

IRON SHIP.

No. 4443 Survey held at Greenock
in the Ship Persian

Date, First Survey 20th Decem^r 1877 Last Survey 20th June 1878

1878

Master Walter Guthrie

TONNAGE under
Tonnage Deck
of Third, Spar,
Awning Deck.
of Poop, or
of Quarter Deck

1324.10
66.55
16.45
44.89
1451.99
65.43
1306.56

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.

HALF BREADTH (moulded) 18.5
DEPTH from upper part of Keel to top of Upper Deck Beams 24.503

GIRTH of Half Midship Frame (as per Rule) 36.854

1st NUMBER 49937

1st NUMBER, if a THREE-DECKED VESSEL 49937

LENGTH 232

2nd NUMBER 10,546

PROPORTIONS—Breadths to Length 6.27

Depths to Length—Upper Deck to Keel 9.43

Main Deck ditto 9.43

Built at Greenock

When built 1870 Launched 30th May 70

By whom built Scott & Co

Owners Wm Orr

Port belonging to London

Destined Voyage India

Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 232 BREADTH Moulded 37 DEPTH top of Floors to Upper Deck Beams 22.503 Power of Engines 2 Horse. 2 N^o. of Decks with flat laid Two N^o. of Tiers of Beams Two

Dimensions of Ship per Register, length 244.8 breadth 37.2 depth 22.5

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 x 2 1/2	9 x 2 1/2	FLAT KEEL PLATES, breadth and thickness	36	11
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	PLATES in Garboard Strakes, breadth and thickness	36	11
STERN-POST for Rudder, do.	8 1/2 x 2 1/2	8 1/2 x 2 1/2	ness from Garboard to upper part of Bilges	10	10
for Propeller	24	24	of doubling at Bilge, increased thickness, and length applied	3 plates, 11	3 plates, 11
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	fin up. part of Bilge to lr. edge of Sh'rstrake	10	10
FRAMES, Angle Iron, for 3/4 length amidships	5 3/4	5 3/4	Main Sheerstrake, breadth and thickness	40	12
Do. for 1/4 at each end	5 3/4	5 3/4	of d'bling at Sh'rstrake, & length applied	—	—
REVERSED FRAMES, Angle Iron	3 1/2	3 1/2	from Mn. to Upr. or Spar Dk. Sh'rstrake.	—	—
FLOORS, depth and thickness of Floor Plate	24	24	Up. or Spar Dk Sh'rstrake, brdth & thickns	—	—
at mid line for half length amidships	24	24	Butt Straps to outside plating, breadth & thickness	11 1/2 x 11 1/2	11 1/2 x 11 1/2
thickness at the ends of vessel	12	12	Lengths of Plating	6 spans	6 spans
depth at 3/4 the half-bdth. as per Rule	12	12	Shifts of Plating, and Stringers	2	2
height extended at the Bilges	52	52	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	—	—
BEAMS, Upper, Spar, or Awning Deck	—	—	Angle Iron on ditto	—	—
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	Tie Plates fore and aft, outside Hatchways	—	—
Single or double Angle Iron on Upper edge	—	—	Diagonal Tie Plates on Beams No. of Pairs	—	—
Average space	40	40	Planksheer material and scantling	—	—
BEAMS, Main, or Middle Deck	—	—	Waterways do. do.	—	—
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	Flat of Upper Deck do. do.	—	—
Single, or double Angle Iron, on Upper Edge	—	—	How fastened to Beams	—	—
Average space	40	40	Stringer Plate on ends of Main or Middle Deck	46	10
BEAMS, Lower Deck, Hold, or Orlop	—	—	Beams, breadth and thickness	46	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	Is the Stringer Plate attached to the outside plating?	Yes	Yes
Single or double Angle Iron on Upper Edge	—	—	Angle Irons on ditto, No. me	5 x 4 x 9	5 x 4 x 9
Average space	40	40	Tie Plates, outside Hatchways	13	10
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	17	17	Diagonal Tie Plates on Beams, No. of pairs	4	4
" Rider Plate	10 3/4	10 3/4	Waterways materials and scantlings	—	—
" Bulb Plate to Intercostal Keelson	5	5	Flat of Middle Deck do. do.	—	—
" Angle Irons	5	5	How fastened to Beams	—	—
" Double Angle Iron Side Keelson	5	5	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	33	9
" Side Intercostal Plate	5	5	Is the Stringer Plate attached to the outside plating?	Yes	Yes
" do. Angle Irons	5	5	Angle Irons on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
" Attached to outside plating with angle iron	3 1/2	3 1/2	Stringer or Tie Plates, outside Hatchways	13	10
BILGE Angle Irons	5	5	Flat of Lower Deck do. do.	—	—
" do. Bulb Iron	5	5	Ceiling betwixt Decks, thickness and material	2 1/2 x 10/16	2 1/2 x 10/16
" do. Intercostal plates riveted to plating for length	5	5	in hold do. do.	2 1/2 x 10/16	2 1/2 x 10/16
BILGE STRINGER Angle Irons	5	5	Main piece of Rudder, diameter at head	6	6
Intercostal plates riveted to plating for length	5	5	do. at heel	3	3
SIDE STRINGER Angle Irons	5	5	Can the Rudder be unshipped afloat?	Yes	Yes
Transoms, material. Knight-heads. Hawse Timbers.	Sum	Sum	Bulkheads No. one Thickness of 7/16	7/16	7/16
Windlass Iron Patent Pat Bitt	—	—	Height up Main Deck	—	—

