

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Inverted*
 Made by *Vict Dock Eng Works*
 When 18 *72* At *London*
 Diameter of cylinder *36* Length of stroke *26*
 No. of revolutions per minute *64*
 Point of cut off
 Diameter of screw shaft *7 1/2*
 Diameter of crank shaft journals *7 1/2*
 Diameter of screw, or of paddle wheel *10 ft*
 Pitch of screw *14 feet*
 No. of blades, *4* Total surface
 No. of bilge pumps *2* and sizes *2 1/2 dia*
 Do they pump from each compartment *Eng room only*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *2* and sizes *2 1/2*
 What gauges are there attached to the engines and boilers ... *one steam to boiler / vacuum*
 Description and size of Donkey Pumps ... *One 4 1/2 dia x 10" stroke*
 Where do they pump from ... *Sea & bilge*
 No. of bilge injections *none* and sizes
 Are they connected to air, or circulating pumps
 Is there a hand pump in the engine room *no*
 Can it be worked by the main engines
 Is there a deck hose of sufficient length to reach to any part of the vessel *yes*

MAIN BOILERS.

Number *one* Description *Cylindrical*
 Made by *Victoria Dock Eng Works*
 When 18 *78* At *London*
 Working pressure *35 lb*
 Tested by hydraulic pressure to *70 lb*, Date
 Description of super-heating apparatus ... *none*
 Can each boiler be worked separately *only one*

Can the super-heater be shut off and the boilers worked separately *none*
 Description and area of safety valves on each boiler ... *Adams Spring values. Two*
 No. of square feet of fire-grate surface in each boiler
 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
 Where fixed
 Working pressure

Tested by hydraulic pressure to, Date
 Description and area of safety valves
 No. of square feet of fire grate

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 and cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *yes*
 Are the discharge pipes above or below the deep water line *Below*
 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 *At this time*
 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 *no tunnel*

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 *Thomas Lea* owned by *John Hewick Esq* of the Port of *London* of *487* Tons Register, and *80* Registered Horse Power, and that they have been carefully inspected and examined by me at *London* and found to be at this date, viz., *May 22nd* 18 *78* in good order and safe working condition.

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