

1927/15

LOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rev 4/10/77

Description *2 Cylindrical Compound Inverted S.E.*
 Made by *North Eastern Marine Eng. Works Corp.*
 When *Sept 7th 1877* At *Sunderland*
 Diameter of cylinder *27" x 50"* Length of stroke *33"*
 No. of revolutions per minute *60*
 Point of cut off *half stroke*
 Diameter of screw shaft *9"*
 Diameter of crank shaft journals *9 1/2"*
 Diameter of screw, or of paddle wheel *12 ft. 0"*
 Pitch of screw *14 ft. 0"*
 No. of blades, *(14)* Total surface *47 sq. ft.*
 No. of bilge pumps *(12)* and sizes *3" dia 33" stroke*
 Do they pump from each compartment *left hold. Well & -
- Pumping room*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *(12)* and sizes *3" dia 33" stroke*
 What gauges are there attached to the engines and boilers ... *1 Steam each Boiler & 100 lb. temp. gauge
1 Safety - 100 lb. temp. gauge
1 Vacuum Gauge*
 Description and size of Donkey Pumps ... *(Ballast) 6" dia 9" stroke D.A.
(Boiler) 4" dia 6" stroke D.A.*
 Where do they pump from ... *Tanks Sea, Engine room
& aft. Well*
 No. of bilge injections *(1)* and sizes *3"*
 Are they connected to air, or circulating pumps *Circulating*
 Is there a hand pump in the engine room *No. Boiler working*
 Can it be worked by the main engines - *can be used*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Cylindrical tubular*
 Made by *North E. M. & Works Corp.*
 When *Sept 7th 1877* At *Sunderland*
 Working pressure *40 lbs per sq. inch*
 Tested by hydraulic pressure to *140 lbs*, Date
 Description of super-heating apparatus *None Steam Domes*
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *No Superheaters*
 Description and area of safety valves on each boiler ... *(2) on each Boiler with
safety gear to all valves
3 1/2" dia = 16.5 sq. in*
 No. of square feet of fire-grate surface in each boiler *24 sq. 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 *Vertical Cylindrical 3 crown tubes*
 Where fixed *Stoke hold*
 Working pressure *50 lbs per sq. inch*

Tested by hydraulic pressure to *110 lbs uprated*, Date *14. June 77*
 Description and area of safety valves *(1) dead weight 2 1/4" dia =
5.9 sq. in*
 No. of square feet of fire grate *10.5 sq. ft.*
made by Clarke Chapman & Burney Gateshead

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 ... *2 Stop Valves rest on
common Cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *all except firemans
ash Cocks about level
of stokehold plates*
 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*
Pro N.E. M. Eng. Co. (Ld) Manufacturer.

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 *Aug 6th 77*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes by run upwards
valves*
 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 Paddle) Steam Vessel *"Lady Bertha"* owned by *Richard Power & Co* of the Port of *Swansea* of *459.85* Tons Register, and *98* Registered Horse Power, and that they have been carefully inspected and examined by me at *Sunderland & Mallow on Sept.* and found to be at this date, viz., *Sept 2nd 1877* in good order and safe working condition.

Amount of Fee for Survey ... £ *4:10:0* Recd by me
Cubitt Travelling Expenses, if any, £ *0:5:0* P. Jones
29/9/77

George W. Manuel
 Engineer Surveyor to Lloyd's Register of Shipping.
North Shields