

22017 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 31/10/78

Report of (any) on Hull of Vessel. Port West Hartlepool No 44081
Report on Engines No 127

Description *Compound, Inverted, Surface Condensing*
 Made by *J. Richardson & Son*
 When *June* 18*78* At *Hartlepool*
 Diameter of cylinder *24 x 50* Length of stroke *33*
 No. of revolutions per minute *About 65*
 Point of cut off *1/2 stroke*
 Diameter of screw shaft *8 1/2"*
 Diameter of crank shaft journals *8 1/2" Sammel shaft 8 dia*
 Diameter of screw, or of paddle wheel *11.6*
 Pitch of screw *15.9"*
 No. of blades, *11* Total surface *48 sq feet*
 No. of bilge pumps *2* and sizes *6 x 6" stroke Single Acting*
 Do they pump from each compartment *From engine room only*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *2* and sizes *3 x 2 3/4" stroke Single Acting*
 What gauges are there attached to the engines and boilers ... *2 Steam 1 Vacuum*
 Description and size of Donkey Pumps ... *200 Pump 1/2 dia x 9" stroke Double Acting 200 " 4 1/2 " x 4 " "*
 Where do they pump from ... *200 Pumps from ballast tanks and engine room. 200 from sea, hotwell fore hold casing of engine room.*
 No. of bilge injections *1* and sizes *4 1/2"*
 Are they connected to air, or circulating pumps *Circulating Pump*
 Is there a hand pump in the engine room *Yes. Works from deck*
 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 *Blair & Co (Lem)*
 When *Sept* 18*78* At *Stockton on Tees*
 Working pressure *4 1/2 lb*
 Tested by hydraulic pressure to *118 lb*, Date
 Description of super-heating apparatus *None*
 Can each boiler be worked separately *Only one boiler on ship*

Can the super-heater be shut off and the boilers worked separately *No superheater*
 Description and area of safety valves on each boiler *Two spring safety valves 2 1/2" dia Combined area*
 No. of square feet of fire-grate surface in each boiler *45.2 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. *All except suction pipes & roses in holds when ship is loaded*

DONKEY BOILER

Description *Vertical Water tubes in furnace*
 Where fixed *In stokehold*
 Working pressure *40 lbs Loaded to 60 lbs*

Made by *Clark, Chapman & Gurney*
 Tested by hydraulic pressure to *110*, Date *4/9/78*
 Description and area of safety valves *1 direct 2 1/2" dia 1 lever 2 3/8" dia = 9.4 sq area*
 No. of square feet of fire grate

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship
 Are they Kingston valves or common cocks ... *Stop valves and 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 *October 18/78*
 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 *Tunnel not watertight Sluice door fitted*

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 *Hawley Hall* owned by *A. Irvine & Co*
 of the Port of *West Hartlepool* of *453* Tons Register, and *98* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *West Hartlepool & Stockton on Tees*
 and found to be at this date, viz., *October 8th* 18*78* in good order and safe working condition.

Amount of Fee for Survey ... £ *4 : 18 : 0*
Certificate
 (Travelling Expenses, if any, £ *0 - 5 - 0*)

James Bain
 Engineer Surveyor to Lloyd's Register of Shipping.

WMC
Rec 29/10/78
11.15