The FRAMES extend in one length from Keel to Gunwale 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 — length amidships.

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

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

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

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. Consitt

The above is a correct description.

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

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

120474-0020

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 82' 10" dia 31 Main 85.4 dia 31 Mizzen 70' 10" dia 28*
Fore & Main Masts & Bowsprit 2 1/2" Bowsprit 19 dia 30 In 3 plates edges double riveted, butt straps outside
Mizzen Mast - 1/16 thicker than Plates and treble & double riveted 3 angle Iron in each all throughout
3 1/2 x 3 x 7/16 in Bowsprit 4 x 3 1/2 x 7/16 and plates doubled in way of

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate	Length & Size req'd pr Rule	Test req'd per Rule	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule	Test req'd per Rule
N°.	SAILS.	CABLES, &c.										
	Fore Sails,	Chain	135.4	1 1/2	63 1/2 x 10 1/2	270 fms	27 Bowers	6135	33.2.7	31.6.3.14	34.0.0	31.12
	Fore Top Sails,		134.2	1 1/2	63 1/2 x 10 1/2	1 1/2		6141	34.3.10	32.5.2.10		20
	Fore Topmast Stay Sails							6130	29.1.2	20.3.0.4	20.3.7	27 16
	Main Sails,											
	Main Top Sails,											
	and											

Standing and Running Riggings *Wire & 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? How are lids secured? Height above deck?

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"* Fore hatch *8' 0" x 6' 0"* Quarter hatch *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. <i>87</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.I. and Surveyed 1877</i>
Date <i>19th March 1877</i>	2nd. On the plating during the process of riveting	<i>Dec 20, Jan 1/2 1878, 17, 26, 30, 31, Feb 4, 7</i>
Order for Ordinary Survey No. <i>2</i>	3rd. When the beams were in and fastened, and before the decks were laid....	<i>12, 27, March 5, 20, 28, April 5, 16, 29</i>
Date <i>✓</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>May 7, 22, 29, June 4, 8, 12, 20...</i>
No. <i>102</i> in builder's yard.	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 5 to 4/16 In 2 plates edges single riveted, butt straps outside
10' Lower Topmast 60ft dia 17 1/2 5 to 4/16 and treble riveted with 2 angle Iron in each
Cross Jack Yard 64ft dia 16 1/2 5 to 4/16 all throughout 3 x 3 x 7/16 and 2 additional for 12ft in centre and plates doubled in way of ship's keel

State if one, two, or three, decked vessel, or if open, or running decked; and the lengths of poop, forecabin, 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 bulwark* Outside *Red lead & Paint & Composition*
I am of opinion this Vessel should be Classed *100 A1*

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, £) *£ 64 : 13 : 0*

Committee's Minute *2nd July 1878*
Character assigned *100 A1*
Two dks
This vessel appears eligible to be classed as recommended viz. 100 A1
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