

IRON SHIPS.

No. 18859 Survey held at Preston & Liverpool Date Oct 9, 1863 July 8th 1864
 the BK Eastham Master Robert Rennie
 Tonnage Gross 611⁰⁵/₁₀₀ Under main St. - Enging Room 582⁴¹/₁₀₀ Register 611⁰⁵/₁₀₀ Built at Preston
 When Built 1864 Launched March 24, 1864 By whom built J. H. Muckern
 Owners & Tennant Port belonging to Liverpool Destined Voyage Madras
 Surveyed Afloat or in Dry Dock Whilst building under Special Survey: 500 ton Scale

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,
160			28			18			6				
of Frames or Ribs from moulding	Inches in Ships. Inches required per Rule. 16ths required per Rule.												
to moulding edge, all fore and aft	21 8 21												
of Angle Iron, and No. / at	Inches. In Ship. In Ship. 16ths. required per Rule. Inches. required per Rule. 16ths. required per Rule.												
bottom of Floor Plate	3 3/4 2 3/4 7/16 3 3/4 2 3/4 7/16												
depth and thickness of Floor Plate at mid line	19 8 1/6 7/16 19 8 1/6 7/16												
depth and thickness of Floor Plate at Bilge Keelson	10 - - - - -												
Size of Reversed Angle Iron, and No. / at top of Floor Plate	3 2 1/2 6 1/16 3 2 1/2 6 1/16												
Frames, Size of Angle Iron, single or double	3 3/4 2 3/4 7/16 3 3/4 2 3/4 7/16												
Reversed Iron, K to every frame	3 2 1/2 6 1/16 3 2 1/2 6 1/16												
Beams, Deck (N ^o . 46) double Angle Iron, Plate, or Bulb Iron	7 7/16 - 7 7/16												
double on single Angle Iron, on top edge	3 2 1/2 6 1/16 3 2 1/2 6 1/16												
average space between	3 ft 6 in 3 ft 6 in												
if wood (N ^o .) sided & moulded	- - - - -												
Hold, or Lower Deck (N ^o . 44) double Angle Iron, Plate, or Bulb Iron	7 7/16 - 7 7/16												
double on single Angle Iron on top edge	3 2 1/2 6 1/16 3 2 1/2 6 1/16												
average space between	3 ft 6 in 3 ft 6 in												
if wood (N ^o .) sided & moulded	- - - - -												
Revised, wood sided and moulded, or if iron, size of Plate	3 1/2 plate 2 x 4 1/2												
Keelson, single plate, box, or intercostal	3 1/2 plate 2 x 4 1/2												
Size of Plates	16 1/2 x 8 1/2 each												
Size of Angle Irons	12 x 4 1/2												
Ditto Bilge (No. /)	angle iron 4 x 4 - 8/16												

Transoms, material None or, if none, in what manner compensated for.
 Knight-heads, and Hawse Timbers None
 The Frames or Ribs extend in one length from Keel to gunwale rivetted through plates with (3/4 in.) rivets, about (6) apart.
 The reverse angle irons on the floors extend in one length across the middle line from Bilge to Bilge to gunwale on alternate ribs.
 Keelson, how are the various lengths of plates or angle irons connected? Butt Straps
 Plates, Garboard, double single rivetted to keel & at upper edge, with rivets (7/8 ins.) diameter averaging (3 ins.) from centre to centre of rivet.
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick or clencher, double single rivetted; rivets (3/4 in.) diameter, averaging (3 ins.) from centre to centre of rivets.
 Butts from Keel to turn of bilge, worked carvel with a lining piece (11-10 1/2 - 1 1/6 - 10 1/6) thick, double single rivetted; rivets (3/4 in.) diameter, averaging (3 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes in alternate strake.
 Edges from bilge to sheerstrake, worked carvel with a lining piece () thick or clencher, double single rivetted; rivets (3/4 in.) diameter, averaging (3 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?
 Edge of Sheerstrake, double single rivetted? 3/4 Rivets 3 in apart
 Butts from bilge to planksheers, worked carvel with a lining piece (23 in - 10 1/2 x 1 1/6 - 10 1/6 - 8 1/6) thick, double single rivetted; rivets (3/4 in.) diameter averaging (3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 1/2)
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? All double rivetted
 Planksheer, how secured to the plating of the sides { Explain by sketch } See the other side.
 Waterway , , planksheer and to the Beams { if necessary. }
 Deck Beams, how secured to the side? Rivetted to Ribs and Stringer Plate.
 Hold or Lower Deck , Rivetted to Ribs and Stringer Plate.
 Paddle , , None
 No. of breasthooks 1 crutches 1 how are pointers compensated? Keelsons, Stringer Plate & Ribs connected.
 What description of iron is used for the angle iron and plate iron in the vessel? Best Iron Builder's Signature J. H. Muckern

