

18501 Jan

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Recd 28/5/77

Description *Two Cylindrical Compound Inverted S.E.*
Made by *Messrs Palmer & Coys Limited*
When *Aug^r 1876* At *Lanark on Tyne*
Diameter of cylinder *25" x 50"* Length of stroke *33"*
No. of revolutions per minute *(60)*
Point of cut off *Two thirds of stroke*
Diameter of screw shaft *9"*
Diameter of crank shaft journals *9"*
Diameter of screw, or of paddle wheel *12' 0"*
Pitch of screw *12' 0" to 17' 0"*
No. of blades, *(4)* Total surface *40 sq. feet*
No. of bilge pumps *(2)* and sizes *6" dia, 7 1/2" stroke*
Do they pump from each compartment *Engine room only*

Are all the bilge suction pipes fitted with roses *Yes*
No. of feed pumps *(2)* and sizes *5" dia, 13" stroke*
What gauges are there attached to the engines and boilers ... *1. Steam in stokehold*
1. ditto " Engine Room
1. Vacuum, 1 compound, 9 cups
Description and size of Donkey Pumps ... *No. 1. Ballast pump 8" dia, 12" stroke DA*
" 2. Water pump 4" dia, 8" stroke DA
Where do they pump from ... *No. 1. from Tanks and Engine Room Bilges*
No. 2. from Sea Water and Engine Room Bilges
No. of bilge injections *(1)* and sizes *6" dia*
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. No. 2 donkey can be used*
Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *(1)* Description *Cylindrical tubular*
Made by *Messrs Palmers Coy Limited*
When *Oct 25th 1876* At *Lanark on Tyne*
Working pressure *65 lbs per sq. inch*
Tested by hydraulic pressure to *130 lbs*, Date *Oct 25th 76*
Description of super-heating apparatus *None*
Can each boiler be worked separately *one boiler*

Can the super-heater be shut off and the boilers worked separately *No Superheaters*
Description and area of safety valves on each boiler ... *(2) spring safety valves*
Adams patent each 4 1/2" dia
= 31.8 sq. in area
No. of square feet of fire-grate surface in each boiler *65 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 with (3) cross water tubes*
Where fixed *Upper Deck*
Working pressure *34 lbs per sq. inch*

Tested by hydraulic pressure to *not ascertained*, Date *—*
Description and area of safety valves *(1) Lever, wrought 3" dia*
No. of square feet of fire grate *14 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 ... *1. Stop valve rest are common cocks*
Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *all except Tank filling cock*
Are the discharge pipes above or below the deep water line *Main & Air pump discharge above rest 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 *None taken 1876 Screw & all connections April 77*
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 Tunnel*

Manufacturer.

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 *"Enaphora Hall"* owned by *Messrs Dixon & Harris* of the Port of *London* of *562* Tons Register, and *99* Registered Horse Power, and that they have been carefully inspected and examined by me at *Lanark on Tyne* and found to be at this date, viz., *May 11th* 1877 in good order and safe working condition.

Amount of Fee for Survey ... £

(Travelling Expenses, if any, £)

Engineer Surveyor to Lloyd's Register of Shipping.

George W. Mammul
North Shields