Ferry Steamer "Oxton"   23894 *Iron*

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

Two pairs of Engines with fore and aft Screws

ENGINES.

Rec 3/7/79

Description	Compound Inverted Direct acting
Made by	Messrs W. Simons & Coy
When	1879 At Renfrew
Diameter of cylinder	19" & 34" Length of stroke 24" *Two of each*
No. of revolutions per minute	About 100
Point of cut off	⅝ths of Stroke
Diameter of screw shaft	5½"
Diameter of crank shaft journals	7"
Diameter of screw, or of paddle wheel	6'6"
Pitch of screw	14'6"
No. of blades, four Total surface	—
No. of bilge pumps One and sizes	3½" dia × 20¾" Stroke
Do they pump from each compartment	Yes

Report (if any) on Hull of Vessel. — Port of Glasgow — No. 4909

Are all the bilge suction pipes fitted with roses	Yes
No. of feed pumps One and sizes	3½" dia × 20¾" stroke
What gauges are there attached to the engines and boilers	One Steam & one Vacuum to each pair of Engines
Description and size of Donkey Pumps	Double acting 3½" × 6"
Where do they pump from	From the Sea Hotwell & Bilge
No. of bilge injections One and sizes	3" to each Engine
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	No
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	W Simons & Coy
When 1879 At	Renfrew
Working pressure	60 lbs
Tested by hydraulic pressure to	120 lbs Date 29.4.'79
Description of super-heating apparatus	Receiver encased Common to both Boilers
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 9.62 area
No. of square feet of fire-grate surface in each boiler	40 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	No Donkey Boiler
Where fixed	—
Working pressure	—
Tested by hydraulic pressure to	— , Date
Description and area of safety valves	—
No. of square feet of fire grate	—

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 & 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	On Slips 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

Wm Simons & Co   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 *"Oxton"* owned by *Birkenhead Ferry Commissioners Birkenhead* of the Port of *Liverpool* of *129* Tons Register, and *98* Registered Horse Power, and that they have been carefully inspected and examined by me at *Renfrew* and found to be at this date, viz., *June 25th 1879* in good order and safe working condition.

Amount of Fee for Survey ... £5 : " : " Paid	*James McAleon*
(Travelling Expenses, if any, £ 1 : 1 : 0)	Engineer Surveyor to Lloyd's Register of Shipping.
[1000—1/9/76.]	*Clyde District*
(Two) Tracings of Boiler appended	

The ... of the vessel has
been made and fitted in accordance
with the ... Instructions that
she is eligible to bear the ...
M.C. and a machinery certificate
Jun 25 June 1879

3.7.79