

## IRON SHIP

16385

No. 2246 Survey held at Port of Regent Date, First Survey Nov 1, 1845 Last Survey May 29 1846  
On the Iron sailing ship E. J. Harland Master English  
Tonnage under Tonnage Deck 1226.24 ONE OR TWO DECKED, THREE DECKED VESSEL.  
Ditto of Third, Spar, or Awning Deck. 44.36 DEPTH from upper part of Keel to top of Upper Deck Beams 24.8  
Ditto of Poop, or Raised Qr. Dk. 9.91 GIRTH of Half Midship Frame (as per Rule) 26.2  
Ditto of Houses on Deck 41.42 1st NUMBER 48.5  
Ditto of Forecastle 41.42 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet 224]  
Gross Tonnage 1322.46 LENGTH 224.0  
Less Crew Space 71.12 2nd NUMBER 14819  
Less Engine Room 1322.46 PROPORTIONS—Breadths to Length 6.5  
Register Tonnage 1248.64 Depths to Length—Upper Deck to Keel 9.15  
as cut on Beam Main Deck ditto 9.15

Built at Regent  
When built 1846 Launched 2nd April  
By whom built W. J. Harland & Co.  
Owners W. J. Harland & Co.  
Port belonging to Regent  
Destined Voyage San Francisco  
If Surveyed while Building, Afloat, or in Dry Dock,

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
on deck as			Moulded...			top of Floors to Upper			Engines ...			
per Rule ...	224.0		35.0			Deck Beams	24	9 1/2			4	4
						Dp. do. Main Deck Beams						
Dimensions of Ship per Register, length, breadth, depth,	226.4		35.2									
KEEL, depth and thickness	9 x 3 1/2		9 x 3 1/2									
STEM, moulding and thickness	9 x 3 1/2		9 x 3 1/2									
STERN-POST for Rudder do. do.	8 1/2 x 2 1/2		8 1/2 x 2 1/2									
for Propeller	2 1/2		2 1/2									
Distance of Frames from moulding edge to	2 1/2		2 1/2									
moulding edge, all fore and aft	2 1/2		2 1/2									
FRAMES, Angle Iron, for 1/2 length amidships	8 x 3 1/2		8 x 3 1/2									
Do. for 1/2 at each end	8 x 3 1/2		8 x 3 1/2									
REVERSED FRAMES, Angle Iron	8 x 3 1/2		8 x 3 1/2									
FLOORS, depth and thickness of Floor Plate	28 x 9		28 x 9									
at mid line for half length amidships	8 x 4		8 x 4									
thickness at the ends of vessel	14 x 5 1/2		14 x 5 1/2									
depth at 1/2 the half-bdth. as per Rule	8 1/2 x 8		8 1/2 x 8									
height extended at the Bilges	8 1/2 x 8		8 1/2 x 8									
BEAMS, Upper, Spar, or Awning Deck	8 1/2 x 8		8 1/2 x 8									
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 4		8 x 4									
Single or double Angle Iron on Upper edge	4 x 4		4 x 4									
Average space	4 feet		4 feet									
BEAMS, Main, or Middle Deck	8 1/2 x 8		8 1/2 x 8									
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 4		8 x 4									
Single, or double Angle Iron, on Upper Edge	4 x 4		4 x 4									
Average space	4 feet		4 feet									
BEAMS, Lower Deck, Hold, or Orlop	8 1/2 x 8		8 1/2 x 8									
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 4		8 x 4									
Single or double Angle Iron on Upper Edge	4 x 4		4 x 4									
Average space	4 feet		4 feet									
KEELSONS Centre line, single or double plate,	14 x 12		14 x 12									
box, or Intercoastal, Plates	11 x 12		11 x 12									
" Rider Plate	11 x 12		11 x 12									
" Bulb Plate to Intercoastal Keelson	5 x 4		5 x 4									
" Angle Irons	5 x 4		5 x 4									
" Double Angle Iron Side Keelson	5 x 4		5 x 4									
" Side Intercoastal Plate	5 x 4		5 x 4									
" do. Angle Irons	5 x 4		5 x 4									
" Attached to outside plating with angle iron	5 x 4		5 x 4									
BILGE Angle Irons	5 x 4		5 x 4									
" do. Bulb Iron	5 x 4		5 x 4									
" do. Intercoastal plates riveted to	5 x 4		5 x 4									
plating for length	5 x 4		5 x 4									
BILGE STRINGER Angle Irons	5 x 4		5 x 4									
Intercoastal plates riveted to plating for	5 x 4		5 x 4									
length	5 x 4		5 x 4									
SIDE STRINGER Angle Irons	5 x 4		5 x 4									
Transoms, material. Knight-heads. Hawse Timbers.	Iron		Iron									
Windlass	Iron		Iron									
Pall Bitt	Iron		Iron									

The FRAMES extend in one length from the keel to up deck & rail Riveted through plates with 1/8 in. Rivets, about 6 apart.  
The REVERSED ANGLE IRONS on floors and frames extend from about middle line to up deck beam knee and to up deck string 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 1/8 in. diameter, averaging 5 ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/8 in. diameter, averaging 3 1/2 ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 1/2 ins. from centre to centre.  
Butts of 3 Strakes at Bilge for half 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 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 1/8 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. double on lower edge  
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 3 1/2 Breadth of laps of plating in single riveting 3

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes  
Waterway, how secured to Beams (Explain by Sketch, if necessary.)  
Beams of the various Decks, how secured to the sides? secured down & riveted No. of Breasthooks, 4 Crutches, 4  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plate for Beams & Keelsons  
Manufacturer's name or trade mark, F. H. & Co. "Thorne" "Holland" Names & Angles - Holland

The above is a correct description.  
Builder's Signature, Harland & Wolff Surveyor's Signature, James M. Neil  
Surveyor to Lloyd's Register of British and Foreign Shipping.



