

16210 Iron

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

No. 575771

### ENGINES.

No. 12199  
Port Newcastle  
Report (if any) on Hull of Vessel.

Description <i>Compound Inverted, Direct-acting</i>	Are all the bilge suction pipes fitted with roses <i>Yes</i>
Made by <i>Palmer Compounded by Palmer</i>	No. of feed pumps <i>2</i> and sizes <i>4 1/2 dia x 18" stroke, Single acting</i>
When made <i>1865</i> At <i>Farrow Compounded at Farrow 1876</i>	What gauges are there attached to the engines and boilers ... <i>1 Steam gauge on each boiler, 1 in engine room, 1 Vac &amp; 1 Combined gauge</i>
Diameter of cylinder <i>One 48" &amp; one 20"</i> Length of stroke <i>30"</i>	Description and size of Donkey Pumps ... <i>No 1 - Double acting, 8 1/2" dia x 10" stroke</i> <i>No 2 - " " "</i>
No. of revolutions per minute <i>About 65</i>	Where do they pump from ... <i>Bilges, Sea &amp; Ballast tanks</i>
Point of cut off <i>About 7/8 stroke</i>	No. of bilge injections <i>1</i> and sizes <i>3 3/4" outside</i>
Diameter of screw shaft <i>1 3/4"</i>	Are they connected to air, or circulating pumps
Diameter of crank shaft journals <i>8"</i>	Is there a hand pump in the engine room <i>No, Small donkey can be used as such</i>
Diameter of screw, or of paddle wheel <i>Not ascertained</i>	Can it be worked by the main engines <i>No</i>
Pitch of screw <i>"</i>	Is there a deck hose of sufficient length to reach to any part of the vessel <i>Yes</i>
No. of blades, Total surface <i>-</i>	
No. of bilge pumps <i>2</i> and sizes <i>4 1/2 dia x 18" stroke Single acting</i>	
Do they pump from each compartment <i>from engine room and after well</i>	

### MAIN BOILERS.

Number <i>2</i> Description <i>Round Multitubular</i>	Can the super-heater be shut off and the boilers worked separately <i>No</i>
Made by <i>Palmer</i>	Description and area of safety valves on each boiler ... <i>Adams spring, two on each boiler.</i>
When <i>March 1876</i> At <i>Farrow</i>	No. of square feet of fire-grate surface in each boiler <i>30.58 sq feet</i>
Working pressure <i>75 lbs</i>	Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin <i>Yes</i>
Tested by hydraulic pressure to <i>150 lbs</i> , Date <i>Feb. 1876</i>	Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. <i>Not accessible in holds when vessel is loaded</i>
Description of super-heating apparatus <i>Annular Superheater</i>	
Can each boiler be worked separately <i>Yes</i>	

### DONKEY BOILER.

Description <i>Round Vertical, Water tubes in furnace</i>	Tested by hydraulic pressure to <i>80 lbs</i> , Date <i>Mar 1876</i>
Where fixed <i>On deck</i>	Description and area of safety valves <i>Direct caught, 4.90 sq in</i>
Working pressure <i>41 lbs</i>	No. of square feet of fire grate <i>9.45 sq feet</i>

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship <i>Yes</i>	What pipes are carried through the bunkers <i>None</i>
Are they Kingston valves or common cocks ... <i>Stop valves and cocks</i>	How are they protected <i>"</i>
Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... <i>All except cock for running up ballast tanks &amp; blow off cocks</i>	When were the stern tube, propeller, screw shaft, and all connections examined in dry dock <i>March 1876</i>
Are the discharge pipes above or below the deep water line <i>Main discharge below others above</i>	Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge <i>Yes</i>
Are they each fitted with a discharge valve on the plating of the vessel <i>Yes</i>	Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead <i>No</i>

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 "*Berrington*" owned by *John Fenwick & Son* of the Port of *Swansea* of *504.4* Tons Register, and *90* Registered Horse Power, and that they have been carefully inspected and examined by me at *Farrow in Fyne* and found to be at this date, viz., *13<sup>th</sup> April* 1876 in good order and safe working condition.

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