

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Description *Compound Inverted Surface Condensing*  
 Made by *Messrs Blair & Co*  
 When *October 18/44* At *Stockton*  
 Diameter of cylinder *32 x 60* Length of stroke *39"*  
 No. of revolutions per minute *one of each About 65*  
 Point of cut off *1/2 stroke*  
 Diameter of screw shaft *11"*  
 Diameter of crank shaft journals *11" Tunnel shaft 10 1/2 in*  
 Diameter of screw, ~~or of paddle wheel~~ *14 1/2*  
 Pitch of screw *Mean 15.0"*  
 No. of blades, *4* Total surface *Not ascertained*  
 No. of bilge pumps *2* and sizes *4 x 28 the Single Acting*  
 Do they pump from each compartment *For bilge pump draws from sea ballast tanks, fore hold, after well & wing to reach to any part of the vessel of engine room. After pump from engine room only*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *2* and sizes *4 x 28 the Single Acting*  
 What gauges are there attached to the engines and boilers ... *3 steam 1 vacuum*  
 Description and size of Donkey Pumps ... *2 x 1 pump 4 1/2 dia x 9 1/2 the Double Acting 2 x 2 " 4 x 8 "*  
 Where do they pump from ... *2 x 1 pumps from sea, ballast tanks fore hold, after well & wing of engine room. 2 x 2 draws from sea, fore hold, after well, wing of engine room & hold*  
 No. of bilge injections *1* and sizes *1 1/2*  
 Are they connected to air, or circulating pumps *Circulating pump*  
 Is there a hand pump in the engine room *Donkey work 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 *Two* Description *Cylindrical Multitubular*  
 Made by *Messrs Blair & Co*  
 When *October 18/44* At *Stockton*  
 Working pressure *46 lbs*  
 Tested by hydraulic pressure to *152 lbs*, Date *18 Sept 18/44*  
 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 *No superheater*  
 Description and area of safety valves on each boiler *Two spring safety valves on each boiler Area of two valves 16.5 sq in*  
 No. of square feet of fire-grate surface in each boiler *28.5 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. *Yes except suction pipes and roses in holds when ship is loaded*

### TWO DONKEY BOILERS Made by J. Robinson, Newport Boiler Works

Description *Vertical, Water tubes in furnace*  
 Where fixed *In stoke hold*  
 Working pressure *65 lbs*

Tested by hydraulic pressure to *130 lbs*, Date *22nd Aug 18/44*  
 Description and area of safety valves *One wrought iron valve 2 1/4 dia & 1 lever & wrought iron valve 2 1/4 dia. Total area 8.9 sq in*  
 No. of square feet of fire grate *11.39 sq feet*

### 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 & 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 *New*  
 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*

*Robt Blair Esq 2d*  
*J. G. Blair*

Manufacturers of Engines & Main Boilers only

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 *Agnes* owned by *Robert Irvine & Co* of the Port of *West Hartlepool* of *1041.94* Tons Register, and *140* Registered Horse Power, and that they have been carefully inspected and examined by me at *Stockton & Hartlepool* and found to be at this date, viz., *27th October 18/44* in good order and safe working condition.

Amount of Fee for Survey ... £ *4 : 0 : 0*  
 (Travelling Expenses, if any, £ *0.5.0*)

Engineer Surveyor to Lloyd's Register of Shipping.