison  
 Engineer Surveyor to Lloyd's Register of Shipping.