

# IRON SHIPS.

Request for P.P. 1863  
 No. 2262 Survey held at Dumbarton Date 15<sup>th</sup> Aug<sup>r</sup> 1864  
 on the Ship Duke of Rothesay Master John Mc Murrick  
 Tonnage Gross 999 Engine Room 29/10/64 Register 999 Built at Dumbarton  
 When Built 1864 Launched 1864 By whom built James & Hamilton  
 Owners James & Hamilton Port belonging to London Destined Voyage Calcutta  
 Surveyed Afloat or in Dry Dock whilst building

Length aloft	Feet	Inches	Extreme Breadth	Feet	Inches	Depth from top of Upper Deck	Feet	Inches	Power of Engines	Horse
99.7			33			20.9				
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship	Inches required per Rule	18			Stem, if bar iron, moulding and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	Inches in Ship	Inches required per Rule	18			Stem, if plate iron, breadth and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
depth and thickness of Floor Plate at mid line	Inches in Ship	Inches required per Rule	18			Stern-post, if bar iron, moulding and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
depth and thickness of Floor Plate at Bilge Keelson	Inches in Ship	Inches required per Rule	18			Keel, if bar iron, moulding and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Size of Reversed Angle Iron, and No. at top of Floor Plate	Inches in Ship	Inches required per Rule	18			Keel, if plate iron, breadth and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Frames, Size of Angle Iron, single or double	Inches in Ship	Inches required per Rule	18			Garboard Plates, Breadth and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Reversed Iron, if to every frame	Inches in Ship	Inches required per Rule	18			From Garboard to upper part of Bilge	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Beams, Deck (No. 5 P) double Angle Iron, Plate, or Bulb Iron	Inches in Ship	Inches required per Rule	18			From upper part of Bilge to Sheerstrakes	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
double or single Angle Iron, on upper edge	Inches in Ship	Inches required per Rule	18			Sheerstrakes, Breadth and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
average space between	Inches in Ship	Inches required per Rule	18			Butt Straps to outside plating, Breadth and thickness	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
if wood (No. ) sided & moulded	Inches in Ship	Inches required per Rule	18			Planksheers	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Hold, or Lower Deck (No. 5 P) double Angle Iron, Plate, or Bulb Iron	Inches in Ship	Inches required per Rule	18			Gunwale Plate or Stringer on ends of Up. Dk Beams	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
double or single Angle Iron, on upper edge	Inches in Ship	Inches required per Rule	18			Angle Iron on ditto	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
average space between	Inches in Ship	Inches required per Rule	18			Diagonal Tie Plates on Beams	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
if wood (No. ) sided & moulded	Inches in Ship	Inches required per Rule	18			Waterway	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Paddle, wood, sided and moulded, or if Iron, size of Plate	Inches in Ship	Inches required per Rule	18			Deck	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Engine	Inches in Ship	Inches required per Rule	18			Ceiling in Hold	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Keelson, single plate, box, or intercostal	Inches in Ship	Inches required per Rule	18			Ceiling betwixt Decks	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Size of Plates	Inches in Ship	Inches required per Rule	18			Beam Clamps or Spirketting	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Size of Angle Irons	Inches in Ship	Inches required per Rule	18			Shelf	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Ditto Bilge (No. 500)	Inches in Ship	Inches required per Rule	18			Stringer Plates on ends of Hold or Lower Dk Beams	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Transoms, material	Inches in Ship	Inches required per Rule	18			Ceiling between Decks	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Knight-heads, and Hawse Timbers	Inches in Ship	Inches required per Rule	18			Stringer or Tie Plates outside Hatchways	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
The Frames or Ribs extend in one length from middle line to gunwale	Inches in Ship	Inches required per Rule	18			Deck Beam Clamps or Spirketting	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
The reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to Dk	Inches in Ship	Inches required per Rule	18			Shelf	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Keelson, how are the various lengths of plates or angle irons connected?	Inches in Ship	Inches required per Rule	18			Stringers in Hold	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets	Inches in Ship	Inches required per Rule	18			Deck, Lower	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Edges from Garboards to upper part of bilge, worked carvel with a lining piece	Inches in Ship	Inches required per Rule	18			Deck, Upper, how fastened to Beams	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Butts from Keel to turn of bilge, worked carvel with a lining piece	Inches in Ship	Inches required per Rule	18			Bulkheads, No. Two	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Edges from bilge to sheerstrake, worked carvel with a lining piece	Inches in Ship	Inches required per Rule	18			Thickness of	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Edge of Sheerstrake, double or single rivetted?	Inches in Ship	Inches required per Rule	18			how secured to the sides of the ship	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Butts from bilge to planksheers, worked carvel with a lining piece	Inches in Ship	Inches required per Rule	18			size of vertical angle iron and their distance apart	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	Inches in Ship	Inches required per Rule	18			The Frames or Ribs extend in one length from middle line to gunwale	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Planksheer, how secured to the plating of the sides	Inches in Ship	Inches required per Rule	18			The reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to Dk	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Waterway	Inches in Ship	Inches required per Rule	18			Keelson, how are the various lengths of plates or angle irons connected?	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Deck Beams, how secured to the side?	Inches in Ship	Inches required per Rule	18			Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Hold or Lower Deck	Inches in Ship	Inches required per Rule	18			Edges from Garboards to upper part of bilge, worked carvel with a lining piece	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
Paddle	Inches in Ship	Inches required per Rule	18			Butts from Keel to turn of bilge, worked carvel with a lining piece	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
No. of breasthooks	Inches in Ship	Inches required per Rule	18			Edges from bilge to sheerstrake, worked carvel with a lining piece	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule
What description of iron is used for the angle iron and plate iron in the vessel?	Inches in Ship	Inches required per Rule	18			Edge of Sheerstrake, double or single rivetted?	Inches in Ship	16ths required per Rule	Inches required per Rule	16ths required per Rule



