

IRON SHIP.

13457

No. 10960 Survey held at Sunderland Date, First Survey 29th April 1874 Last Survey 24th Oct 1874

On Iron Ship "Foyles" Yard Number 141 Master James Hamilton

TONNAGE under 1519.39 ONE, OR TWO DECKED, THREE DECKED VESSEL. Built at Sunderland

Ditto of Third, Sec'd, or Awaiting Deck. 90.34 HALF BREADTH (moulded)... 19.25 When built 1874 Launched 12th Sept

Ditto of Poop, 11.15 DEPTH from upper part of Keel to top of Upper Deck Beams 26.50 By whom built J.R. Oswald

Ditto of Houses on Deck... 40.96 GIRTH of Half Midship Frame (as per Rule)... 85.75 Owners J. House

Ditto of Forecastle 1661.34 1st NUMBER... 234.10 Port belonging to London

Gross Tonnage 57.65 1st NUMBER, if a THREE DECKED VESSEL deduct 7 feet... 20,065 Destined Voyage Calcutta (direct)

Less Crew Space 1610.70 2nd NUMBER... 20,065 Surveyed while Building, Afloat, or in Dry Dock

Less Engine Room 1610.70 PROPORTIONS—Breadths to Length... Under 7

Register Tonnage as cut on Beam 1610.70 Depths to Length—Upper Deck to Keel Under 9

Length on deck as per Rule... 234 Breadth Moulded... 38 6 DEPTH top of Floors to Upper Deck Beams... 24 5 Power of Engines... ✓ N° of Decks with flat laid ✓

Dimensions of Ship per Register, length, 244.3 breadth, 38.8 depth, 24.3 N° of Tiers of Beams ✓

KEEL, depth and thickness... 9 1/2 x 2 1/2 Inches in Ship. Inches per Rule. 9 1/2 x 2 1/2

STEM, moulding and thickness... 9 x 2 1/2 STEERN-POST for Rudder do. do. 9 x 2 1/2

Distance of Frames from moulding edge to moulding edge, all fore and aft... 24 (Class 100A)

FRAMES, Angle Iron, for 1/2 length amidships... 5 3/2 Do. for 1/2 at each end... 5 3/2

REVERSED FRAMES, Angle Iron... 3 1/2 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships... 25 10

thickness at the ends of vessel... 9 1/2 depth at 1/2 the half-bath, as per Rule... 12 1/2

height extended at the Bilges... 12 1/2 BEAMS, Upper, Spar, or Awaiting Deck... 9 9

Angle or double Angle Iron, Plate or Tee Bulb Iron... 3 1/2 3 7 Average space... alternate frames

BEAMS, Main or Middle Deck... 9 9 Single or double Angle Iron, Plate or Tee Bulb Iron... 3 1/2 3 7

Angle, or double Angle Iron, on Upper Edge... 3 1/2 3 7 Average space... alternate frames

BEAMS, Lower, Spar, or Awaiting Deck... 9 9 Angle or double Angle Iron, Plate or Tee Bulb Iron... 3 1/2 3 7

Angle, or double Angle Iron, on Upper Edge... 3 1/2 3 7 Average space... alternate frames

KEELSONS Centre line, single or double plate, 25 8 Rider Plate... 9 1/2 9 1/2

Bulb Plate to Intercoastal Keelson... 5 1/2 4 9 Angle Irons... 5 1/2 4 9

Double Angle Iron Side Keelson... 3 1/2 3 7 Side Intercoastal Plate... 3 1/2 3 7

do. Angle Irons... 3 1/2 3 7 Attached to outside plating with angle iron... 3 1/2 3 7

ALICE Angle Irons... 5 1/2 4 9 Bulb Iron... 5 1/2 4 9

do. Intercoastal plates riveted to plating for length... 5 1/2 4 9

BILGE STRINGER Angle Irons... 5 1/2 4 9 Intercoastal plates riveted to plating for length... 5 1/2 4 9

IDE STRINGER Angle Irons... 5 1/2 4 9 Bulb Iron... 5 1/2 4 9

ransoms, material, Knight heads, Hawse Timbers... None Required

indlass Sargfield's Patent Pall Bitt None Required

FRAMES extend in one length from Keel to Gunnwale

REVERSED ANGLE IRONS on floors and frames extend from middle line to Hold Beam Stringer and to Up^d Deck

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 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1 1/8 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 1 1/6 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1 1/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1 1/8 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. Single Up^d; double Down^d

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

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

Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting Nil

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

Waterway, how secured to Beams Butt Straps (Explain by Sketch, if necessary.) to frames

Beams of the various Decks, how secured to the sides? Ends turned down No. of Breasthooks, 2 Crutches, 2

What description of Iron is used in frames, floors, keelsons, tie, and stringer plates, outside plating, &c. Best quality

Manufacturer's name or trade mark, W. & A. Mitchell

The above is a correct description.

