

# IRON SHIP.

13961

Recy 23/2/75

No. 12737 Survey held at Newcastle Date, First Survey 10<sup>th</sup> July 1874 Last Survey 11<sup>th</sup> July 1875.

On the S. S. "Caduceus"

Master J. S. Satterley

TONNAGE under 1764.62

ONE, OR TWO DECKED, THREE DECKED VESSEL.

Built at Newcastle

Tonnage Deck

SPAR, OR AWNING-DECKED VESSEL.

When built 1874 Launched Nov-24<sup>th</sup>/74

Ditto of Third, Spar, or Awning Deck.

HALF BREADTH (moulded) 16.40

By whom built Palmers Iron & Shipbuilding Co<sup>rs</sup> Limited

Ditto of Poop, or Raised Qr. Dk.

DEPTH from upper part of Keel to top of Upper Deck Beams 26.45

Owners Messrs Hall Bros

Ditto of Horses on Deck

GIRTH of Half Midship Frame (as per Rule) 39.00

Port belonging to London

Ditto of Forecastle

1st NUMBER 81.85

Destined Voyage Bombay

Gross Tonnage 1844.01

1st NUMBER, & a THREE-DECKED VESSEL

Surveyed while Building, Afloat, in Dry Dock.

Less Crew Space 74.16

LENGTH 281.75

Less Engine Room 590.08

2nd NUMBER 21088

Register Tonnage as cut on Beam 1179.77

PROPORTIONS—Breadths to Length 8.5

Depths to Length—Upper Deck to Keel 10.6

Main Deck ditto 14.4

LENGTH on deck as per Rule 281 9 BREADTH—Moulded 32 10 DEPTH top of Floors to Upper Deck Beams 24 6 Do. do. Main Deck Beams 17 6 Power of Engines 150 Horse. N<sup>o</sup>. of Decks with flat laid 4 No. of Tiers of Beams Three

Dimensions of Ship per Register, length, 282 breadth, 33.3 depth, 24.2

KEEL, depth and thickness 9 1/2 x 2 1/2  
STEM, moulding and thickness 9 x 2 1/2  
STERN-POST for Rudder do. do. 9 x 5  
for Propeller 9 x 5  
Distance of Frames from moulding edge to moulding edge, all fore and aft 24 (Class 100 A)

FRAMES, Angle Iron, for 3/4 length amidships Do. for 1/2 at each end  
REVERSED FRAMES, Angle Iron  
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 3/4 the half-bdth. as per Rule height extended at the Bilges  
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space  
BEAMS, Main, or Middle Deck Single or double Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space  
BEAMS, Lower Deck, Hold, or Orlop Single or double Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space  
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates Rider Plate Bulb Plate to Intercoastal Keelson Angle Irons Double Angle Iron Side Keelson Side Intercoastal Plate Angle Irons Attached to outside plating with angle iron

BILGE Angle Irons do. Bulb Iron do. Intercoastal plates riveted to plating for the length of D. bottom

BILGE STRINGER Angle Irons Intercoastal plates riveted to plating for 3/5 length.

SIDE STRINGER Angle Irons

Transoms, material. Knight-heads. Hawse Timbers. Windlass Iron patent Pall Bitt Iron

The FRAMES extend in one length from Gunwale to Gunwale Riveted through plates with 7/8 3/4 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to above Main D<sup>e</sup> Stringer and to Gunwale alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 1/4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 3/4 in. diameter, averaging 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 3/4 in. diameter averaging 3 3/4 ins. from centre to centre.

Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 3/4 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 3/4 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 6 Dia<sup>m</sup> Breadth of laps of plating in single riveting 3 1/2 Dia<sup>m</sup>

Flat Keel Plates, breadth and thickness PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilge of doubling at Bilge, or increased thickness, and length applied

fin up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.

Up. or Spar Dk Sh'rstrake, brdth & thickness Butt Straps to outside plating, breadth & thickness Lengths of Plating Shifts of Plating, and Stringers

Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness Angle Iron on ditto Tie Plates fore and aft, outside Hatchways Diagonal Tie Plates on Beams No. of Pairs, none

Plank-sheer material and scantling Waterways do. do. Flat of Upper Deck do. How fastened to Beams Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness

Is the Stringer Plate attached to the outside plating? Angle Irons on ditto, No. 2 Tie Plates, outside Hatchways Diagonal Tie Plates on Beams, No. of pairs Waterways materials and scantlings Flat of Middle Deck do. How fastened to Beams Stringer Plates on ends of Lower Deck, Hold or Orlop Beams

Is the Stringer Plate attached to the outside plating? Angle Irons on ditto, No. 2 Stringer or Tie Plates, outside Hatchways Flat of Lower Deck Ceiling betwixt Decks, thickness and material in hold Main piece of Rudder, diameter at head do. at heel Can the Rudder be unshipped afloat? Bulkheads No. 5 Thickness of Height up to Main deck, Fore 13' to Upper deck How secured to sides of ship Size of Vertical Angle Irons 3.3. 7/16 and distance apart 30 ins. Are the outside Plates doubled two spaces of Frames in length?

