

# IRON SHIPS.

Rec 21/11/68

No. 238 Survey held at Glasgow Date 20<sup>th</sup> Sept. 1868  
 on the Sew St. Maria Master ✓  
 Tonnage under tonnage deck 198.39 Built at Glasgow When built 1865 Launched 9<sup>th</sup> Sept 65  
 Ditto of poop or spar deck 37.94 By whom built Wm Wingate & Co Owners Don Juan Amann  
 Ditto of engine room 60.05  
 Total Register tonnage 198.21 Port belonging to Bilboa Destined Voyage Bilboa  
 Gross tonnage 238.36  
 Surveyed while Building, Afloat, or in Dry Dock whilst building and afloat

Length aloft 130.5 Extreme Breadth 20.8 Depth from top of Upper Deck Beam to top of Floor 11.5 Power of Engines 40 N<sup>o</sup>. of Decks One  
 (Dimensions of Ship per Register, length 130.5 breadth 20.8 depth 11.35)

	Inches in Ship.		Inches required per Rule.		Inches in Ship.		Inches required per Rule.		16ths required per Rule.	
	Inches.	16ths.	Inches.	16ths.	Inches.	16ths.	Inches.	16ths.	Inches.	16ths.
Keel, if bar iron, depth and thickness	0	2	10	12						
„ if plate iron, breadth and thickness										
Stem, if bar iron, moulding and thickness	0	2	10	12						
„ if plate iron, breadth and thickness										
Stern-post, if bar iron, moulding and thickness	0	2	10	12						
„ if plate iron, breadth and thickness										
Distance of Frames from moulding edge to moulding edge, all fore and aft	21		21							
Frames, Size of Angle Iron, single or double	3	2 1/2	5	12	5	12	5	12	5	12
„ Reversed Iron, if to every frame										
„ Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	3 1/2	2 1/2	5	12	5	12	5	12	5	12
Floors, depth and thickness of Floor Plate at mid line	12		12							
„ Ditto ditto at Bilge Keelson	9		9							
„ Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	3 1/2	2 1/2	5	12	5	12	5	12	5	12
Beams, Deck (N <sup>o</sup> . - -) double Angle Iron, Plate, Tee, or Butt Iron	5	3	5	15	5	15	5	15	5	15
„ „ double or single Angle Iron, on edge	3 1/2	2 1/2	5	12	5	12	5	12	5	12
„ „ average space between	3		3							
„ Hold, or Lower Deck (N <sup>o</sup> . - -) double Angle, Tee, Plate, or Butt Iron										
„ „ double or single Angle Iron on edge										
„ „ average space between										
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron										
„ Engine										
Keelson, single or double plate, box, or intercostal										
„ Size of Plates	15		15							
„ Size of Angle Irons	3	3	5	12	3	12	3	12	3	12
„ Side, single or double, plate, box, or intercostal	3	3	5	12	3	12	3	12	3	12
„ Bilge (No. - -) at each Bilge, single, or double, plate, or box	3	3	5	12	3	12	3	12	3	12

Plates in Garboard Strakes, breadth and thickness 28 70 70  
 Ditto from Garboard to upper part of Bilges 50 70 70  
 „ from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold 50 70 70  
 „ from 3/4ths depth of Hold to lower edge of Sheerstrake 50 70 70  
 „ Sheerstrake, breadth and thickness 40 70 70  
 Butt Straps to outside plating, breadth and thickness 8 70 70  
 Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness 18 50 50  
 Angle Iron on ditto 3 3 3  
 Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways 8 50 50  
 Diagonal Tie Plates on ditto 8 50 50  
 Planksheer, materials and scantlings See Bulwarks  
 Waterway ditto ditto See  
 Flat of Upper Deck, thickness and material 5 1/2 2 1/2 Yellow Pine  
 „ „ how fastened to Beams See  
 Ceiling betwixt Decks and in Hold, thickness and material Plated  
 Clamps or Spircketting ditto „  
 Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness „  
 Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams „  
 Stringers in Hold 3 3 3  
 Flat of Lower Deck, thickness and material „  
 Main piece of Rudder, diameter at head 3 1/2 13 1/2  
 „ „ „ at heel 2 13  
 (Can the Rudder be unshipped afloat) Yes  
 Bulkheads, N<sup>o</sup>. 4 Thickness of 70  
 „ Height up upper deck  
 „ how secured to the sides of the ship rivetted between two frames  
 „ size of vertical angle irons 3 1/2 3 1/2 and their distance apart 3 1/2

