

IRON SHIP.

Re 10/7/73

No. 3685 Survey held at Dumbarton Date, First Survey 2nd July 72 Last Survey 9 July 1873

On the Spar decked St Julio Diniz Yard Number 44 Master J Contente

TONNAGE under Deck } 724.15
 Ditto of Third Spar, } 377.77
 or Awning Deck }
 Ditto of Poop, or }
 Raised Or. Dk. }
 Ditto of House } 5.50
 on Deck }
 Ditto of Foremast }
 Gross Tonnage 1107.42
 Less Crew Space }
 for fees 1101.92
 Less Engine Room } 354.37
 Register Tonnage } 747.55
 as cut on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded) ... 14.65 Feet.
 DEPTH from upper part of Keel to top of Main Upper Deck Beams 17.66
 GIRTH of Half Midship Frame (as per Rule) ... 28.34
 1st NUMBER ... 6085
 1st NUMBER, if a THREE DECKED VESSEL deduct 7 feet
 LENGTH ... (1871 Rules) 233
 2nd NUMBER ... 1470
 PROPORTIONS—Breath to Length ... Under 8.
 Depths to Length—Upper Deck to Keel ...
 Main Deck ditto ... Under 14.

Built at Dumbarton
 When built 1872.3 Launched 29 March
 By whom built J R Swan
 Owners Progresso Maritimo do Porto
 Port belonging to Oporto
 Destined Voyage Blas Oporto
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 233 Feet. Inches. BREADTH—Moulded ... 29.3 Feet. Inches. DEPTH top of Floors to Upper Deck Beams ... 23.41 Feet. Inches. Do. do. Main Deck Beams ... 16.16 Feet. Inches. Power of Engines ... X Horse. No. of Decks with flat laid 3 No. of Tiers of Beams 3

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<u>8 x 2 1/2</u>	<u>8 x 2 3/8</u>						
STEM, moulding and thickness	<u>7 1/2 x 2 1/2</u>	<u>7 1/2 x 2 3/8</u>						
STERN-POST for Rudder do. do. for Propeller	<u>8 1/2 x 4</u>	<u>8 1/2 x 4</u>						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>23</u>	<u>23</u>						
FRAMES, Angle Iron, for 1/2 length amidships Do. for 1/4 at each end	<u>3 1/2</u>	<u>3</u>	<u>7</u>	<u>3 1/2</u>	<u>3</u>	<u>7</u>	<u>3 1/2</u>	<u>3</u>
REVERSED FRAMES, Angle Iron	<u>3</u>	<u>2 1/2</u>	<u>6</u>	<u>3 1/2</u>	<u>3</u>	<u>6</u>	<u>3 1/2</u>	<u>3</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 1/2 the half-bdth. as per Rule height extended at the Bilges...	<u>10</u>	<u>7</u>	<u>17 1/2</u>	<u>7</u>	<u>6</u>	<u>35</u>	<u>6</u>	<u>6</u>
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron Average space...	<u>6</u>	<u>6.5</u>	<u>6</u>	<u>6.5</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>
BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron Average space...	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>
BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron Average space...	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>
KEELSONS Centre line, single or double plate, box or intercostal, Plates Rider Plate Bulb Plate to Intercostal Keelson Angle Irons Double Angle Iron Side Keelson Side Intercostal Plate do. Angle Irons Attached to outside plating with angle iron	<u>23</u>	<u>7</u>	<u>23</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>
BILGE Angle Irons do. Bulb Iron do. Intercostal plates riveted to plating for length	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>
BILGE STRINGER Angle Irons Intercostal plates riveted to plating for length, also forward	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>
SIDE STRINGER Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>	<u>7</u>	<u>5</u>	<u>3 1/2</u>
Transoms, material. Knight-heads. Hawse Timbers.								
Windlass Iron Patent Pall Bitt								

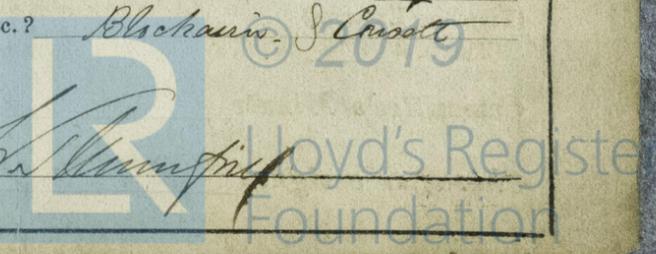
Dimensions of Ship per Register, length, 244 breadth, 29.5 depth, 16.05 *x Will be forwarded*

