

# IRON SHIP.

1696  
Rec 28/9/76  
No. 11490 Survey held at Sunderland Date, First Survey April 11<sup>th</sup> Last Survey Sept. 26 1876

On the Barque "Lorraine" Master Not appointed

<b>TONNAGE</b> under Tonnage Deck	803.02	<b>ONE, OR TWO DECKED, THREE DECKED VESSEL.</b>
Ditto of Third, Spar, or Awning Deck.	-	<b>SPAR OR AWNING DECKED VESSEL.</b>
Ditto of <del>Lower</del> Raised Or. Dk.	32.86	<b>HALF BREADTH</b> (moulded) ... .. 16.37
Ditto of Houses on Deck	6.62	<b>DEPTH</b> from upper part of Keel to top of Upper Deck Beams 20.95
Ditto of Forecastle	28.78	<b>GIRTH</b> of Half Midship Frame (as per Rule) ... .. 32.5
Gross Tonnage	871.28	<b>1st NUMBER</b> ... .. 69.82
Less Crew Space	42.88	<b>1st NUMBER, if a THREE DECKED VESSEL</b> [deduct 7 feet - - -
Less Engine Room	-	<b>LENGTH</b> ... .. 186. -
Register Tonnage as out on Beam	828.40	<b>2nd NUMBER</b> ... .. 12986
		<b>PROPORTIONS</b> —Breadths to Length ... .. 5
		Depths to Length—Upper Deck to Keel ... .. 8
		Main Deck ditto ... .. ✓

Built at Sunderland  
 When built 1876 Launched 19 Aug<sup>r</sup> 1876  
 By whom built Messrs. Wm Foxford & Sons  
 Owners Messrs. John Lidgett & Sons  
6 Beckett square E.C. London  
 Port belonging to London  
 Destined Voyage Not fixed  
 If Surveyed while Building, Afloat, ~~or in Dry Dock.~~

Official Number Not required

PLANS CALLED

<b>LENGTH</b> on deck as per Rule ...	186	<b>BREADTH</b> Moulded ...	32	<b>DEPTH</b> top of Floors to Upper Deck Beams ...	19	<b>Power of Engines</b> ...	✓	<b>No. of Decks with flat laid</b> ...	Two
			9	Do. do. Main Deck Beams ...	2			<b>No. of Tiers of Beams</b> ...	two

Dimensions of Ship per Register, length, 196.5 breadth, 32.86 depth, 19.25

	Inches in Ship.		Inches per Rule.	
	In Ship.	16ths.	Inches per Rule.	16ths.
<b>KEEL</b> , depth and thickness ...	8 x 2 3/8	7	8 x 2 3/8	7
<b>STEM</b> , moulding and thickness ...	7 x 2 3/8	7	7 x 2 3/8	7
<b>STERN-POST</b> for Rudder do. do. ...	7 x 2 3/8	7	7 x 2 3/8	7
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	22 in		22 in	
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships ...	4 1/2 x 3	7	4 1/2 x 3	7
Do. for 1/2 at each end ...	4 1/2 x 3	7	4 1/2 x 3	7
<b>REVERSED FRAMES</b> , Angle Iron ...	3 x 3	7	3 x 3	7
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ...	2 1/2	9	2 1/2	9
thickness at the ends of vessel ...	-	8	-	8
depth at 3/4 the half-bdth. as per Rule ...	11	-	10 1/2	-
height extended at the Bilges ...	a fair taper			
<b>BEAMS</b> , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ...	7 1/2 x 7	7	7 1/2 x 7	7
Single or double Angle Iron on Upper edge ...	3 x 3	6	3 x 3	6
Average space ...	alternate frames			
<b>BEAMS</b> , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ...	-	-	-	-
Single, or double Angle Iron, on Upper Edge ...	-	-	-	-
Average space ...	-	-	-	-
<b>BEAMS</b> , Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ...	8	8	8	8
Single or double Angle Iron on Upper Edge ...	3	3	3	3
Average space ...	alternate frames			
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates ...	13	10	13	10
" Rider Plate ...	10	10	10	10
" Bulb Plate to Intercostal Keelson ...	-	-	-	-
" Angle Irons ...	4 1/2 x 3 1/2	7	4 1/2 x 3 1/2	7
" Double Angle Iron Side Keelson ...	-	-	-	-
" Side Intercostal Plate ...	-	-	-	-
" do. Angle Irons ...	-	-	-	-
" Attached to outside plating with angle iron ...	-	-	-	-
<b>BILGE</b> Angle Irons ...	4 1/2 x 3 1/2	7	4 1/2 x 3 1/2	7
" do. Bulb Iron ...	-	-	-	-
" do. Intercostal plates riveted to plating for length ...	-	-	-	-
<b>BILGE STRINGER</b> Angle Irons ...	4 1/2 x 3 1/2	7	4 1/2 x 3 1/2	7
Intercostal plates riveted to plating for length ...	-	-	-	-
<b>SIDE STRINGER</b> Angle Irons ...	-	-	-	-

