

IRON SHIPS.

Rec 17/6/64

Survey held at Glasgow Date 11 June 1864
 the Iron S. "Clutha" Master Mitchell Campbell
 Tonnage Gross 534.16 Engine Room 139.76 Register 394.4 Built at Glasgow
 when Built 1864 Launched 6 May 1864 By whom built Messrs Barclay, Curle & Co
 Owners Baron Co Port belonging to Grandmoult Destined Voyage London
 Surveyed Afloat or in Dry Dock whilst building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.
191.5			27.5			15						140	
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	21										
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	Inches in Ship.	Inches required per Rule.	18										
depth and thickness of Floor Plate at mid line	Inches in Ship.	Inches required per Rule.	18										
depth and thickness of Floor Plate at Bilge Keelson	Inches in Ship.	Inches required per Rule.	9										
Size of Reversed Angle Iron, and No. at top of Floor Plate	Inches in Ship.	Inches required per Rule.	3										
Frames, Size of Angle Iron, single or double	Inches in Ship.	Inches required per Rule.	4										
Reversed Iron, if to every frame and on every other frame	Inches in Ship.	Inches required per Rule.	4										
Beams, Deck (No. double Angle Iron, Plate, or Bulb Iron)	Inches in Ship.	Inches required per Rule.	4										
double or single Angle Iron, on upper edge	Inches in Ship.	Inches required per Rule.	4										
average space between	Inches in Ship.	Inches required per Rule.	4										
if wood (No. sided & moulded	Inches in Ship.	Inches required per Rule.	4										
Hold, or Lower Deck (No. double Angle Iron, Plate, or Bulb Iron)	Inches in Ship.	Inches required per Rule.	4										
double or single Angle Iron, on upper edge	Inches in Ship.	Inches required per Rule.	4										
average space between	Inches in Ship.	Inches required per Rule.	4										
if wood (No. sided & moulded	Inches in Ship.	Inches required per Rule.	4										
Paddle, wood, sided and moulded, or if Iron, size of Plate	Inches in Ship.	Inches required per Rule.	4										
Engine	Inches in Ship.	Inches required per Rule.	4										
Keelson, single plate, box, or intercostal	Inches in Ship.	Inches required per Rule.	4										
Size of Plates	Inches in Ship.	Inches required per Rule.	4										
Size of Angle Irons	Inches in Ship.	Inches required per Rule.	4										
Ditto Bilge (No. double or single)	Inches in Ship.	Inches required per Rule.	4										
Transoms, material	Inches in Ship.	Inches required per Rule.	4										
Weight-heads, and Hawse Timbers	Inches in Ship.	Inches required per Rule.	4										
The Frames or Ribs extend in one length from middle line to Gunwale rivetted through plates with (3/4 in.) rivets, about (5 1/2) apart.	Inches in Ship.	Inches required per Rule.	4										
The reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to Deck	Inches in Ship.	Inches required per Rule.	4										
on the frames, alternate from middle line to Gunwale	Inches in Ship.	Inches required per Rule.	4										
Keelson, how are the various lengths of plates or angle irons connected?	Inches in Ship.	Inches required per Rule.	4										
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (3 in.) from centre to centre of rivet.	Inches in Ship.	Inches required per Rule.	4										
Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets.	Inches in Ship.	Inches required per Rule.	4										
Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?	Inches in Ship.	Inches required per Rule.	4										
Edges from bilge to sheerstrake, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?	Inches in Ship.	Inches required per Rule.	4										
Edge of Sheerstrake, double or single rivetted?	Inches in Ship.	Inches required per Rule.	4										
Butts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (4 in.) Breadth of laps in single rivetting (2 1/2 in.)	Inches in Ship.	Inches required per Rule.	4										
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	Inches in Ship.	Inches required per Rule.	4										
Planksheer, how secured to the plating of the sides	Inches in Ship.	Inches required per Rule.	4										
Waterway, how secured to the Beams	Inches in Ship.	Inches required per Rule.	4										
Deck Beams, how secured to the side?	Inches in Ship.	Inches required per Rule.	4										
Hold or Lower Deck	Inches in Ship.	Inches required per Rule.	4										
Paddle	Inches in Ship.	Inches required per Rule.	4										
No. of breasthooks	Inches in Ship.	Inches required per Rule.	4										
What description of iron is used for the angle iron and plate iron in the vessel?	Inches in Ship.	Inches required per Rule.	4										

Builder's Signature
Cundeyman & Barclay, Curle & Co
 IRON 437A-0058

36309 Iron
Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes
 Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Yes
 Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes
 Are there any rivets which either break into or have been put through the seams or butts of the plating? a few in corners of Butts

Her Masts, Yards, &c., are in Red Pine condition, and sufficient in size and length.
 She has **SAILS.**

N ^o .		CABLES, &c.		ANCHORS, and their weights.	
		Fathoms.	Inches.	N ^o .	Weight
<u>A single</u> <u>Suit of</u> <u>Sails</u> and	Fore Sails,	<u>Tested to 20 tons</u>		<u>Tested to 10 1/2 tons</u>	
	Fore Top Sails,	Chain	5 1/2	Bower,	3
	Fore Topmast Stay Sails,	Hempen Stream Cable	9 1/2	<u>Portman's Patent</u>	13.1
	Main Sails,	Hawser	20 1/2	Stream,	1
	Main Top Sails,	Towlines	80	Kedge,	2
		Warp	80		3.0
		All of <u>Good</u> quality.	4		1.2

Her Standing and Running Rigging Good Warr's Hemp sufficient in size and Good in quality.

She has a 22 ft life Boat Long Boat and a 22 ft Quarter Boat and a 10 ft Dingy
 The present state of the Windlass is new Capstan new and Rudder new Pumps new and efficient

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.
 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under Special
 2nd. On the plating during the progress of rivetting Survey and seen on the following
 3rd. When the beams were in and fastened, and before the decks were laid dates. Feb. 4. 8. 10. 19. 22. 26. 28.
 4th. When the ship was complete, and before the plating was finally coated 1. 8. 9. 12. 17. 26. 29. 31. Apr. 4. 18. 71
 5th. After the ship was launched 30 May 4. 7. 12. 20 June 11. 1864

The Frames are spaced 18 ins apart for 60 feet in
 midships 4 x 3 x 7/16. In the Engine Room space which is
 45 feet long the Frames and Reverse Bars are doubled to
 the upper part of Bilges, and Frames increased to 4 x 4 x 7/16.
 Built from the intercostal and Bilge keelson 7 x 7/16.
 Sheerstrake doubled with a 7/16 plate 30 ins broad for a length
 of 144 feet. Main piece of Windlass British Oak
 fitted with English Oak Stantions in Iron sockets (cast)
 bolted to the Waterway and Gunwale Plate

In what manner are the surfaces preserved from oxidation? Red Lead and Patent Paint

I am of opinion this Vessel should be classed A. 1

The amount of the Fee£5 : : is received by me,

June 11/64 Special£26 : 11s

Certificate (if required)£ : Grates

Committee's Minute 17th June 1864

Character assigned B 1

S. J. Darlison
 I have examined the
 Report and find it
 correct for this class
 recommended -
 June 17/64



Lloyd's Register
 Foundation