

# IRON SHIP.

No. 2443 Survey held at Greenock Date, First Survey 20<sup>th</sup> Decem<sup>r</sup> 1877 Last Survey 20<sup>th</sup> June 1878  
 in the Ship Persian Master Walter Guthrie 1870

Tonnage under Deck	1324.10	ONE OR TWO DECKED, THREE DECKED VESSEL.	BUILT AT <u>Greenock</u>
Tonnage of Third, Spar, Awning Deck.		SPAR, OR AWNING DECKED VESSEL.	When built <u>1870</u> Launched <u>30<sup>th</sup> May 70</u>
Tonnage of Poop, Fore-castle, and Quarter Deck.	66.55	HALF BREADTH (moulded) ... ..	By whom built <u>Scott &amp; Co</u>
Ditto of Houses on Deck	16.45	DEPTH from upper part of Keel to top of Upper Deck Beams	Owners <u>Wm Orr</u>
Ditto of Fore-castle	44.89	GIRTH of Half Midship Frames (as per Rule)	Port belonging to <u>London</u>
Gross Tonnage	1451.99	1st NUMBER ... ..	Destined Voyage <u>India</u>
Less Cabin Space	65.43	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]	Surveyed while Building, Afloat, or in Dry Dock.
Less Engine Room	1306.56	LENGTH ... ..	
Register Tonnage as cut on Beam		2nd NUMBER ... ..	
		PROPORTIONS—Breathths to Length	
		Depths to Length—Upper Deck to Keel	
		Main Deck ditto	

PLANS CASE

LENGTH on deck as per Rule	Feet. Inches.		BREADTH—Moulded	Feet. Inches.		DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.		Power of Engines	Horse.	N <sup>o</sup> . of Decks with flat laid	N <sup>o</sup> . of Tiers of Beams
	232			37			22.503					
Dimensions of Ship per Register, length, <u>244.8</u> breadth, <u>37.2</u> depth, <u>22.5</u>												
KEEL, depth and thickness	9 x 2 1/2		9 x 2 1/2									
STEM, moulding and thickness	8 1/2 x 2 1/2		8 1/2 x 2 1/2									
STERN-POST for Rudder for Propeller	8 1/2 x 2 1/2		8 1/2 x 2 1/2									
Distance of Frames from moulding edge to moulding edge, all fore and aft	24											
FRAMES, Angle Iron, for 3/4 length amidships Do. for 1/2 at each end	5 3		5 3		0 5 3		0 5 3					
REVERSED FRAMES, Angle Iron	3 1/2 3		3 1/2 3		0 3 1/2		0 3 1/2					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 1/4 the half-bdth. as per Rule height extended at the Bilges.	24		24		10 24		10 24					
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space	8 1/2 6		8 1/2 6		0 8 1/2		0 8 1/2					
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space	9 6		9 6		9 9		9 9					
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	17		17		12 17		12 17					
BILGE Angle Irons do. Bulb Iron do. Intercostal plates riveted to plating for length	5 4		5 4		9 5		9 5					
BILGE STRINGER Angle Irons Intercostal plates riveted to plating for length	5 4		5 4		9 5		9 5					
SIDE STRINGER Angle Irons	5 4		5 4		9 5		9 5					
Transoms, material. Knight-heads. Hawse Timbers.									Iron			
Windlass									Iron Patent Pat Bitt			

Flat Keel Plates, breadth and thickness	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, increased thickness, and length applied	36	11	36	11
fm up. part of Bilge to lr. edge of Sh'rstrake	10		10	
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness	40	12	40	12
Butt Straps to outside plating, breadth & thickness	1 1/4	11/16	2 x 1 1/4	11/16
Lengths of Plating	6	11/16	5	11/16
Shifts of Plating, and Stringers	2	11	2	11
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,				
Planksheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.				
How fastened to Beams				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	46	10	46	10
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	5 x 4 x 9			
Tie Plates, outside Hatchways	13 10			
Diagonal Tie Plates on Beams, No. of pairs	13 10			
Waterways materials and scantlings	Gutter 4			
Flat of Middle Deck do. do.	4 Pine 4			
How fastened to Beams	Green Bolted nuts			
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	33	9	33	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	4 x 4 x 9			
Stringer or Tie Plates, outside Hatchways	13 10			
Flat of Lower Deck do. do.	13 10			
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2 x 10/16 copper iron			
Main piece of Rudder, diameter at head do. at heel	2 1/2 Pine 2 1/2 3			
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. Thickness of	1 1/2 9/16			
Height up	Main Deck			
How secured to sides of ship	Double frames			
Size of Vertical Angle Irons and distance apart	3 3/4 x 3 x 7/8 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 Gunwall Riveted through plates with 7/8 in. Rivets, about 7 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to on every frame and to Main Deck 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 1/2 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 7/8 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 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 7/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 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 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 1 length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1 length.

Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting 1

Butt Straps of Keelsons, Stringer and Tie Plates, treble or single Riveted? Single

Waterway, how secured to Beams Iron Gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, 5 Crutches, 5

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best

Manufacturer's name or trade mark Angle Iron. Mossend. Plates. Consett

The above is a correct description.

Builder's Signature, Scott & Co Surveyor's Signature, H. J. S. 1878

Surveyor to Lloyd's Register of British and Foreign Ship,

1878-0020

**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? *Very few* 21247 Iron

Masts, Bowsprit, Yards, &c., are *Iron* 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 22" dia 31 Main 25.4 dia 31 Mizzen 70" dia 20"*  
*Fore & Main Masts Bowsprit 24" dia 30 In 3 plates edges double riveted butt straps outside*  
*Mizzen Mast 76" dia 16 thicker than plates and treble & double riveted 3 angle Iron in each all throughout*  
*76" dia 3 1/2 x 3 x 7/16 in Bowsprit 4 x 3 1/2 x 7/16 and plates doubled in way of*  
*wedging*

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate	Length & Size req'd per Rule	Test req'd per Rule	ANCHORS.		Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule	Test req'd per Rule
								N <sup>o</sup> .	Weight.				
	Fore Sails,	Chain	135.4	3 1/2	63 1/2 x 10 1/2	270 fms	63 1/2 x 8 1/2	27 Bowers	6135	33.2.7	31.6.3.16	34.0.0	31.12.20
	Fore Top Sails,	Wetherin	134.2	3	63 1/2 x 10 1/2	176	63 1/2 x 8 1/2	27 1/2	6141	34.3.10	32.5.2.10	20.3.17	27.16.20
	Fore Topmast Stay Sails	Wetherin						27 1/2	6130	29.1.2	20.3.0.14		
	Main Sails,	Hampm Strm Cbl	60	1	10 x 27			27 1/2	6139	11.1.0	13.5.0.0	13.2.0	
	Main Top Sails,	Hawser	90	1 1/2		10		Stream	6127	5.2.20	0.0.0	6.3.0	
	and	Towlines	90	1 1/2		6		Kedges	6136	2.1.10	5.0.0	3.1.0	
		Warp	90	1 1/2									

Standing and Running Rigging *Wine hempen* sufficient in size and *good* in quality. She has *2* Life Long Boats and *others*  
 The Windlass is *Harfield Patent* 2 Capstans *Winches* and Rudder *Efficient* Pumps *2 Patent*

Engine Room Skylights.—How constructed? \_\_\_\_\_ How secured in ordinary weather? \_\_\_\_\_

What arrangements for deadlights in bad weather? \_\_\_\_\_

Coal Bunker Openings.—How constructed? \_\_\_\_\_ How are lids secured? \_\_\_\_\_ Height above deck? \_\_\_\_\_

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Pots & scuppers*

Cargo Hatchways.—How formed? *Sun Camings*

State size Main Hatch *16'0" X 10'0"* Forehatch *8'0" X 6'0"* Quarterhatch *8'0" X 6'0"*

If of extraordinary size, state how framed and secured? \_\_\_\_\_

What arrangement for shifting beams? *One shifting beam in main hatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *115* Date *19th March 1877*  
 Order for Ordinary Survey No. \_\_\_\_\_ Date \_\_\_\_\_  
 No. *102* 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 S.S. and surveyed 1877*  
 2nd. On the plating during the process of riveting *Dec 20, Jan 4, 1878, 17, 26, 30, 31, Feb 4, 7*  
 3rd. When the beams were in and fastened, and before the decks were laid... *12, 27, March 5, 20, 28, April 5, 16, 29*  
 4th. When the ship was complete, and before the plating was finally coated or cemented... *May 7, 22, 29, June 4, 8, 12, 20*  
 5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *This vessel has been built in conformity with the Rules, and Midship section and longitudinal plans herewith appended, which were submitted and approved by the Committee in letter dated 16th Nov 1877. The workmanship and materials are of good quality.*

Fore & Main Lower Yards *70ft dia 19 1/2 6 5/16*  
 1<sup>o</sup> Lower Topmast *60ft dia 17 5/16*  
 Cross Jack Yard *64ft dia 16 1/2 5 5/16*  
 In 2 plates edges single riveted, *butts overlapped* and treble riveted with 2 angle Iron in each all throughout *3 x 3 x 7/16* and 2 additional for *12ft in centre and plates doubled in way of being*

State if one, two, or three, decked vessel, or if open, or running decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Portland cement to above belt* Outside *Red lead & Paint & Composition*  
 I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *[Signature]*  
 Special ... £ 59 : 13 : 0 *28 June 1878*  
 Certificate ... £ 0 : 0 : 0  
 (Travelling Expenses, if any, £ \_\_\_\_\_)

Committee's Minute *2nd July 1878*

Character assigned *100 A 1*  
*[Signature]*  
 This vessel appears to be classed as recommended viz. *100 A 1*  
 Lloyd's Register Foundation