

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Compound Inverted*
 Made by *J & J Thomson*
 When *18 71* At *Glasgow*
 Diameter of cylinder *34 x 60* Length of stroke *36*
 No. of revolutions per minute *about 56*
 Point of cut off *about half stroke*
 Diameter of screw shaft *1 1/2*
 Diameter of crank shaft journals
 Diameter of screw, or of paddle wheel *14.6*
 Pitch of screw *18.0*
 No. of blades, *4* Total surface *not ascertained*
 No. of bilge pumps *2* and sizes *4 3/4 x 18*
 Do they pump from each compartment *from E. Room, aft & fore holds*
 Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *2* and sizes *3 1/4 x 18*
 What gauges are there attached to the engines and boilers ... *1 Steam to each boiler 1 Steam 1 Vac 1 Comp 4 Engines*
 Description and size of Donkey Pumps ... *A) - Double Acting in E. Room B) - Single Acting in S. Hold*
 Where do they pump from ... *A from Sea & Bilge B " " "*
 No. of bilge injections *one* and sizes *4"*
 Are they connected to air, or circulating pumps *Condenser*
 Is there a hand pump in the engine room *no, but donkey*
 Can it be worked by the main engines *Can be used*
 Is there a deck hose of sufficient length to reach to any part of the vessel *yes.*

MAIN BOILERS.

Number *Two* Description *Double ended*
 Made by *J & J Thomson*
 When *18 71* At *Glasgow*
 Working pressure *56 lbs*
 Tested by hydraulic pressure to *90 lbs*, Date *at this repair*
 Description of super-heating apparatus *none, but steam chest*
 Can each boiler be worked separately *yes*
 Can the super-heater be shut off and the boilers worked separately *none fitted*
 Description and area of safety valves on each boiler *2 No's valves each 4 1/4 dia*
 No. of square feet of fire-grate surface in each boiler *60 sq feet*
 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 *Vertical*
 Where fixed *Stokehold*
 Working pressure *30 lbs*
 Tested by hydraulic pressure to _____, Date _____
 Description and area of safety valves *Sever & weight*
 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 & cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *not all.*
 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 *Suction to fore hold*
 How are they protected *under ceiling*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *at this survey*
 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 *Thames* owned by *Temperleys, Carter & Warke*
 of the Port of *London* of *105 1/2* Tons Register, and *180* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *London*
 and found to be at this date, viz., *April 17th* 18 *78* in good order and safe working condition.

Amount of Fee for Survey ... £ *4:4:0*

(Travelling Expenses, if any, £ _____)

(1000/31/7/76.)

Engineer Surveyor to Lloyd's Register of Shipping.

James Milner
 Lloyd's Register
 Foundation

IRON 479-0090