

IRON SHIP.

No. 25341 Survey held at Birkenhead Date, First Survey Jan 6/16 Last Survey Jan 5-1877
 On the Brigantine-S.S. "Sicily" Yard Number 437 Master J. Harbord

TONNAGE (under Tonnage Deck) 1564.49 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Poop, 49.46 SPAR, OR AWNING DECKED VESSEL.
 Ditto of Houses on Deck, 17.89
 Ditto of Forecastle 43.30
 Gross Tonnage 1675.14
 Less Crew Space 55.31
 Less Engine Room 536.04
 Register Tonnage as cut on Beam 1003.79

HALF BREADTH (moulded) 16.5
 DEPTH from upper part of Keel to top of Upper Deck Beams 25
 GIRTH of Half Midship Frame (as per Rule) 37.35
 1st NUMBER 70.85
 1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 2757
 LENGTH 275.8
 2nd NUMBER 21684
 PROPORTIONS—Breadths to Length 8 to 9 times
 Depths to Length—Upper Deck to Keel 11 to 12
 Main Deck ditto 11 to 12

Built at Birkenhead
 When built 1876 Launched Nov 54
 By whom built Laird & Co.
 Port belonging to Liverpool
 Destined Voyage Bombay via Glasgow
 If Surveyed while Building, Afloat, or in Dry Dock. Yes

LENGTH on deck as per Rule 275.8 BREADTH—Moulded 33 DEPTH top of Floors to Upper Deck Beams 23 Power of Engines 200 Horse, N°. of Decks with flat laid 2 N°. of Tiers of Beams 3
 Dimensions of Ship per Register, length, 275.8 breadth, 33.2 depth, 23

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. 9 x 5
 for Propeller 9 x 5
 Distance of Frames from moulding edge to moulding edge, all fore and aft 24

FRAMES, Angle Iron, for 1/2 length amidships 5 3/4 x 3
 Do. for 1/4 at each end 5 3/4 x 3
 REVERSED FRAMES, Angle Iron 3 1/2 x 3
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 24
 thickness at the ends of vessel 8
 depth at 1/2 the half-bdth. as per Rule 13
 height extended at the Bilges 48

BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 5 1/2 x 3
 Single or double Angle Iron on Upper edge 5 1/2 x 3
 Average space 24

BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8
 Single or double Angle Iron on Upper edge 8
 Average space 48

BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron 9
 Single or double Angle Iron on Upper edge 9
 Average space 12

KEELSONS Centre line, single or double plate, box, or Intercoastal Plates 10
 Rider Plate 9 1/2
 Bulb Plate to Intercoastal Keelson 5 1/2 x 4
 Angle Irons 5 1/2 x 4
 Double Angle Iron Side Keelson 5 1/2 x 4
 Side Intercoastal Plate 8
 do. Angle Irons 5 1/2 x 4
 Attached to outside plating with angle iron 3 1/2 x 3

BILGE Angle Irons 5 1/2 x 4
 do. Bulb Iron 5 1/2 x 4
 do. Intercoastal plates riveted to plating for length 5 1/2 x 4

BILGE STRINGER Angle Irons 5 1/2 x 4
 Intercoastal plates riveted to plating for length 5 1/2 x 4

SIDE STRINGER Angle Irons 5 1/2 x 4

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Iron Patent Pall Bitt —

The FRAMES extend in one length from Keel to Gunwale

The REVERSED ANGLE IRONS on floors and frames extend across middle line to Main deck stringer plate 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 1/10 in. diameter, averaging 5 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/16 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/16 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of 3 Strakes at Bilge for 1/2 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 7/16 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/16 in. diameter, averaging 3 1/2 ins. from cr. to cr.

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

Flat Keel Plates, breadth and thickness 36
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges 36
 of doubling at Bilge, or increased thickness, and length applied 10 x 11
 fin up. part of Bilge to l. edge of Sh'rstrake 8 x 9 ends

Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Main to Upper or Spar Dk. Sh'rstrake. 40
 Up. or Spar Dk Sh'rstrake, brdth & thickness 40

Butt Straps to outside plating, breadth & thickness 16 1/2 x 16 3/4
 Lengths of Plating 12 feet
 Shifts of Plating, and Stringers well arranged

Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness 40
 Angle Iron on ditto 5 1/2 x 4

Tie Plates fore and aft, outside Hatchways 14
 Diagonal Tie Plates on Beams No. of Pairs 14

Planksheer material and scantling Iron gutter
 Waterways do. do. 7 ends
 Flat of Upper Deck do. do. Complete Iron
 How fastened to Beams riveted

Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 37
 Is the Stringer Plate attached to the outside plating? Yes

Angle Irons on ditto, No. 2
 Tie Plates, outside Hatchways 14

Diagonal Tie Plates on Beams, No. of pairs 14
 Waterways materials and scantlings 3 1/4
 Flat of Middle Deck do. do. 1 1/2