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
Flat Keel Plates, breadth and thickness ...	-	-	-	-
<b>PLATES</b> in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...	32	10	32	10
fm up. part of Bilge to lr. edge of Sh'rstrake	alternate	alternate	alternate	alternate
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	36	10	36	10
Butt Straps to outside plating, breadth & thickness	10 1/2	8 1/2	9 1/2	8 1/2
Lengths of Plating ...	11 feet	1 in		
Shifts of Plating, and Stringers ...	2 frame spaces			
Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness ...	36	8	36	8
Angle Iron on ditto ...	4 1/2 x 3 1/2	7	4 1/2 x 3 1/2	7
Tie Plates fore and aft, outside Hatchways	10	8	10	8
Diagonal Tie Plates on Beams No. of Pairs,	-	-	-	-
Planksheer material and scantling ...	Gutter gunwale			
Waterways do. do. ...	-	-	-	-
Flat of Upper Deck do. do. ...	3 1/2	8	3 1/2	8
How fastened to Beams <u>galvanized iron</u>	Scrub Bolts & Nuts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ...	-	-	-	-
Is the Stringer Plate attached to the outside plating?	-	-	-	-
Angle Irons on ditto, No. ...	-	-	-	-
Tie Plates, outside Hatchways ...	-	-	-	-
Diagonal Tie Plates on Beams, No. of pairs	-	-	-	-
Waterways materials and scantlings ...	-	-	-	-
Flat of Middle Deck do. do. ...	-	-	-	-
How fastened to Beams ...	-	-	-	-
Stringer Plates on ends of <u>Lower Deck, Hold or Orlop</u> Beams ...	27	7	27	7
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. <u>2</u> ...	3 1/2 x 3 1/2	7	3 1/2 x 3 1/2	7
Stringer or Tie Plates, outside Hatchways <u>double angle</u>	3 1/2 x 3 1/2	7	3 1/2 x 3 1/2	7
Flat of Lower Deck ...	-	-	-	-
Ceiling betwixt Decks, thickness and material in hold do. do. ...	2 1/2			
Main piece of Rudder, diameter at head do. at heel ...	4 3/4		4 3/4	
Can the Rudder be unshipped afloat? <u>Yes</u>	2 3/4		2 3/4	
Bulkheads No. <u>1</u> Thickness of <u>5/8</u>				
Height up <u>Upper deck</u>				
How secured to sides of ship <u>Between double frames</u>				
Size of Vertical Angle Irons <u>3 x 3 x 7</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				

Transoms, material. Knight heads. Hawse Timbers. Iron  
 Windlass Emmerson & Walker's Patent Pall Bitt Iron  
 The **FRAMES** extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.  
 The **REVERSED ANGLE IRONS** on floors and frames extend near middle line to Hold or Orlop Stringer 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 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 2 Strakes at Bilge** for 12 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 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
**Butts from Bilge to Main Sheerstrake**, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
**Edges of Main Sheerstrake**, double & single riveted. **Upper Sheerstrake**, double or single riveted.  
**Butts of Main Sheerstrake**, treble riveted for 1/2 length amidships. **Butts of Upper or Spar Sheerstrake**, treble riveted length amidships.  
**Butts of Main Stringer Plate**, treble riveted for 1/2 length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for length amidships.  
 Breadth of laps of plating in double riveting 4 3/4 Breadth of laps of plating in single riveting length