Transoms, material See, if none, in what manner compensated for.  
 Knight-heads, and Hawse Timbers See  
 The Frames extend in one length from middle line to gunwale rivetted through plates with (5/8 in.) rivets, about (8) apart.  
 The reverse angle irons on the floors extend in one length across the middle line from upper part of bilge to Q<sup>r</sup>  
 „ „ „ on the frames „ „ from middle line to gunwale  
 Keelson, how are the various lengths of plates or angle irons connected? by living pieces  
 Plates, Garboard, double or rivetted to keel, double or single at upper edge, with rivets (5/8 in.) diameter, averaging (2 1/2 in.) apart.  
 „ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 in.) apart.  
 „ Butts from Keel to turn of bilge, worked carvel with butt straps (5/8 & 7/8) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No  
 „ Edges from bilge to sheerstrake, worked carvel with a living piece ( ) thick, or clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No  
 „ Edges of Sheerstrake, double or single rivetted? At upper edge Single At lower edge Double  
 „ Butts from bilge to planksheers, worked carvel with butt straps (5/8, 7/8, & 7/8) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 in.) apart. Breadth of laps in double rivetting (3 1/2 in.) Breadth of laps in single rivetting (4 in.)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double  
 Planksheer, how secured to the plating of the sides See  
 Waterway „ „ planksheer and to the Beams See  
 Deck Beams, how secured to the side? Welded & rivetted to the frames  
 Hold or Lower Deck ditto „  
 Paddle „ „ „ No. of breasthooks None crutches None

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Phoenix Best  
 Manufacturer's name or trade mark „  
 We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature Wm Wingate & Co Surveyor's Signature „

**Workmanship.** Are the lands or laps of the clewwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter 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?* *Yes*  
 Do the holes for rivetting plate to frames, butt straps, 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 in corners of*

Her Masts, Bowsprit, Yards, &c., are in *Wood Good* condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.

4310 *Iron*

She has SAILS.		Tested by <i>M. H. Peade</i> CABLES, &c.			Tested by <i>Geo Thompson</i> ANCHORS, and their weights.		
No.		Fathoms.	Inches.	Tested to Tons.	No.	Weight. Ex. Stock	Tested to Tons.
<i>A</i>	Fore Sails,						
<i>Single</i>	Fore Top Sails,	Chain	180	78	13 1/2		
<i>Small</i>	Fore Topmast Stay Sails,	Hempen Stream Cable	90	0		1.0.0	0.11.1
<i>of</i>	Main Sails,	Hawser	90	4		1.0.0	0.13.5
<i>Sails</i>	Main Top Sails,	Towlines	90	5 1/2		1.0.0	
and		<i>Warp</i> <i>Warp Chain</i>	80	58			
		All of <i>Good</i> quality.					
	Her Standing and Running Rigging	<i>Galva Wire</i> <i>Warp</i> sufficient in size and			<i>Good</i> in quality.		
	She has	<i>One</i> Long Boat and <i>two</i> others					
	The present state of the Windlass is	<i>new</i> Capstan			- - and Rudder <i>new</i> Pumps <i>new and efficient</i>		

Order for Special Survey DATES of  
 No. *342* Surveys held  
 Date *May 1865* while building  
 Order for Ordinary Survey as per  
 No. *-* Section 18.  
 Date *-*  
 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 *Butt under Special*  
 3rd. When the beams were in and fastened, and before the decks were laid *Survey from the*  
 4th. When the ship was complete, and before the plating was finally coated *2nd time to the*  
 5th. After the ship was launched *20<sup>th</sup> Sept 1865*  
 State if she has a Spar Deck *Two* Poop *Yes* or Forecastle *Two*

**General Remarks,**

*Fitted with a side stinger formed of two Angle Bars 3x3x70. Built on to middle line intercostal keelson 8x70; edges of Garboards and Sheerstrakes double rivetted and in all other respects as per accompanying approved Indenture Section for the A class  
 The Anchors and Chains are not in conformity with Table B B agreeable to the 3 of the Gross Tonnage that I beg to leave the assigning of the figures to the Committee's consideration.*

In what manner are the surfaces preserved from oxidation? Inside *Red lead*  
 Ditto ditto Outside *Red lead*

I am of opinion this Vessel should be Classed *A*  
 The amount of the Fee .....£ *3* : " : " is received by me,  
*M. H. Peade* Special .....£ *14* : *18* : "  
 Certificate (if required) .....£ *Gratuity*

Committee's Minute *27<sup>th</sup> Sept 1865*  
 Character assigned *A*

*A. D. Darling*  
 This Vessel appears to be in conformity with the Rules of the Register and is accordingly entered in the Register of the Port of London on the 21<sup>st</sup> Sept 1865  
*A. D. Darling*

*M. H. Peade*