Yes Yes 4.4. 9/16 4.4. 9/16 Bulb stringer fixed at mid between beams & attached to Iron Deck. 7. 6/16 Iron 6/16 by rivets 33 1/2 9/16 33 1/2 9/16 Yes Yes 4.4. 9/16 4.4. 9/16 2 1/2 2 1/2 6 1/2 6 1/2 3 1/2 3 1/2 6/16 6/16

Sparring 2 1/2 2 1/2 6 1/2 6 1/2 3 1/2 3 1/2 6/16 6/16

Between double frames

Plates & Angles by Palmers

Shipbuilding & Iron Co<sup>rs</sup> Limited

The above is a correct description.

Builder's Signature, J. S. Satterley

Surveyor's Signature, T. Moverly

Surveyor to Lloyd's Register of British and Foreign Shipping.

1000 (24/3/74).

IRON 460 - 0220

Lloyd's Register

Foundation

IRON 460 - 0220



Workmanship. Are the butts of plating planed or otherwise fitted? Planed  
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  
Are the fillings between the ribs and plates solid single pieces? Yes  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes  
Do any rivets break into or through the seams or butts of the plating? a few 13961 Iron

Masts, Bowsprit, Yards, &c., are all in Good condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit Fore Mast, Length 82 ft Diam 25 ins of Iron

Schooner Rigged.

Main - do - 73 1/2 ft - 25 in

Mizen do - 54 - 19 -

Formed with two plates in the round 7/16" & 6/16 thick  
double riveted edges, double & treble riveted butts.

NUMBER for EQUIPMENT 23061

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		Chain	270	13/4	55 5/8	270 x 13/4	55 5/8	Bowers	1	31.3.11	30.0.2.14	30.0.0	28 12/20
	Fore Sails,	(State Machine where Tested, Date, & name of Superintendent.)							1	31.1.10	29.13.0.16	30.0.0	28 12/20
	Fore Top Sails,								1	25.3.0	25.8.0.14	25.2.0	25 4/20
	Fore Topmast Stay Sails												
	Main Sails,	Chain	90	1 1/6		1 1/6		Stream	...	1	12.0.9	12.0.0	
	Main Top Sails,	Hawser ...	90	10 1/2		11		Kedges	...	1	6.2.0	6.0.0	
		Towlines ...	90	8		7							
		Warp ...	90	6 1/2									
		quality <u>Good</u>											

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has Two Life Boats and Three others

The Windlass is Good Capstan Good and Rudder Good Pumps Good & Efficient

Engine Room Skylights. How constructed? Iron Casings & Lead Skylight over. How secured in ordinary weather? rolled down

What arrangements for deadlights in bad weather? Deadlights in each Sash

Coal Bunker Openings. How constructed? Iron Casings How are lids secured? by Iron bars Height above deck? 15 ins

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Ports & Scuppers cut in Bulkheads

Cargo Hatchways. How formed? of Iron

State size Main Hatch 17-6 x 9-6 Forehatch 10-0 x 7-0 Quarterhatch 13-0 x 9-6

If of extraordinary size, state how framed and secured? ✓

What arrangement for shifting beams? Shifting Beam in Hatches

Hatches, If strong and efficient? Yes

Order for Special Survey No. 1019

Date 16 Jan 1874

Order for Ordinary Survey No. ✓

Date ✓

No. 112 in builder's yard.

DATES of Surveys held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under Special Survey.
- 2nd. On the plating during the process of riveting 1874 July 10. 14. 16. 17. 24. 27. 30. Aug 3. 10. 12. 14. 18. 20.
- 3rd. When the beams were in and fastened, and before the decks were laid... 26. 28. Sep 1. 2. 7. 14. 18. 22. 25. 29. Oct 1. 14. 16. 19. 20.
- 4th. When the ship was complete, and before the plating was finally coated or cemented... 22. 28. Nov 10. 13. 19. 24. 30. Dec 4. 11. 14. 21. 29.
- 5th. After the ship was launched and equipped 1875 Jan 6. 20. Feb 11.

General Remarks (State quality of workmanship, &c.)

She is fitted with a double bottom in Fore and After Holds, also in Engine Room (two frame spaces excepted) of the united length of 184 feet. Side plate 7/16" thick, Top plates 6/16" thick. The Tanks have been efficiently tested. Satisfactory compensation is given for the break of the Double bottom in the Engine Room.

Monkey Forecastle 32 feet long, and Bridge deck about 40 ft long fitted Amidships.

She is well built, and worthy of the Class recommended. the Tracing of Midship Section approved by the Committee was attached to the report of Sister Vessel "Yrident" N<sup>o</sup> 12670.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement & Paint Outside Red lead & paint

I am of opinion this Vessel should be Classed 100 A. 1. Three Deck part double bottom

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

on 1770 Special Certificate ... £ 69 : 5 : : Feb 1875

(Travelling Expenses, if any, £ ✓).

Committee's Minute 26th February 1875

Character assigned 100 A. 1.

Double Bottom 2 Dks 3 Tiers of Beams. Iron on Iron deck

25/2/75