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & treble throughout  
 Waterway, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)  
 How the various Decks, how secured to the sides? Turned down ends and riveted to frames and stringer butts No. of Breasthooks, 4 Crutches, 4 of hansom  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates by Stockton malleable  
 manufacturer's name or trade mark, iron Comp<sup>y</sup> & Bolckow, Vaughan & Co.; Angles & Butts by Stockton Malleable Iron Co.

The above is a correct description.  
 Builder's Signature, William Crawford Surveyor's Signature, James Gibson  
 Surveyor to Lloyd's Register of British and Foreign Ships

IRON 468-0132

**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 very well*  
 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*

Masts, Bowsprit, Yards, &c., are *of 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 *please see sketch attached*

*16964 Tm*

NUMBER for EQUIPMENT	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.						
						N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.		
SAILS. Fore Sails, Fore Top Sails, Fore Topmast Stay Sails Main Sails, Main Top Sails, and	CABLES, &c. Chain each 15 fathoms Hmpn Strm Cbl Hawser ... Towlines ... Warp ... quality <i>good</i>	270	1 5/8	47 5/10	270 - 1 1/2	47 5/10	Bowers	1	26.0.4	25.13.1.2	25.2.0	25 5/10
		90	8				1	25.0.4	24.17.0.21	21.3.0	22 2/10	
		90	10				1	21.3.14	22.5.0.14	10.2.0		
		90	6				1	5.1.7		5.1.0		
		90	5				1	2.3.18		2.3.0		
		Stream	1	10.2.7						10.2.0		
		Kedges	1	5.1.7						5.1.0		
			1	2.3.18						2.3.0		

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *2* L<sup>g</sup> Boat Sails and *2* others  
 The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*  
 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? *4 Ports & 4 Scuppers on each side*  
 Cargo Hatchways.—How formed? *Iron plate comings and Headledges*  
 State size Main Hatch *14' 6" x 10' 0" x 2' 0" high* Forehatch *6 ft square x 2 ft high* Quarterhatch *5 ft square x 2 ft high*  
 If of extraordinary size, state how framed and secured? —————  
 What arrangement for shifting beams? —————  
 Hatches, If strong and efficient? *Yes*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.								
2629	23 <sup>rd</sup> March 1876			82		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped	<i>Built under J.P. and planked 1876 April 11 19 24 26 May 13 15 17 20</i>	<i>25 26 30 June 18 19 22 24 26 July 4 8 14 18 21 25 28 31 August 4 8 11 14 19 23 26 31</i>	<i>Sept 13 26</i>					

**General Remarks** (State quality of workmanship, &c.) *This vessel has been constructed in accordance with the rules & tracing of midship section attached; she has a short raised quarter deck about 40 feet in length, and a top-gallant fore-castle about 28 feet in length, and painting beams are fitted at each end as per rule. A House on deck 18' 0" x 9' 0" and the ceiling in the flat of bottom is laid in hatches as far as practicable; The plating of the Fore and Main lower Masts, Bowsprit & Yards have been submitted to both hot & cold tests and proved very satisfactory. The materials and workmanship are of a good description throughout, and the landing edges as well as the butts of the shell plating have all been planed fair*

State if one, two, or three, decked vessel, or if spar, or awning 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 upper turn* Outside *3 coats of paint*  
 I am of opinion this Vessel should be Classed *100 A.T.* of *plates and paint above*

The amount of the Entry Fee ... £ 5: - - is received by me, *HW*  
 Special ... £ 41: 8: - *19<sup>th</sup> Sept. 1876*  
 Certificate ... - : - : -  
 (Travelling Expenses, if any, £ - - -).  
 Committee's Minute *29 September 1876*  
 Character assigned *100 A.T.*  
*HW*  
*James Liban*  
 Lloyd's Register Foundation