How fastened to Beams nut & screw bolts
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 37
 Is the Stringer Plate attached to the outside plating? Yes

Angle Irons on ditto, No. 2
 Stringer or Tie Plates, outside Hatchways 14

Flat of Lower Deck 2
 Ceiling betwixt Decks, thickness and material 3
 in hold do. 2 1/2

Main piece of Rudder, diameter at head 7
 do. at heel 3 1/2
 Can the Rudder be unshipped afloat? Yes

Bulkheads No. 5 Thickness of plates 7
 Height up 3 to upper deck 22 to main 8 1/2
 How secured to sides of ship By double frames

Size of Vertical Angle Irons 3 1/2 x 3 1/2 and distance apart 30 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

IRON 467-0531

Builder's Signature, Laird & Co. Surveyor's Signature, E. Wheeler

Workmanship.

Do 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? *No*

Masts, Bowsprit, Yards, &c., are 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 *Foremast - (Iron) extreme length 76.0 x 22 dia. 2 plates in the sound 6/16 thick, 3 angle irons 3 x 2 1/2 x 5 1/4 the entire length, laps flush - single riveted & butts double riv. - Doubling plate 6/16 at partners.*
Mainmast - (Iron) 70 ft. 9 x 22 dia. Constructed same as foremast.
Others spars of Pine

NUMBER for EQUIPMENT 2383-2

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight, Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	129-17 1/2	13/4	55-10 tons	270-13 1/4	55-10 tons	Bowers	1	31-0-7	29-5-1-21	30-0-0	28-12-20 tons
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	142-3 1/2	13/4	55-10			Stream	1	12-0-0	12-0-0	12-0-0	12-0-0
	Fore Topmast Stay Sails	Hawser	90	1 1/16		90-1 1/16		Kedges	1	3-0-21	3-0-21	3-0-0	3-0-0
	Main Sails,	Towlines	300	6		90-11							
	Main Top Sails,	Warp	140	5		90-7							
		quality	140	4 1/2									

Standing and Running Rigging *wire & hemp* sufficient in size and *best* in quality. She has *three* Long Boats and in *good* order
 The Windlass is *Good* Capstans *Good* and Rudder *Good* Pumps & sluices fitted in each compartment

Engine Room Skylights. How constructed? *Leaky - fitted on Bridge* How secured in ordinary weather? *Catch bolts*

What arrangements for deadlights in bad weather? *Flaps to skylight.*

Coal Bunker Openings. How constructed? *Iron* How are lids secured? *With 1 screw bolt* Height above deck? *6' & some level*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Well supplied both in scuppers and Ports.*

Cargo Hatchways. How formed? *Iron Cornings*
 State size Main Hatch *24 ft x 10 ft* Fore hatch *10 ft square* Quarter hatch *10 ft square*
 If of extraordinary size, state how framed and secured? *Strong cross beams, & well secured.*

What arrangement for shifting beams? *—*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *627*

Date *4th July 1876*

Order for Ordinary Survey No. *—*

Date *—*

No. *437* in builder's yard.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the process of riveting
- 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 or cemented..
- 5th. After the ship was launched and equipped

During the whole time of building and fitting out.

General Remarks,

The upper deck is complete iron deck all fore and aft - 7/16 & 6/16 thick - seams lapped and single riveted, and butts triple riv. in midship body and double at ends.



The hold stringer in way of the Boilers is formed thus and is carried well over and also well connected to the stringer plate at each end of it.

Has a full fore-castle 40 feet long, beams 5 1/2 x 3 x 5/16 angle irons at every frame, on a an iron deck over same 6/16 & 7/16 thick; also a full Poop 40 ft long, beams single angle irons 6 x 3 x 5/16, stringer plate 32 x 5/16, and deck of pine 3" thick.

Is well built and thoroughly equipped.

State if ~~one, two or three~~ decked vessel, or if ~~spar or awning~~ decked, and lengths of poop, fore-castle *40 feet* or of double or part double bottom. *40 feet*

How are the surfaces preserved from oxidation? Inside *Portland Cement in bottom and* Outside *Red lead & other Paint*

I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee ... £ 5 : : is received by me, *cf*
 Special ... £ 65 : 10 : *15/4 - 1877*
 Certificate ... *10* *Guineas*

Machining
 (Travelling Expenses)
 (if any) £ *—*
 Committee's Minute *Liverpool Jan 16 1877.*

Character assigned *100 A 1* Built under Sp. S. Survey.
Record (A&S P) Classing 76 and Lloyd's M.C. 177 (Red)

Le C. Wheeler

This vessel appears eligible to be classed as recommended

100 A 1. 2 decks
Mondeck 30 9/16
Lloyd's M.C. 177 (Red)
1877