Workmanship. Are the butts of plating planed or otherwise fitted? *Recommended*  
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? *They do*  
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? *Equal through the butts*

Masts, Bowsprit, Yards, &c., are *throughout* 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 *2 1/2" No. 1 masts 82' 3" & 82' 9" in length & 20" dia. plates 1/16 to 1/8, Angles 3 1/2 x 3 1/2 & 4 x 4. Main mast 44' 3" & 2 1/2" plates 1/16 & 1/8, Angles 3 1/2 x 3 1/2 & 4 x 4. Bowsprit 22' 6" outboard, 28' plates 1/16 & 1/8, Angles 3 1/2 x 3 1/2 & 4 x 4. 7 1/2" No. 1 masts 80' 19" p. 1/16 & 1/8, A. 2 1/2 x 2 1/2 & 3 1/2. 7 1/2" No. 1 masts 80' 19" p. 1/16 & 1/8, A. 2 1/2 x 2 1/2 & 3 1/2. All constructed of 2 plates & 2 angles, Butts quadruple, double double, & 8 x 8 single riveted. Plates (F. H. B. "Red") submitted to both tests, and found of good quality.*

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.							Bowers					
N <sup>o</sup> .							(State Machine when tested, Date, & name of Superintendent.)					
Fore Sails,	CABLES, &c.	126	1 1/16	82 1/2	240 x 82 1/2	82 1/2	one		32.1.10	28.8.0.0	32	20 1/2
Fore Top Sails,	Chain	135 1/2	1 1/16	82 1/8	1 1/16	82 1/8	one		31.3.14	20.0.2.0	32	20 1/2
Fore Topmast Stay Sails	Chute	24	1 1/16	82 1/8	1 1/16	82 1/8	one		24.2.3	26.15.2.0	24 1/4	26 1/2
Main Sails,	Hamp Strm Cbl	90	1"	12	90 x 1"	12	Chute		18	18 1/2	18	18 1/2
Main Top Sails,	Hawser ...	90	11		90 x 11		Stream		13.2.0	12.12.2.0	13 1/2	"
	Towlines ...	90	6		90 x 6		Kedges		6.2.15	4.12.2.0	6 1/2	"
	Warp ...	90	6		90 x 6		one		3.1.2	5.4.0.0	3 1/4	"
	quality	90	6		90 x 6							

Standing and Running Rigging *Midland hemp* sufficient in size and *Good* in quality. She has *no* Life Boat and *no* others.

The Windlass is *Good* Capstans *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? *One scupper, and one large hinged ports on each side*

Cargo Hatchways. How formed? *Pro Comings*

State size Main Hatch *16' 6" x 10'* Forehatch *4' 6" x 4'* Quarterhatch *4' 6" x 4'*

If of extraordinary size, state how framed and secured? *---*

What arrangement for shifting beams? *One in middle of hatchway*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>100</i>	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	<i>November 1, 5, 8, 13, 15, 22, 23, 24, December 1, 4, 10, 14</i>
Date <i>11 October 1876</i>		2nd. On the plating during the process of riveting	<i>14, 21, 24, 29, January 8, 10, 13, 14, 20, 22, 24, February 1, 9, 12, 15, 19, 22, 25, 26, March 1, 2, 5, 10, 13, 16, 21, 28</i>
Order for Ordinary Survey No. <i>---</i>		3rd. When the beams were in and fastened, and before the decks were laid ...	<i>April 3, 4, 14, 20, 21, 25, 28, May 2, 5, 8, 10, 15, 14</i>
Date <i>---</i>		4th. When the ship was complete, and before the plating was finally coated or cemented ...	<i>18, 24, 29</i>
No. <i>106</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This two decked vessel, with Raised Quarter deck 5' 1" for, and Forecastle 2' 6", has been built in accordance with the accompanying sketch of midship section, and in other respects with the Rules for the 100 A. Class, with the exception that alternate Reverse Bars stop short at the lower part of upper deck Beam knee, you will however please see that the sheerstrake plate is 1 1/16 thick instead of 1/16 as required by Rule, and it is respectfully submitted that this arrangement will not in any effect the efficiency of the vessel.*

*The materials of which she is constructed, and the workmanship throughout are of a superior description, and the iron work is very efficiently protected from oxidation by cement and paint. A Donkey Boiler and Steam winch is fitted on board with connections to work the pumps and windlass.*

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 *Cement and paint* Outside *Paint*

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, *M. N.*  
Special ... £ *5* : *8* : *6* *15 May 1876*  
Certificate ... *Gratis* : *James M. Neil*

(Travelling Expenses, if any, £ *---*).

Committee's Minute *2nd June 1876*

Character assigned *100 A. 1.*

*STW*

*1876*