

# IRON SHIPS.

No. 436 Survey held at Belfast Date 31<sup>st</sup> October Recd 13/11/62  
 on the New Iron Ship "Star of Erin" Master James Ewing 18 h2  
 Tonnage Gross 948.55 Engine Room - Register - Built at Belfast & Launched 9<sup>th</sup> Oct  
 When Built 1862 By whom built Harland & Wolff Owners Robert Lorry & Sons  
 Port belonging to Belfast Destined Voyage India via Liverpool  
 Surveyed Afloat or in Dry Dock Specially Surveyed while Building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Power of Engines	Horse No.
200			32			21		11		

Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	Stem, if bar iron, moulding and thickness	Inches in Ship.	Inches required per Rule.	Stem, if plate iron, breadth and thickness	Inches in Ship.	Inches required per Rule.
18	18	18	10	10	10	8	8	8
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	4 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
depth and thickness of Floor Plate at mid line	28	12	8	8	8	8	8	8
depth and thickness of Floor Plate at Bilge Keelson	13	10	8	8	8	8	8	8
Size of Reversed Angle Iron, and No. 2 at top of Floor Plate	3 1/2	3	8	8	8	8	8	8
Frames, Size of Angle Iron, single or double	4 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
Reversed Iron, to every frame or every frame	3 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
Beams, Deck (No. ) double Angle Iron or Bulb Iron with double Angle Iron on top	3	3	8 1/2	8 1/2	8 1/2	8	8	8
depth & thickness of plate amidships	h	12	8	8	8	8	8	8
double or single Angle Iron, on lower edge	3 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
average space between	3 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
if wood (No. ) sided & moulded	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Hold, or Lower Deck (No. ) double Angle Iron or Bulb Iron with double Angle Iron on top	3	3	8 1/2	8 1/2	8 1/2	8	8	8
depth & thickness of plate amidships	h	12	8	8	8	8	8	8
double or single Angle Iron, on lower edge	3 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
average space between	3 1/2	3	8 1/2	8 1/2	8 1/2	8	8	8
if wood (No. ) sided & moulded	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Paddle, wood, sided and moulded or if Iron, size of Plate	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Engine	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Side or Bilge	3	3	8 1/2	8 1/2	8 1/2	8	8	8
Number	3	3	8 1/2	8 1/2	8 1/2	8	8	8

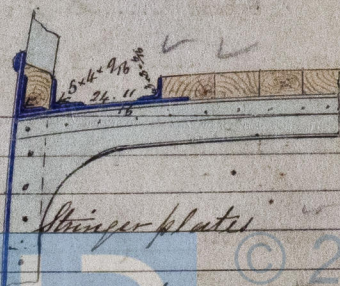
  

Transoms, material Iron or, if none, in what manner compensated for. Diagonal plates from Post rivetted to frame  
 Knight-heads d- Bulkheads, No. 3 Thickness of 7/16  
 Hawse Timbers d- are they free from defects? how secured to the sides of the ship Rivetted between two frames  
 size of vertical angle iron and their distance apart 3 1/2 x 4 3/4 30 in apart

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about ( h ) apart.  
 The reverse angle irons on the floors extend in one length across the middle line from 3 1/2 to 4 feet on each side alternately to hold beam & gunwale  
 on the frames d- from d- to d-

Keelson, how are the various lengths of plates or angle irons connected? With butt straps and double rivetted  
 Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/8 ins.) diameter averaging ( 4 in.) from centre to centre of rivet.  
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece ( in. ) thick, or clencher, double or single rivetted; rivets ( 1 in.) diameter, averaging ( 3 ins.) from centre to centre of rivets.  
 Butts from Keel to turn of bilge, worked carvel with a lining piece ( 12 x 1 1/2 ) thick, double or single rivetted; rivets ( 1 in.) diameter, averaging ( 3 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? alternately  
 Edges from bilge to planksheer, worked carvel with a lining piece ( in. ) thick, double or single rivetted; rivets ( 7/8 in.) diameter, averaging ( 3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? alternately  
 Butts from bilge to planksheers, worked carvel with a lining piece ( 11 x 1 1/2 ) thick, or clencher, double or single rivetted; rivets ( 7/8 in.) diameter averaging ( 3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting ( 9 x 12 ) Breadth of laps in single rivetting ( - )

Planksheer, how secured to the plating of the sides Explain by sketch,  
 Waterway planksheer and to the Beams if necessary.  
 Side trussing breadth and thickness of plates how secured?  
 Deck trussing how secured?  
 Deck Beams, how secured to the side? Knee plates welded & rivetted to frames  
 Hold or Lower Deck The same as above, and diagonal trussing to masts and  
 Paddle how secured?  
 No. of breasthooks 4 crutches 3 how are pointers compensated? By plate iron rivetted to frames  
 What description of iron is used for the angle iron and plate iron on the vessel? Staffordshire





29538

**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes

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

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Filled in solid

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

Her Masts, Yards, &c., are in _____ condition, and sufficient in size and length.			She has SAILS.		CABLES, &c.	Fathoms.	Inches.	ANCHORS, and their weights.	
N <sup>o</sup> .								N <sup>o</sup> .	Weight.
	Fore Sails,				Chain .....				Bower, .....
	Fore Top Sails,				Hempen Stream Cable .....				
	Fore Topmast Stay Sails,				Hawser .....				Stream, .....
	Main Sails,				Towlines .....				
	Main Top Sails,				Warp .....				Kedge, .....
	and				All of _____ quality.				

Her Standing and Running Rigging \_\_\_\_\_ sufficient in size and \_\_\_\_\_ in quality.

She has one Long Boat and two others

The present state of the Windlass is Good Capstans 2 Good and Rudder Good Pumps 4 Cast metal good

**General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.**

DATES of Surveys held while building, as per Section 17.	1st.	On the several parts of the frame, when in place, and before the plating was wrought	
	2nd.	On the plating during the progress of rivetting	
	3rd.	When the beams were in and fastened, and before the decks were laid	<u>Specially Surveyed</u>
	4th.	When the ship was complete, and before the plating was finally coated	<u>While Building</u>
	5th.	After the ship was launched	

*This Messels Shearstrakes for about 130 feet amidships, are treble rivetted in the butts and the lower deck stringer plates, are secured to double angle on the frames for about the same distances. Has a greenheart plank in main deck on each side next Iron Waterway.*

*She left this on the 1<sup>st</sup>, in tow of a steamer for Liverpool, with only her lower masts stepped. And there to be fitted out.*

In what manner are the surfaces preserved from oxidation? *The flat of the floor inside, to well up the turn of the bilge right fore and aft, is covered with Portland Cement about 1 in. thick, above this, and outside 3 coats of paint*

I am of opinion this Vessel should be classed 12 A

The amount of the Fee .....£ 5 : - : is received by me, Mr. Linton

Special .....£ 47 : 8 : 6

Certificate (if required) .....£ 52 : 8 : 6

Committee's Minute 11<sup>th</sup> November 1862

Character assigned A = for 12 years

*I am of opinion this vessel is eligible to be classed 12A*

