

1958 5 Jun

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rev 8/11/77

Report (if any) Newcastle 4746

Description *Compound Inverted*
 Made by *J. Clark & Co*
 When *Oct* 1877 At *Newcastle*
 Diameter of cylinder *26 x 48* Length of stroke *30*
 No. of revolutions per minute *70*
 Point of cut off *1/2 stroke, 2/3rd in S.P.*
 Diameter of screw shaft *8"*
 Diameter of crank shaft journals *8"*
 Diameter of screw, or of paddle wheel *12 ft*
 Pitch of screw *15.6*
 No. of blades, *4* Total surface *34 sq feet*
 No. of bilge pumps *2* and sizes *3 1/2 x 15"*
 Do they pump from each compartment *Yes Engine Room only*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *2* and sizes *3 1/2 x 15 stroke*
 What gauges are there attached to the engines and boilers ... *1 Steam in Stokehold, 1 Steam, 1 Vac & 1 Comp. in Engine room Ballast. 8" x 10*
 Description and size of Donkey Pumps ... *small donkey 4" x 10" from fore & aft tanks*
 Where do they pump from ... *Bilges and sea in Eng. room & aft well*
 No. of bilge injections *one* and sizes *4"*
 Are they connected to air, or circulating pumps *Circulating*
 Is there a hand pump in the engine room *no*
 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*
 Made by *J. Clark & Co*
 When *Oct* 1877 At *Newcastle*
 Working pressure *65 lbs per sq inch*
 Tested by hydraulic pressure to *130 lbs*, Date *Sept 7-1877*
 Description of super-heating apparatus *none*
 Can each boiler be worked separately *only one*

Can the super-heater be shut off and the boilers worked separately *no*
 Description and area of safety valves on each boiler ... *2 Spring valves, 5" diameter*
 No. of square feet of fire-grate surface in each boiler *44 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*

DONKEY BOILER.

Description *Vertical 3 cross tubes*
 Where fixed *Stokehold*
 Working pressure *50 lbs*
Clacke Chapman & Burney Waterhead

Tested by hydraulic pressure to *100 lb*, Date *9/18/77*
 Description and area of safety valves *8 Weight 3 lbs = 7.0 sq*
 No. of square feet of fire grate *12.5 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 ... *Cocks & valves*
 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 *above*
 Are they each fitted with a discharge valve on the plating of the vessel *yes*
J. Clark & Co Manufacturer.

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 *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 *yes*
Safety valves eased 66, closed 65, accounts 68.

We 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 *Cambroune* owned by *Messrs Argeles Gueret*
 of the Port of *Nantes* of *525.46* Tons Register, and *98* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *Newcastle*
 and found to be at this date, viz., *October 17th* 1877 in good order and safe working condition.

Amount of Fee for Survey ... £ *4:10:0*
Subsistence 0:5:0 Paid by *George W. Mansel & James Milton*
 (Travelling Expenses if any) *me* *7/11/77*

George W. Mansel & James Milton
 Engineer Surveyors to Lloyd's Register of Shipping,
 North Shields