

17919 Lm

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY, ENGINES.

Rev 1/3/77

Report (if any) on Hull of Vessel. No. 2772 Port of Hartlepool.

Description *Inverted Compound Surface Condensing*  
 Made by *Messrs J. Richardson & Sons.*  
 When *Oct. 1876* At *Hartlepool.*  
 Diameter of cylinders *23 x 43* Length of stroke *24*  
(one of each)  
 No. of revolutions per minute *about 80.*  
 Point of cut off *1/2 stroke.*  
 Diameter of screw shaft *7*  
 Diameter of crank shaft journals *7*  
 Diameter of screw, or of paddle wheel *11 feet*  
 Pitch of screw *12 feet*  
 No. of blades, *4* Total surface *40 sq. feet.*  
 No. of bilge pumps *1* and sizes *3 1/2 dia x 17 stroke.*  
 Do they pump from each compartment *from Engine room*

Are all the bilge suction pipes fitted with roses *yes.*  
 No. of feed pumps *1* and sizes *3 1/2 dia x 17 stroke.*  
 What gauges are there attached to the engines and boilers ... *1 steam gauge on boiler in stokehold forward, & 1 in the engine room*  
 Description and size of Donkey Pumps ... *1 inverted double acting 4 1/2 dia x 9 stroke.*  
 Where do they pump from ... *from the sea, bilges of engine room and tanks.*  
 No. of bilge injections *1* and sizes *4 1/2 dia*  
 Are they connected to air, or circulating pumps *to Circulating pump.*  
 Is there a hand pump in the engine room *yes.*  
 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 *Cylindrical & Multi-tubular*  
 Made by *Messrs J. Richardson & Sons.*  
 When *Oct. 1876* At *Hartlepool.*  
 Working pressure *70 lbs per sq. inch*  
 Tested by hydraulic pressure to *140 lbs* Date *Sept 16/76*  
I was present n.d.  
 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 spring safety valves 4 3/8 dia - 3.0 sq. ins. Area.*  
 No. of square feet of fire-grate surface in each boiler *35 3/4.*  
 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 *Upright Cylindrical with 3 Cross tubes.*  
 Where fixed *in the stokehold.*  
 Working pressure *58 lbs per sq. inch.*

Tested by hydraulic pressure to *142 lbs* Date *Sept 24/76*  
I was present n.d.  
 Description and area of safety valves *1 brass & weight 2 1/2 lbs 4 3/8 dia - 2 3/8 sq. ins. Area.*  
 No. of square feet of fire grate *9 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 ... *stop valves & 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 *new*  
 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 *sluice door fitted. The tunnel is open to the gutter ways of the ballast tank.*

*J. Richardson & Sons*  
*Wm. Cheesman*

Manufacturer. *Except of the Donkey Boiler*

*I was present when the steam was raised and the engines worked. steam 70 lbs room 27 lbs all worked very satisfactory n.d. Sept 30/76*

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 *Wightman* owned by *Steel Young & Co.*  
 of the Port of *London* of *324 1/4* Tons Register, and *70* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *Hartlepool*  
 and found to be at this date, viz., *October 17<sup>th</sup>* 18 *76.* in good order and safe working condition.

Amount of Fee for Survey *£ 3 : 10 : 0*

(Travelling Expenses, if any, £ *2-5*)

*£3-15 received at Hartlepool*

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

*Wm Allison*  
*by M. J. G.*



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