

19495 Lin

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

Rec 24/12/77

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Description *Compound Inverted Surface Condensing*  
 Made by *J. Readhead & Co*  
 When *July 18 43* At *South Shields*  
 Diameter of cylinder *26 1/2* Length of stroke *33*  
 No. of revolutions per minute *About 65*  
 Point of cut off *5/8th of stroke*  
 Diameter of screw shaft *8 1/2*  
 Diameter of crank shaft journals *8 1/2 - Summit shafts 8 dia*  
 Diameter of screw, or of paddle wheel *12 - 6*  
 Pitch of screw *14 - 6 to 16 - 6*  
 No. of blades, *4* Total surface *45 sq feet*  
 No. of bilge pumps *2* and sizes *3 x 18 stroke Single Acting*  
 Do they pump from each compartment *Port pump draws from engine room only*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *2* and sizes *3 x 18 stroke Single Acting*  
 What gauges are there attached to the engines and boilers ... } *2 steam*  
 } *1 Vacuum*  
 Description and size of } *1 pump 8 dia x 12 stroke Double Acting*  
 Donkey Pumps ... } *4 x 9*  
 } *1 pump draws from sea, after well, engine room, fore hold & ballast tanks, 2 pumps draw from sea, ballast tanks fore hold & after well*  
 Where do they pump from .....  
 No. of bilge injections *1* and sizes *4 outside*  
 Are they connected to air, or circulating pumps *Circulating pump*  
 Is there a hand pump in the engine room *Donkey works by hand*  
 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 *J. Readhead & Co*  
 When *July 18 43* At *South Shields*  
 Working pressure *65 lb*  
 Tested by hydraulic pressure to *130 lbs*, Date *July 18 43*  
 Description of super-heating apparatus *None*  
 Can each boiler be worked separately *only one boiler in 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 lower weight valves*  
 } *Total area 31.8 sq in*  
 No. of square feet of fire-grate surface in each boiler } *50 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 & pump in fore hold when ship is loaded*

### DONKEY BOILER Made by Geo. Duncan, No. Hartlepool

Description *Vertical Water tubes in furnace*  
 Where fixed *On deck*  
 Working pressure *65 lbs*

Tested by hydraulic pressure to *130 lbs*, Date *24 Nov 1844*  
 Description and area of safety valves *Direct & lower weight valves* Total area *4.9 sq in*  
 No. of square feet of fire grate *13.3*

### 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 and cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ..... } *No*  
 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? *None*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock? *Decr. 1844*  
 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? *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 *Debdale* owned by *Groves, Maclean & Co*  
 of the Port of *West Hartlepool* of *917* Tons Register, and *98* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *West Hartlepool*  
 and found to be at this date, viz., *7th Decr* 18*44* in good order and safe working condition.

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

*James Bain*  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 Lloyd's Register Foundation  
 1200475-0138

Report on Log Engines No 44  
 Port of West Hartlepool No 5924  
 Report (if any) on Hull of Vessel.