Flat Keel Plates, breadth and thickness ... 30 10.9 30 10.9
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied *See upper bilge intercostal*
 fm up. part of Bilge to Ir. edge of Sh'rstrake 9.0 9.0
 Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied 30 13.9 30 13.9
 from Mn. to Upper or Spar Dk. Sh'rstrake. 6 6
 Upper Spar Dk Sh'rstrake, brdth & thickness 45 9.0 30 9.0
 Butt Straps to outside plating, breadth & thickness 18 1/2 10 1/2 14.0 16 1/2 10 1/2 14.0
 Lengths of Plating ... 60 60
 Shifts of Plating, and Stringers ... 2
 Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness ... 40 7 46 1/4 7
 Angle Iron on ditto ... 3 1/2 3 1/2 3 1/2 3 1/2
 Tie Plates fore and aft, outside Hatchways 10 11 7 11 7
 Diagonal Tie Plates on Beams No. of Pairs
 Planksheer material and scantling *See* 11 3 1/2
 Waterways do. do. 3 3
 Flat of Upper Deck do. *P.P.* 3 3
 How fastened to Beams *Auto Secured*
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 47 1/2 10 46 1/4 10
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2
 Tie Plates, outside Hatchways 11 9 11 9
 Diagonal Tie Plates on Beams, No. of pairs
 Waterways materials and scantlings *See* 9 3 1/2
 Flat of Middle Deck do. *P.P.* 3 1/2 3 1/2
 How fastened to Beams *M.S. Secured*
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... 20 1/2 0 20 1/2 0
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2
 Stringer or Tie Plates, outside Hatchways 11 0 11 0
 Flat of Lower Deck ... 2 1/2 2 1/2
 Ceiling betwixt Decks, thickness and material in hold do. do. *P.P.* 2 1/2 2 1/2
 Main piece of Rudder, diameter at head 5 1/2 3 1/4
 do. at heel 3 1/2 3
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. 4 Thickness of 3/16
 Height up Upper & Middle deck after me covered at 10
 How secured to sides of ship Double frames except for one which has single frames and bolts
 Size of Vertical Angle Irons 3 x 3 1/2 x 6 and distance apart 30 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from Keel to Spar deck Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend across the middle line to Spar deck, stringer and above main deck alternately for one third the vessel's length amidships, the rest alternately to above main and lower decks. (See remarks)
 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 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.
 Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 for 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 3 1/2 4 1/2 Breadth of laps of plating in single riveting 3 1/2 2 1/4
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double and part treble riveted
 Waterway, how secured to Beams Auto Secured (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Sized bracket knees No. of Breasthooks, 5 Crutches, 4
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Blochain's
 Manufacturer's name or trade mark, Consett

The above is a correct description.
 Builder's Signature, J R Swan Surveyor's Signature, H. Mansfield

IRON SHIP-0401



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? Solid pieces
 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 at corners of butts 11619 Jan

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
Parts of Patch Pine

$14.65 + 24.91 + 35.79 = 75.35 =$
 $75.35 \times 233 =$

NUMBER for EQUIPMENT 17336 Date of contract 10th May 1873 Dates of Tests 10th & 10th March 1873

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c. Tons.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	136.42	1 9/16	44	270 1/8	123 1/2		320	24.1.24	24.6.1	23 1/2	23 1/2
	Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)	136.42	1 9/16	44	270 1/8	123 1/2		320	24.1.16	24.6.1	23 1/2	23 1/2
	Fore Topmast Stay Sails	Heppen Stream Cable	91.2	1	10.	90	1		321	24.2.14	22.1.14	19.3.25	20 1/2
	Main Sails,	Hawser	90	9 1/2		92			323	10.2.7		10	
	Main Top Sails,	Towlines	90	6		6			322	5.		5	
	and	Warp							319	2.2.4		2 1/2	
		quality											

Standing and Running Rigging is Warshump sufficient in size and good in quality. She has Six Long Boat Pumps
 The Windlass is New Patent Capstan Iron and Rudder Good Pumps Good
Engine Room Skylights.—How constructed? Iron Cornings How secured in ordinary weather? by screws
 What arrangements for deadlights in bad weather? Portable boards with lynchpins
Coal Bunker Openings.—How constructed? On spar deck How are lids secured? by bolts Height above deck? Four
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? The vessel has only scupper openings

Cargo Hatchways.—How formed? Iron Cornings
 State size Main Hatch 11 x 7 1/2 Forehatch 7 1/2 x 6 Quarterhatch 11 x 4 1/2
 If of extraordinary size, state how framed and secured? Part of extraordinary size
 What arrangement for shifting beams?
Hatches, If strong and efficient? Yes

Order for Special Survey No. 858 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Sept 72. 3rd 6. 10. 13
 Date 25th June 1873 Surveys held 2nd. On the plating during the progress of riveting Oct 4. 11. 15. 18. 22. 28. 30. Nov 7. 11. 14. 18
 Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid 21. 25. 28 Dec 2. 5. 9. 12. 17.
 Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented Jan 73. 9. 13. 20. 23
 No. 44 in builder's yard. Section 18. 5th. After the ship was launched and equipped 27. 31 Feb 4. 7. 11. 14. 18. 21 Mar 3. 6. 10. 13. 14. 18. 24.
Mar 27. Apr 4. May 19. 26. June 3. 10. 19. 23. 25. July 9. 1873

General Remarks,
 This vessel has been built in accordance with the accompanying
 drawings section and sheer tracing as approved by Secretary's letter
 dated 14th June '72 and the requirements contained therein, in account
 of the erections on the spar deck, have been carried out as proposed.

This is a — and — vessel, or if spar — decked, and length of poop, forecabin or raised quarter deck, or of double or part double bottom.
 How are the surfaces preserved from oxidation? Inside Cement and Paints Outside Paints
 I am of opinion this Vessel should be Classed +100A Spar decked

The amount of the Entry Fee ... £ 5 : : : is received by me,
 Special ... £ 52 : : :
 Certificate ... Gratis
 (Travelling Expenses) (if any) £ 4.4.0
 Committee's Minute 11th July 1873
 Character assigned 100A Spar decked
M.C.
AICP
HPW
 This vessel appears to be eligible to Class as recommended, viz. 100A.1. "Spar decked"
10/7/73