

17770 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 12/2/77

Report (if any) on Hull of Vessel. Port Hartlepool. No. 37593760

Description Inverted, Compound, Surface Condensing,
 Made by Messrs J. Richardson & Sons.
 When Jan^y 1877 At Hartlepool
 Diameter of cylinder 28 x 53 Length of stroke 33
one off each
 No. of revolutions per minute about 65.
 Point of cut off 1/2 stroke.
 Diameter of screw shaft 9"
 Diameter of crank shaft journals 9"
 Diameter of screw, or of paddle wheel 13'0"
 Pitch of screw 15'6"
 No. of blades, 4 Total surface 55 sq. feet.
 No. of bilge pumps 2 and sizes 2 1/2 dia. x 3 1/2 stroke.
 Do they pump from each compartment from engine room, aft well, & fore hold.

Are all the bilge suction pipes fitted with roses yes.
 No. of feed pumps 2 and sizes 3 1/2 dia. x 2 3/2 stroke.
 What gauges are there attached to the engines and boilers ... 1 steam gauge in stokehole & 1 in the engine room. 1 vacuum gauge.
 Description and size of Donkey Pumps ... 2 double acting inverted, 7 1/2 dia. x 9 stroke and 3 1/2 x 8 stroke.
 Where do they pump from ... the large one draws from sea tanks & bilge of engine room. The small one from the sea, fore hold, & bilge of aft well, engine room.
 No. of bilge injections one and sizes 4 1/2 diameter.
 Are they connected to air, or circulating pumps to circulating pumps
 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 & Multitubular.
 Made by Messrs J. Richardson & Sons.
 When Jan^y 1877 At Hartlepool.
 Working pressure 65 lbs per sq. inch
 Tested by hydraulic pressure to 130 lbs. Date Dec^r 7th 1876
J. was present N.A.
 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 valves 4 3/8 dia. = 30 sq. inches.
 No. of square feet of fire-grate surface in each boiler } 60.
 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. ... all, except the bilge suction of fore hold, when cargo is in.

DONKEY BOILER.

Description Upright cylindrical, with 3 cross tubes.
 Where fixed in the stokehole.
 Working pressure 50 lbs per sq. inch.

Tested by hydraulic pressure to 130 lbs. Date Jan^y 7th 1876
 Description and area of safety valves one loaded direct 2 1/2 } = 7.9 sq. in.
one lever & weight 2 1/2 }
 No. of square feet of fire grate 12

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 } at the deep load line.
 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, and the tunnel caulked.

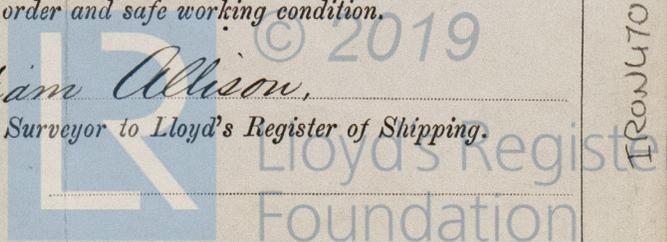
J. Richardson & Sons
of Chester

Manufacturer. Except of the Donkey Boiler I was present when the steam was raised and the engines worked, steam 65 lbs. per sq. inch & revs 80. all worked very satisfactory Dec^r 15th 1876. W.A.

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 "Evelyn" owned by Coverdale & Co. of the Port of Hartlepool of 700 2/100 Tons Register, and 110 Registered Horse Power, and that they have been carefully inspected and examined by me at Hartlepool. and found to be at this date, viz., January 31st 1877. in good order and safe working condition.

Amount of Fee for Survey ... £ 5-10-0
 Certificate 5-5-0
 Travelling Expenses, if any, £ 2-5
15-15-0 Received at Hartlepool by W.A.

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



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