17025 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 14/11/76

(left margin: Report (if any) on Hull of Vessel. Port Glasgow No. 1333)

Description Compound, Inverted Direct acting
Made by Messrs Barclay Curle & Coy
When 1876 At Glasgow
Diameter of cylinders 36" & 63" one of each   Length of stroke 39"
No. of revolutions per minute 65
Point of cut off Variable
Diameter of screw shaft 10¼"
Diameter of crank shaft journals 11½"
Diameter of screw 15"·0"
Pitch of screw 25"·0"
No. of blades Four Total surface 50ft
No. of bilge pumps One and sizes 5½" x 22" Stroke
Do they pump from each compartment Yes

Are all the bilge suction pipes fitted with roses Yes
No. of feed pumps One and sizes 5½" dia x 22" Stroke
What gauges are there attached to the engines and boilers ... One Steam, One Vacuum & One Compound in Engine Room & One to each Boiler in Stokehold.
Description and size of Donkey Pumps ... Double acting 4½" x 10" Stroke
Where do they pump from .... From the Sea, Bilge & Hotwell
No. of bilge injections One and sizes 3¾"
Are they connected to air, or circulating pumps To Circulating
Is there a hand pump in the engine room Yes
Can it be worked by the main engines Yes
Is there a deck hose of sufficient length to reach to any part of the vessel Yes

MAIN BOILERS.

Number Two   Description Round Horizontal
Made by Barclay Curle & Coy
When 1876 At Glasgow
Working pressure 60 lbs
Tested by hydraulic pressure to 120 lbs, Date Sept 1876
Description of super-heating apparatus .... Annular, Vertical Single Tube
Can each boiler be worked separately Yes

Can the super-heater be shut off and the boilers worked separately No
Description and area of safety valves on each boiler .... Two Direct Spring each 14·18" area.
No. of square feet of fire-grate surface in each boiler 58 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 Flat Sided Horizontal
Where fixed On Upper Deck
Working pressure 35 lbs

Tested by hydraulic pressure to 70 lbs, Date Sept 76
Description and area of safety valves Direct weighted (one) 5·93 area
No. of square feet of fire grate 12 ft

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 ... Screw down Valves and Cocks.
Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ...... Blow off Cocks are under Stokehold plates. Coal Bunkers coming on either Side of Stokehold.
Are the discharge pipes above or below the deep water line
Are they each fitted with a discharge valve on the plating of the vessel Yes

What pipes are carried through the bunkers Bilge pipes to forehold
How are they protected By wood Casing
When were the stern tube, propeller, screw shaft, and all connections examined in dry dock On Slip previous to being launched
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

Barclay Curle & Co Manufacturer.
pr J.G.

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 "Benarty" owned by W. Thompson & Coy of the Port of Leith of 1119 Tons Register, and 190 Registered Horse Power, and that they have been carefully inspected and examined by me at Glasgow and found to be at this date, viz., November 13 1876 in good order and safe working condition.

Amount of Fee for Survey ... ... £ 9:10:— P⁰

James Mollison
Engineer Surveyor to Lloyd's Register of Shipping.

[1000—1/9/76.]

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