3658 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? Well fitted

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Solid pieces

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes generally 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 butts only

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length.

She has SAILS.

CABLES, &c.

ANCHORS, and their weights.

	No.	Weight.
Fore Sails,		
Fore Top Sails,		
Fore Topmast Stay Sails,		
Main Sails,		
Main Top Sails,		
Chain	270	1 1/2
Hempen Stream Cable	90	11
Hawser	75	7 1/8
Towlines	90	8
Warp	90	5
All of <u>Good</u> quality.		
Bower,	3	25-1-14 25-1-25 24-1-15
Stream,	1	9-1-21
Kedge,	2	

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

She has one Long Boat and two others
The present state of the Windlass is Good Capstan Good and Rudder Good Pumps 2 in Main hold & 1 at each end.

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
 - 2nd. On the plating during the progress of rivetting
 - 3rd. When the beams were in and fastened, and before the decks were laid
 - 4th. When the ship was complete, and before the plating was finally coated
 - 5th. After the ship was launched

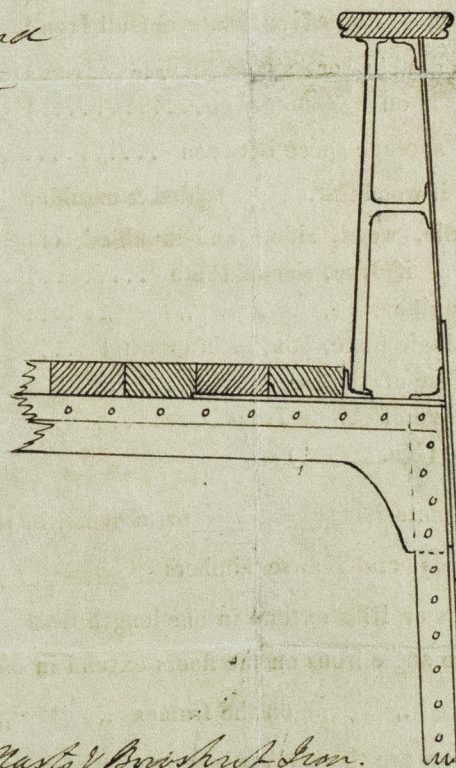
When surveying her I found a good part of the upper deck laid and no diagonal plates on the beams, so they were put on the lower hold beams. The upper deck stringer plates are 6 1/2 inches wider than required or equal to a tie 12 1/2 in extra and the lower hold stringers are 5 in wider, making a tie plate 10 in in excess of the Rules.

She has angle iron on both sides of the bulkheads 4 ft apart; on one side they are placed vertically & the other athwartship.

The butts of floor plates are treble rivetted & there are pieces of angle iron across the middle line, rivetted back to butt to ribs and floor plates, also through the garboard plates.

There is a deck house aft for the cabin officers, and another abaft the foremast for the crew, also a Monkey Forecastle.

The middle line keelson is formed with double plates, on a foundation plate, double angle iron to top and bottom, also a plate on the top of all.



In what manner are the surfaces preserved from oxidation? Cement & Red paint

A1

I am of opinion this Vessel should be classed A1

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

Special£ 30 : 11 : - 18/64 Nov

Certificate (if required)£ " gratis "

Committee's Minute Spec-22 July 1864

Character assigned A1 Brilliant and Special Survey

Leahouse Martindale.

25 July 1864