

21879 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Recd 14/10/78

Report (if any) on Hull of Vessel. Port Newcastle No. 24106

Description *Inverted, Compound, Surface, Condensing* Are all the bilge suction pipes fitted with roses *yes*
 Made by *Messrs Hawks Crawshaw & Sons* No. of feed pumps *2* and sizes *4" x 18"*
 When *Sept* 1878 At *Gateshead* What gauges are there attached to the engines and boilers ... *2 Steam, 1 Vacuum, Engine Room, 1 Steam in Stokehole*
 Diameter of cylinder *32 x 61* Length of stroke *36"* Description and size of Donkey Pumps ... *Ballast 10" x 10" Acting Boiler 3 1/2" x 6" Aft Tank, Main Tank*
 No. of revolutions per minute *about 65 Revol* Where do they pump from ... *Engine space, Sea, Wells in tunnels, Aft, Main, Fore holds,*
 Point of cut off *9" / 16"* No. of bilge injections *1* and sizes *6"*
 Diameter of screw shaft *10 3/4"* Are they connected to air, or circulating pumps *air*
 Diameter of crank shaft journals *10 3/4"* Is there a hand pump in the engine room *No*
 Diameter of screw of paddle wheel *14 ft 6 in* Can it be worked by the main engines *No*
 Pitch of screw *15 ft 6 in to 17 ft 6 in* Is there a deck hose of sufficient length to reach to any part of the vessel *yes*
 No. of blades *4* Total surface *58 sq ft*
 No. of bilge pumps *2* and sizes *4" x 18"*
 Do they pump from each compartment *yes*

MAIN BOILERS.

Number *Two* Description *Cylindrical* Can the super-heater be shut off and the boilers worked separately *No superheater*
 Made by *Messrs Hawks Crawshaw & Sons* Description and area of safety valves on each boiler ... *Adams Spring valve 25.1 sq in area*
 When *Sept* 1878 At *Gateshead* No. of square feet of fire-grate surface in each boiler *40 sq ft*
 Working pressure *70 lbs* Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *yes*
 Tested by hydraulic pressure to *150 lbs*, Date *1.8.78* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times ... *yes*
 Description of super-heating apparatus *none*
 Can each boiler be worked separately *yes*

DONKEY BOILER.

Description *Upright, Cylindrical* Tested by hydraulic pressure to *100 lbs*, Date *11.7.78*
 Where fixed *Stokehole* Description and area of safety valves *1 dead weight 3 3/4" = 11" area*
 Working pressure *50 lbs* No. of square feet of fire grate *19 sq ft*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *yes* What pipes are carried through the bunkers *none*
 Are they Kingston valves or common cocks ... *3 Lewis valves & 3 Cocks* How are they protected *— " —*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *yes* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *new*
 Are the discharge pipes above or below the deep water line *air & air pumps, above, Bilge pumps below* Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *yes*
 Are they each fitted with a discharge valve on the plating of the vessel *yes* Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *yes*

Hawks Crawshaw & Sons Manufacturer.
per Mr Workhouse

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 *Japanese* owned by *Mr J. Sutton* of the Port of *London* of *1203.00* Tons Register, and *170* Registered Horse Power, and that they have been carefully inspected and examined by me at *Newcastle* and found to be at this date, viz., *20 September* 1878 in good order and safe working condition.

Amount of Fee for Survey ... £ *8* : *10* : *0*
 (Travelling Expenses, if any, £ *0* : *5* : *0*)

Read by *John Brockat*
 Engineer Surveyor to Lloyd's Register of Shipping.
North Shields
12/10/78



IRON 480-0382

The Machinery and Boiler of the
essel. are fitted in accordance
with the Committee's requirements
submitted that she is
eligible to have Lloyd's
M.C. and a machinery
certificate Jan. 28 - left

1878

MO

15-10-78



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