

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Recd 19/2/77

Report (if any) on Hull of Vessel. Port Montrose No. 4032.

Description *Inverted Compound surface Cond.*
 Made by *Messrs Kemp & Hume.*
 When *Jan'y 1877* At *Glasgow.*
 Diameter of cylinder *20" x 34"* Length of stroke *24"*
 No. of revolutions per minute *about 80.*
 Point of cut off *about 9/16*
 Diameter of screw shaft *6 1/8"*
 Diameter of crank shaft journals *6 1/4"*
 Diameter of screw, ~~or of paddle wheel~~ *10" x 0"*
 Pitch of screw *14'-0"*
 No. of blades, *Four* Total surface *26.25 sq feet*
 No. of bilge pumps *one* and sizes *2 3/4" Diam 14" Stroke*
 Do they pump from each compartment *Engine room bilge and fore hold*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *one* and sizes *2 3/4" Diam 14" Stroke*
 What gauges are there attached to the engines and boilers ... *one Glass water + one Pressure in Stokhold. one each Glass water. Pressure + Vacuum in Engine Room*
 Description and size of Donkey Pumps ... *Vertical. D.A. 6" x 6" Stroke 3" Diam. D.A. Pump*
 Where do they pump from ... *From Sea. Bilge fore hold and Ballast Tank - to Boiler through ship side and on Deck*
 No. of bilge injections *one* and sizes *2" 1302*
 Are they connected to air, or circulating pumps *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 *one* Description *Circular Tubular*
 Made by *Messrs Black & Noble*
 When *Jan'y 1877* At *Montrose.*
 Working pressure *70 lbs*
 Tested by hydraulic pressure to *140 lbs*, Date *8 Nov. 1876*
 Description of super-heating apparatus ... *Vertical Domb*
 Can each boiler be worked separately *---*

Can the super-heater be shut off and the boilers worked separately *---*
 Description and area of safety valves on each boiler ... *Two direct load 3" dia total area 14. inches*
 No. of square feet of fire-grate surface in each boiler *27 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 *Round Vertical 3.9" Dia 7.6" High*
 Where fixed *Stoke hold.*
 Working pressure *50 lbs*

Tested by hydraulic pressure to *100 lbs*, Date *8 Nov. 1876*
 Description and area of safety valves *Revers Weight 3.14 Area*
 No. of square feet of fire grate *7. 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 ... *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 *Above*
 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 *Before launching*
 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 Engines placed aft*

Kemp & Hume Manufacturer.

Black & Noble

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 *City of Gloucester* owned by *The Gloucester Steam Coy, Lim.* of the Port of *Gloucester* of *235.21 / 134.16* Tons Register, and *55* Registered Horse Power, and that they have been carefully inspected and examined by me at *Montrose,* and found to be at this date, viz., *25th January 1877* in good order and safe working condition.

Fees - - - *2 15 0*
 Railway Fines - - *1 13 0*
 Substance Allowance *2 5 0*
 £ *6 13 0*

John Sturrock
 Engineer Surveyor to Lloyd's Register of Shipping.

paid