Builder's Signature, James Hamilton Surveyor's Signature, Joseph Keen

1874

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Workmanship. Are the butts of plating planed or otherwise fitted?

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the facing side?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are Iron and Steel 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 89 ft long, 30 in diameter at partners. Main Mast 89 ft long, 28 in diameter at partners. Bowsprit length 25 ft - 31 ft diameter at bed.

These are all new and made of Iron. The foremast yard is also made of Iron length 63 ft. diameter at slip 15 in. The three topmasts and all the yards from upper topmast including downwinds are of steel and formerly belonged to the S.S. "Southern" for detailed particulars see annexed sketch and sketches on tracing cloth.

NUMBER for EQUIPMENT 22071		Fathoms.	Inches.	Test per Certificate.	Length & Size reg'd or Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.										
Two	Fore Sails,	Chain	270	1 1/8	67% tons	67% 10	Bowers	1152	31.2.0	33.8.3.0	36.2.0	33 3/20 tons
Complete	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)						1153	31.1.10	33.7.0.21	36.2.0	33 3/20 tons
	Fore Topmast Stay Sails	Hmpn Strm Cbl	90	1 1/8	1 1/8	1 1/8						
Auto	Main Sails,	Hawser	90	1 1/8	11	11						
and	Main Top Sails,	Towlines	90	10	10 1/2	10 1/2	Stream	1154	31.2.0	29.15.0.0	31.0.3	29 3/20 tons
		Warp	90	1 1/8	6 1/2	6 1/2	do - one	1155	31.2.0	29.15.0.0	31.0.3	29 3/20 tons
		quality	90	1 1/8	6 1/2	6 1/2	Kedges	1156	31.2.0	29.15.0.0	31.0.3	29 3/20 tons

Standing and Running Rigging Fore and Aft sufficient in size and Good in quality. She has two Life Long Boats and five others.

The Windlass is Efficient - Self Capstans Good and Rudder Efficient - Pumps Good and Self - Two Mains and two Pumps all in good order.

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? In addition to the scuppers she is fitted with eight large ports and four mousing pipes also available for freeing the deck of water.

Cargo Hatchways. - How formed? Iron plates and angles in the ordinary manner.

State size Main Hatch 16 ft long 9 ft wide - Fore hatch 7 ft long 6 ft wide Quarter hatch 8 ft long by 6 ft wide

If of extraordinary size, state how framed and secured? The main hatch is divided into two by a substantial cross

What arrangement for shifting beams? Skew - and one half braced over. The side (main) plating

Hatches, If strong and efficient? They are.

Order for Special Survey No. <u>2482</u>	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	<u>Built under S.S. and Surveyed 1874 April 29 May 1 1874 June 19 22 24 26 28 30</u>
Date <u>27 March 74</u>		2nd. On the plating during the process of riveting	<u>June 22 24 26 28 30 July 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 August 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31</u>
Order for Ordinary Survey No. <u>141</u>		3rd. When the beams were in and fastened, and before the decks were laid	<u>Oct 2 11 20 29</u>
Date		4th. When the ship was complete, and before the plating was finally coated or cemented	
No. <u>141</u> in builder's yard		5th. After the ship was launched and equipped	

General Remarks, (State quality of workmanship &c.) The workmanship of this vessel is strong and efficient. She has been built under Special Survey in accordance with the scantlings and arrangements, shown on the accompanying approved plan of midship section and with the requirements of the rules - excepting that the twelve deck double angle iron side stringers required, has not been fitted, as compensation for which the space of 3 ft wide plating below sheerstrake is 12 ft 6 in thick up line of 1 1/8 in and the butts of same treble riveted for half the observed length amidships, - and as she exceeds 24 ft depth of hold she should, according to rule, be fitted with an 8 ft deep stringer - plate fitted below hold beams - as compensation for the omission of this stringer, she has been fitted with a 3 x 9/16 inch plate between the double angle iron side stringers in hold for three-fifths vessel's length amidships, and three strakes of outside plating each 1/8 inch thicker than required by rule, which received the approval of the Committee as per Secretary's letter of 25th February last. That in consequence of some of the iron and side stringer angle irons being brought lighter than admitted by rule she has been fitted with two extra pairs of side stringers formed of double angle irons 3 x 3 x 5/16 and 7/16 as shown in red ink on tracing. One of these stringers extends 130 feet in length amidships, and the other 100 feet. Which compensation received the Committee's sanction, as per Secretary's letter 1st October 1874. Six lengths of three-deck stringer angle iron, which by the Navigation Committee is being fitted in an unsatisfactory manner, have been removed and replaced by others well fitted. - As a poop 48 ft long. Forecastle 38 ft long.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, fore-castle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement to Bilges paint above Outside Composition paint on bottom, paint above

I am of opinion this Vessel should be Classed * 100-A-1 Two decks fore and aft

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,

Special ... £ 65 : 5 : 0 27th October 1874

Certificate ... frates

(Travelling Expenses) (if any) £

Committee's Minute

Character ass

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100-A-1

100-A-1

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