

# IRON SHIP.

(Received at London Office,

No. *850* Survey held at *Port Glasgow* Date, First Survey *16<sup>th</sup> Feb 1883* Last Survey *14<sup>th</sup> Sept 1883*  
On the Ship *"Formosa"* (32 vessels)

TONNAGE under Tonnage Deck *1499.30*  
Ditto of Third, Spar, or Awning Deck *75.79*  
Ditto of Poop, or Raised Or. Dk. *34.62*  
Ditto of Houses on Deck *41.14*  
Ditto of Forecastle *1650.88*  
Gross Tonnage *95.73*  
Less Crew Space  
Less Engine Room  
Register Tonnage as out on Beam *1555.15*

~~ONE, OR TWO DECKED, THREE DECKED VESSEL,~~  
~~SPAR, OR AWNING DECKED VESSEL.~~  
Half Breadth (moulded) *19.0*  
Depth from upper part of Keel to top of Upper Deck Beams *25.6*  
Girth of Half Midship Frame (as per Rule) *39.84*  
1st Number *84.44*  
1st Number, if a 3-Decked Vessel deduct 7 feet  
Length *246.15*  
2nd Number *20785*  
Proportions— Breadths to Length *6.47*  
Depths to Length— Upper Deck to Keel *9.7*  
Main Deck ditto

Master *J. Witt*  
Built at *Port Glasgow*  
When built *1883* Launched *21 Aug*  
By whom built *Russell & Co.*  
Owners *Peter Denniston & Co.*  
Residence *Glasgow*  
Port belonging to *Glasgow*  
Destined Voyage *Agua Bay*  
If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *246.1* BREADTH— Moulded *38.0* DEPTH top of Floors to Upper Deck Beams *23.3* Power of Engines *✓* N° of Decks with flat laid *1* N° of Tiers of Beams *2*

Dimensions of Ship per Register, length, <i>256.4</i> breadth, <i>38.15</i> depth, <i>22.75</i>	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>9 1/2 x 2 1/2</i>	<i>9 1/2 x 2 1/2</i>								
STEM, moulding and thickness	<i>9 x 2 1/2</i>	<i>9 x 2 1/2</i>								
STERN-POST for Rudder do. do.	<i>9 x 2 1/2</i>	<i>9 x 2 1/2</i>								
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24</i>	<i>24</i>								
FRAMES, Angle Iron, for 1/2 length amidships	<i>5 3/2 x 8</i>	<i>5 3/2 x 8</i>								
Do. for 1/2 at each end	<i>5 3/2 x 7</i>	<i>5 3/2 x 7</i>								
REVERSED FRAMES, Angle Iron	<i>3 1/2 x 8</i>	<i>3 1/2 x 8</i>								
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>25 1/2</i>	<i>10</i>	<i>25</i>	<i>10</i>						
thickness at the ends of vessel	<i>14</i>	<i>12 1/2</i>	<i>60</i>	<i>8</i>						
depth at 1/2 the half-bdth. as per Rule	<i>56</i>	<i>60</i>								
height extended at the Bilges										
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	<i>9</i>	<i>9</i>	<i>9</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>						
Average space	<i>48</i>	<i>48</i>								
BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	<i>9</i>	<i>9</i>	<i>9</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>						
Average space	<i>48</i>	<i>48</i>								
BEAMS, Lower Deck Single or double Angle Iron, Plate or Tee Bulb Iron	<i>9</i>	<i>9</i>	<i>9</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>						
Average space	<i>48</i>	<i>48</i>								
BEAMS, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	<i>9</i>	<i>9</i>	<i>9</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>	<i>3 1/2 x 7</i>						
Average space	<i>48</i>	<i>48</i>								
KEELSONS Centre line, single or double plate, or Intercoastal Plates	<i>18</i>	<i>13</i>	<i>18</i>	<i>13</i>						
Rider Plate	<i>11 1/2</i>	<i>13</i>	<i>11 1/2</i>	<i>13</i>						
Double Plate to Intercoastal Keelson	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
Angle Irons	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
Double Angle Iron Side Keelson	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
Side Intercoastal Plate	<i>3 1/2 x 8</i>	<i>3 1/2 x 8</i>	<i>3 1/2 x 8</i>	<i>3 1/2 x 8</i>						
Attached to outside plating with angle iron	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
ILGE Angle Irons	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
do. Bulb Iron	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
do. Intercoastal plates riveted to plating for length	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
BILGE STRINGER Angle Irons	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
Intercoastal plates riveted to plating for length	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						
SIDE STRINGER Angle Irons	<i>5 1/2 x 4</i>	<i>9</i>	<i>5 1/2 x 4</i>	<i>9</i>						

