

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Inverted Compound Surface Cond.*
 Made by *London & Glasgow Engineering Co.*
 When *18 74* At *Glasgow*
 Diameter of cylinders *2:31 x 54* Length of stroke *33*
 No. of revolutions per minute *55*
 Point of cut off *7/8 of stroke*
 Diameter of screw shaft *9 1/2*
 Diameter of crank shaft journals *9 1/2*
 Diameter of screw, or of paddle wheel *15 0*
 Pitch of screw *19 0*
 No. of blades, *4* Total surface *47.5*
 No. of bilge pumps *2* and sizes *dia: 6 1/2 stroke 6 3/4*
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *2* and sizes *dia 5 stroke 9 1/2*
 What gauges are there attached to the engines and boilers ... *3 Steam gauges, 1 Vacuum gauge, 1 Compound gauge.*
 Description and size of Donkey Pumps ... *2 Vertical, 9 1/2 dia, 5 stroke, 10 dia, 10 stroke, 6 pump.*
 Where do they pump from ... *From Bilge & from sea.*
 No. of bilge injections *one* and sizes *5 1/2 pipe*
 Are they connected to air, or circulating pumps *Circulating*
 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 *Circular tubular*
 Made by *Messrs Ch. J. Palmer & Co.*
 When *February 18 74* At *Hull*
 Working pressure *50 lb per sq. inch.*
 Tested by hydraulic pressure to *140 lb.*, Date *26/11/78.*
 Description of super-heating apparatus
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately
 Description and area of safety valves on each boiler *2 Spring Valves, Section & Cameron, 3 1/8 inch*
 No. of square feet of fire-grate surface in each boiler *49, 5 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*

DONKEY BOILER.

Description *Vertical circular*
 Where fixed *On Storehold*
 Working pressure *60 lb per sq. inch.*

Tested by hydraulic pressure to *120 lb.*, Date *4/1/79*
 Description and area of safety valves *2 Spring valves, S. & C. 1 1/4 inch*
 No. of square feet of fire grate *28, 5 1/2*

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 ... *Common 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 *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 *13th Dec. 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 *Lady Lyceff* owned by *Mercantile Steam Shipping Co Ltd.*
 of the Port of *London* of *1199* Tons Register, and *150* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *New Holland & Hull*
 and found to be at this date, viz., *15th February* 18 *74* in good order and safe working condition.

Amount of Fee for Survey £ : :

(Travelling Expenses, if any, £)

Engineer Surveyor to Lloyd's Register of Shipping.