

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Rec 22/5/76

Description *Inverted direct Acting. Common jet Condenser.*  
 Made by *J. Richardson & Sons.*  
 When *1865* At *Hartlepool.*  
 Diameter of cylinder *36* (2 off) Length of stroke *24*  
 No. of revolutions per minute *70*  
 Point of cut off *3/8* of the stroke.  
 Diameter of screw shaft *7/8*  
 Diameter of crank shaft journals *8 1/2*  
 Diameter of screw, or of paddle wheel *12.0*  
 Pitch of screw *15.0*  
 No. of blades, *3* Total surface *36 sq. ft.*  
 No. of bilge pumps *2* and sizes *4" dia x 12" stroke Single Acting.*  
 Do they pump from each compartment *yes.*

Are all the bilge suction pipes fitted with roses *yes.*  
 No. of feed pumps *2* and sizes *3 1/4" dia x 12" stroke Single Acting*  
 What gauges are there attached to the engines and boilers ... *1 Vacuum gauge on Condenser*  
 Description and size of *1 inverted pump 3 1/2" dia*  
 Donkey Pumps ... *x 8" stroke double acting.*  
 Where do they pump *sea & bilges in the aft hold*  
 from *each side of engine room & for coal bunker or hold.*  
 No. of bilge injections *1* and sizes *3" dia*  
 Are they connected to air, or circulating pumps *air pumps*  
 Is there a hand pump in the engine room *no (donkey can be used)*  
 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 *0000*  
 Made by *Messrs Blair & Co.*  
 When *1870* At *Stockton.*  
 Working pressure *25 lbs per sq. inch.*  
 Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description of super-heating apparatus *none.*  
 Can each boiler be worked separately *only 1 boiler.*

Can the super-heater be shut off and the boilers worked separately  
 Description and area of safety valves on each boiler *2. loaded direct 4" dia = 31.8 area*  
 No. of square feet of fire-grate surface in each boiler *61 1/2*  
 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, except the bilge rose in aft hold when bunker is full.*

### DONKEY BOILER.

Description *Vertical. Act' with 3 water tubes.*  
 Where fixed *in the stokehold.*  
 Working pressure *60 lbs per sq. inch.*

Tested by hydraulic pressure to *120 lbs per sq. inch.* Date *April 14/76*  
 Description and area of safety valves *1 loaded direct 2 1/2" dia 8.4 area*  
 No. of square feet of fire grate *12.5*

### 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 *stop 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 *April 1876*  
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *yes. by shell cock & non return valves.*  
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Tunnel not watertight sluice door fitted.*

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 *"Damiatta"* owned by *Wm. Baylon*  
 of the Port of *Middlesbrough* of *83 x 69* Tons Register, and *90* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *Middlesbrough*  
 and found to be at this date, viz., *May 1<sup>st</sup>* 18 *76* in good order and safe working condition.

*William Allison*  
 Engineer Surveyor to Lloyd's Register of Shipping.