

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Description *Vertical Compound*  
 Made by *Black Hawthorn & Co*  
 When *March 1878* At *Newcastle*  
 Diameter of cylinders *24 & 45* Length of stroke *33*  
 No. of revolutions per minute *72*  
 Point of cut off *7/8*  
 Diameter of screw shaft *8"*  
 Diameter of crank shaft journals *8"*  
 Diameter of screw, *12 ft 0 in*  
 Pitch of screw *13 ft*  
 No. of blades, *4* Total surface *36*  
 No. of bilge pumps *2* and sizes *2 3/4 x 16 1/2*  
 Do they pump from each compartment *Engine room & aft hold*

Are all the bilge suction pipes fitted with roses *yes*  
 No. of feed pumps *2* and sizes *2 3/4 x 16 1/2*  
 What gauges are there attached to the engines and boilers ... *1 Steam & 1 Vacuum in Engine Room*  
 Description and size of Donkey Pumps ... *Hand acting 7" x 8" & 3 1/2 x 6*  
 Where do they pump from ... *Engine room, aft hold, aft tanks, fore tanks, Sea*  
 No. of bilge injections *1* and sizes *4" dia*  
 Are they connected to air, or circulating pumps *Cir*  
 Is there a hand pump in the engine room *No*  
 Can it be worked by the main engines *Donkey can be worked by hand*  
 Is there a deck hose of sufficient length to reach to any part of the vessel *yes*

### MAIN BOILERS.

Number *One* Description *Cylindrical*  
 Made by *Black Hawthorn & Co*  
 When *March 1878* At *Newcastle*  
 Working pressure *65 lbs*  
 Tested by hydraulic pressure to *130 lbs*, Date *30/1/78*  
 Description of super-heating apparatus *Donkey partially in uptake*  
 Can each boiler be worked separately *one boiler*

Can the super-heater be shut off and the boilers worked separately *yes*  
 Description and area of safety valves on each boiler ... *2 Spring valves 3 1/2" dia = 24.5 sq in area*  
 No. of square feet of fire-grate surface in each boiler *45.8*  
 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 *Vertical*  
 Where fixed *Stoke hole*  
 Working pressure *50 lbs*

Tested by hydraulic pressure to *100 lbs Certif.*, Date *28/1/78*  
 Description and area of safety valves *1 2 1/2" dia = 5.8 area*  
 No. of square feet of fire grate *11.5* weight *295 lbs*

### 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 ... *3 Kingston & 3 cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *yes above*  
 Are the discharge pipes above or below the deep water line *yes*  
 Are they each fitted with a discharge valve on the plating of the vessel *yes*  
*for Black Hawthorn & Co Manufacturer.*  
*J. Wallau*

What pipes are carried through the bunkers *none*  
 How are they protected *new*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *yes*  
 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 *yes*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) Screw (or ~~Steam~~) Steam Vessel *S.S. "Rosebud"* owned by *Mr Peter Rowe* of the Port of *Newcastle* of *466.82* Tons Register, and *90* Registered Horse Power, and that they have been carefully inspected and examined by me at *Newcastle* and found to be at this date, viz. *7th March* 1878 in good order and safe working condition.

Amount of Fee for Survey ... £ *44:10:0* *Acct by*  
 (Travelling Expenses, if any, £ *0:5:0* *he 1/3/78*)

*John Brockhat*  
 Engineer Surveyor to Lloyd's Register of Shipping. *North Shields*