The FRAMES extend in one length from *Keel* to *gunwale* Riveted through plates with *7/8* in. Rivets, about *7* apart.  
The REVERSED ANGLE IRONS on floors and frames extend *from* middle line to *upper deck stringer* and to *all frames 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 1/8* ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 1/2* ins. from centre to centre.  
Butts of *4* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/6* thicker than the plates they connect.  
Edges from Bilge to Main Sheerstrake, worked clench, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* 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.  
Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.  
Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length amidships.  
Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting  
Butt Straps of Keelsons, Stringer and Tie Plates, treble or double riveted. No. of Breasthooks, *5* Crutches, *4*  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Good - The frames, keelsons and keels are made of Mossend. Floors - shell plates - Main & yard - Corro's & Dougl's - 17 lb.*  
Manufacturer's name or trade *Russell & Co.*  
The above is a correct description of the ship.  
Builder's Signature, *Russell & Co.* Surveyor's Signature, *J. Tharler*  
Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly when plating is of alternate thicknesses - as distinguished from diminished thickness at ends of vessel.

\* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

CIRK 300 - 0288



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

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? *Yes, a few only at the butts.*

Masts, Bowsprit, Yards, &c., are *Iron & Wood* 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 Material and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Fore & Main Masts - 3 angles inside 14 x 3 x 1/2 all masts 3 plates, 1/2 inch thick*

*Fore Main Masts. Length 88 1/2 - heel 22 1/2 x 1/4 - head 20 x 1/4 - round 24 x 1/4 - Deck 31 x 1/4 - 1/2 inch thick*  
*Main Mast " 80 1/2 - heel 20 1/2 x 1/4 - head 18 x 1/4 - round 22 x 1/4 - 1/2 inch thick*  
*Bowsprit. Length 22 - 1/2 inch thick*  
*Three plates in the round - 3 angles 14 x 3 x 1/2 - butts 1/2 inch thick - 1/2 inch thick*

NUMBER for EQUIPMENT 22140				ANCHORS.			
N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.
1/2	Fore Sails,	Chain ..... 135	135	1 1/2	6 1/2	1 1/2	5 1/2
	Fore Top Sails,	Iron Stream Chain 75	75	1 1/2	20 1/2	1 1/2	20 1/2
	Fore Topmast Stay Sails,	or Steel Wire ..					
	or Hempen Strm Cable .....						
	Towline, Hemp.		90	1 1/2	20 1/2	1 1/2	20 1/2
	Main Sails,	or Steel Wire ..					
	Hawser .....		90	10 1/2	20 1/2	1 1/2	20 1/2
	Main Top Sails, and	Warp .....	90	6 1/2	20 1/2	1 1/2	20 1/2
	quality <i>Good</i>						

Standing and Running Rigging *Hemp & wire* sufficient in size and *Good* in quality. She has *1* Life Boat and *3* others

The Windlass is *Iron Patent* 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? *Four fueling ports - two mooring pipes and fine scuppers in each side.*

Cargo Hatchways. How formed? *Iron Coaming and headledges riveted together*

State size Main Hatch *16.6" x 12.6"* Forehatch *8' x 8'* Quarterhatch *8' x 8'*

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

What arrangement for shifting beams? *Deep shifting beam and three fore and afters in main hatch*

Hatches, If strong and efficient? *Yes 1/2 inch thick*

Order for Special Survey No. *114*

Date *7<sup>th</sup> Dec/82*

Order for Ordinary Survey No. *73*

Date *7<sup>th</sup> Dec/82*

No. *73* in builder's yard.

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
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid....
- 4th. When the ship was complete, and before the plating was finally coated or cemented..
- 5th. After the ship was launched and equipped

*Special Surveyed 1883: -*  
*Feb 16. 22. 28; Mar 3. 6. 26; Apr 3. 12. 18. 23; May 1. 10. 17. 19. June 1. 5. 8. 12. 18. 21. 29; July 25. 30. Aug 3. 7. 15. 16. 21. 27. 28. 31. 14.*

State dates of letters respecting this case *20 Feb<sup>r</sup> 1883*

General Remarks (State quality of workmanship, &c.) *This is an iron sailing ship built in accordance with the approved plans attached hereto and with the Rules generally. She is a sister vessel to the "Sumatra". Green Survey Report No 8295 - built by the Messrs Russell for the same Owners. The workmanship is good*

How are the surfaces preserved from oxidation? Inside *Paint and Cement* Outside *Paint and Composition*

I am of opinion this Vessel should be Classed *100A1*

The amount of the Entry Fee .....£ 4: is received by me,

Special .....£ 63:17:6 20/9/1883

(to be sent as per margin). Certificate ... *Gratis*

(Travelling Expenses, if any, £ ...)

Committee's Minute *FRIDAY 23 SEPT 1883*

Character assigned *TRW 100A1*

*L. Shearke*  
Surveyor to Lloyd's Register of British and Foreign Shipping  
*It is submitted that this vessel is the favorable consideration of the Committee to be classed 100A1*  
*Lloyd's Register*  
*Foundation*  
*1918*