**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 and are the rivet holes

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes well and sufficiently countersunk in the outer plate?

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 Good condition, and sufficient in size and length.

She has **SAILS.**

**CABLES, &c.**

**ANCHORS, and their weights.**

No.		Fathoms.	Inches.	No.	Weight.
1	Fore Sails,	300	1 1/2	1	33.2.0
2	Fore Top Sails,	90	1 1/2	2	33.2.0
3	Fore Topmast Stay Sails,	60	1 1/2	3	33.2.0
4	Main Sails,	90	9	4	33.2.0
5	Main Top Sails,	90	5 1/2	5	33.2.0
6	and			6	33.2.0
				7	33.2.0
				8	33.2.0
				9	33.2.0
				10	33.2.0
				11	33.2.0
				12	33.2.0
				13	33.2.0
				14	33.2.0
				15	33.2.0
				16	33.2.0
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				26	33.2.0
				27	33.2.0
				28	33.2.0
				29	33.2.0
				30	33.2.0

Her Standing and Running Rigging Good sufficient in size and Good in quality.

She has two 24 feet long Long Boat and two 24 feet long Boats and two 24 feet long Gigs

The present state of the Windlass is new Capstan new and Rudder new Pumps new

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

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 between the Sept. 28<sup>th</sup> Oct. 9. 1864.

3rd. When the beams were in and fastened, and before the decks were laid Nov. 5. 10. 23. 30. Dec. 9. 14. 18. 1863.

4th. When the ship was complete, and before the plating was finally coated Jan. 30. Feb. 5. 11. 24. Mar. 3. 10. 15. 24.

5th. After the ship was launched Apr. 2. 25. May 5. 11. 18. 24. June 2. 15. 21. 29. July 4. 11. 21. 30. Aug. 5. 17. 22. 26. Sept. 5. 9. 15. 20. Oct. 5. 8. 26. 29. Nov. 2. 9. 11. 15. 1864.

This vessel is built to the Old Room and Space of 18 mcs

The Gunwale Plate and Hold Beam Stringer are in excess of the Rule. The Sheerstrake is extended 6 ins above the Gunwale Plate with Butt Straps to the same in one length; is fitted with a Full Loop and Forecastle and house on Deck for part of the crew

Fore. main & surgeen masts of sheer plates to 50 double overlap joints and tubto flush rivetted Butts. Fore and main Topmasts of 40 ft

Fore & main Gards and Fore & main Topsail Gards to plates 40 ft

The Diagonal 40 Plates on Beams are narrow as required by Rule, but increased 20 of an inch in thickness, as also Stringer Plate outside Hatchways

In what manner are the surfaces preserved from oxidation? Flat of Bottom coated with Portland Cement, rest of Frames and plating with red lead

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

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

Nov 1864 Special .....£ 49. 16. : :

Certificate (if required) .....£ 10. 0. : :

Committee's Minute 18<sup>th</sup> November 1864

Character assigned A. 1

S. P. Darling

I concur in the above recommendation



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