

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

19909 *See*  
*Rev 27/12/91*

Report (if any) on H.M. 1357 Port Greenock No. 1359

Description *Compound Inverted Direct Acting*  
 Made by *Rankin & Blackmore*  
 When *18 4/4* At *Greenock*  
 Diameter of cylinder *24" x 46"* Length of stroke *26"*  
 No. of revolutions per minute *98*  
 Point of cut off *2/3 stroke*  
 Diameter of screw shaft *4 1/2"*  
 Diameter of crank shaft journals *4 1/2"*  
 Diameter of screw, ~~or paddle wheel~~ *9' 6"*  
 Pitch of screw *15 ft*  
 No. of blades, *Four* Total surface *not ascertained*  
 No. of bilge pumps *Two* and sizes *3" dia x 15" stroke*  
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *Two* and sizes *3" dia 15" stroke*  
 What gauges are there attached to the engines and boilers ... *Two Steam, One Vacuum & Compound Combined*  
 Description and size of Donkey Pumps ... *Double acting 8" dia 4 1/2" x 9" pump*  
 Where do they pump from ... *From the Sea & Bilge*  
 No. of bilge injections *One* and sizes *2 1/2"*  
 Are they connected to air, or circulating pumps *By Circulating*  
 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 *Two* Description *Round Horizontal*  
 Made by *Rankin & Blackmore*  
 When *18 4/4* At *Greenock*  
 Working pressure *70 lbs*  
 Tested by hydraulic pressure to *140 lbs*, Date *Oct 27/91*  
 Description of super-heating apparatus ... *None*  
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *Yes*  
 Description and area of safety valves on each boiler ... *Two Direct Spring each 9' 6" area*  
 No. of square feet of fire-grate surface in each boiler *32 ft*  
 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 *Round Vertical*  
 Where fixed *In Store hold*  
 Working pressure *45 lbs*

Tested by hydraulic pressure to *100 lbs*, Date *Oct 31/91*  
 Description and area of safety valves *One Direct Spring 9" area*  
 No. of square feet of fire grate *9 ft*

### 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 ... *Screw down Valve & Cocks*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *All fitted on turn of bilge except Donkey cock which is fitted as high as possible for Donkey & Bilge Seal*  
 Are the discharge pipes above or below the deep water line *Near 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 *Dec 15<sup>th</sup> 1894*  
 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 *No Lummel the after Compartment is checked over & water tight a sluice door is fitted on Bulkhead*

*Rankin & Blackmore* Manufacturer's

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or ~~Steel~~) Screw (or ~~Paddle~~) Steam Vessel *"Alert"* owned by *James Mollison & Co* attended to by *Thomas J. Parke & Others* Registered Horse Power, of the Port of *Greenock* of *116* Tons Register, and *90* Registered Horse Power, and that they have been carefully inspected and examined by me at *Greenock & Glasgow* and found to be at this date, viz., *Dec 15<sup>th</sup> 1894* in good order and safe working condition.

Amount of Fee for Survey ... £ *4:10:-*

(Travelling Expenses, if any, £)

(1000/31/7/76.)

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

© 2019

Lloyd's Register Foundation

IRON 475-0317