

## STEEL IRON SHIP.

(Received at London Office, 9614 DEC 1888

No. 9614 Survey held at Port Glasgow Date, First Survey 13<sup>th</sup> June 88 Last Survey 1<sup>st</sup> Dec. 1888  
On the Steel twin screw Steamer "Rio Branco" 2 steel pole masts. Schooner rig.TONNAGE under 1415.03 ONE, OR TWO DECKED, THREE DECKED VESSEL,  
Tonnage Deck 37 SPAN, OR AWNING DECKED VESSEL.Breadth of Main Deck 33.65 Half Breadth (moulded) 16.5  
Ditto of Propeller Raised On Deck 83.79 Depth from upper part of Keel to top of Upper Deck Beams 10.06Ditto of Houses on Deck 23.44 Girth of Half Midship Frame (as per Rule) 23.75  
Ditto of Forecastle 23.44 1st Number 49.91

Gross Tonnage 556.28 1st Number, if a 3-Decked Vessel deduct 7 feet

Less Crane Space Length 199.2  
Less Engine Room 2nd Number 99.32Register Tonnage 378.27 Proportions— Breadths to Length 6.4  
as cut on Beam Depths to Length—Upper Deck to Keel 18.6  
Main Deck dittoMaster W. Boulton 87-88  
Built at Port Glasgow  
When built 1888 Launched 27<sup>th</sup> Sept 1888By whom built Russell & Co.  
Owners Amazon Steam Navigation Co. (Limited)  
Residence London.Port belonging to Para  
Destined Voyage Para  
If Surveyed while Building, Afloat, or in Dry Dock.  
Built under special survey.

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid
on deck as	199	0	Moulded...	31	0	top of Floors to Upper	9	8	Engines ...	150	Nº. of Tiers of Beams
per Rule ...						Do. do. Main Deck Beams.....					
Dimensions of Ship per Register, length,	200.45		breadth,	34.35		depth,	9.7				
KEEL, depth and thickness			Inches in Ship.			Inches per Rule.					
STEM, moulding and thickness...			6 x 1 1/2			6 x 1 1/2					
STERN-POST for Rudder do. do.			6 x 1 1/2			6 x 1 1/2					
" " for Propeller			24			24					
Distance of Frames from moulding edge to											
moulding edge, all fore and aft											
FRAMES, Angle Iron, for 2/3 length amidships			Inches. In Ship.	Inches. In Ship.	26ths	Inches. In Ship.	Inches. In Ship.	26ths			
Do. for 1/3 at each end			2 1/2	2 1/2	6	2 1/2	2 1/2	6			
EVERSED FRAMES, Angle Iron			2 1/2	2 1/2	5	2 1/2	2 1/2	5			
FLOORS, depth and thickness of Floor Plate			12			12					
at mid line for half length amidships											
thickness at the ends of vessel			6			6					
depth at 2/3 the half-bdth. as per Rule			24			24					
height extended at the Bilges...											
BEAMS, Upper, Span, or Running Deck			3 1/2	2 1/2	6	3 1/2	2 1/2	6			
Angle or double Ang. Iron, Plate or Tee Bulb Iron											
Angle or double Angle Iron on Upper edge			48			48					
Average space...			6	3	7	6	3	7			
BEAMS, Main, or Middle Deck			6	3	7	6	3	7			
Angle or double Ang. Iron, Plate or Tee Bulb Iron											
Angle or double Angle Iron on Upper edge			48			48					
Average space...			48			48					
BEAMS, Lower Deck											
Angle or double Ang. Iron, Plate or Tee Bulb Iron											
Angle or double Angle Iron on Upper edge											
Average space...											
KEELSONS Centre line, single or double plate,			23			23					
Iron, or Intercoastal, Plates			6 1/2			6 1/2					
Rider Plate			6			6					
Bulk Plate to Intercoastal Keelson			3	3	7	3	3	7			
Angle Irons											
Double Angle Iron Side Keelson											
Side Intercoastal Plate											
do. Angle Irons											
Attached to outside plating with angle iron											
BILGE Angle Irons			3	3	7	3	3	7			
do. Bulb Iron											
do. Intercoastal plates riveted to											
plating for length											
BILGE STRINGER Angle Irons			3	3	7	3	3	7			
Intercoastal plates riveted to plating for											
length											
DOE STRINGER Angle Irons											

The FRAMES extend in one length from midline to mainmast. Riveted through plates with 5/8 in. Rivets, about 5 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper turn of bilge and to main deck 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 3/4 in. diameter, averaging 3 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 5/8 in. diameter, averaging 2 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 1/2 ins. from centre to centre.

Butts of the Strake at Bilge for half length, double riveted with Butt Straps 1/2" thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 3/4 in. diameter, averaging 3 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 2 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, double riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted for length amidships.

Butts of Main Stringer Plate, double riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length amidships.

Breadth of laps of plating in double riveting 4 1/2. Breadth of laps of plating in single riveting 2 1/2.

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double. No. of Breasthooks, 14 deep floors Crutches, 14 deep floors

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &amp;c.? Siemens Steel

Manufacturer's name or trade mark, Corbett &amp; Coats.

The above is a correct description.

Builder's Signature, Russell &amp; Co.

Surveyor's Signature, R. F. F. F.

Surveyor to Lloyd's Register of British and Foreign Shipping.

ROBERT L. BOND TAYLOR &amp; SONS, Surveyors and General Steam Printers, 10, Old Street, Goswell Road, London, E.C.

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Workmanship. Are the butts of plating planed or otherwise 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?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the facing surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are in 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

The spars are in accordance with approved sketch. The steel has been tested as required. "Connell" brand.

NUMBER & LETTER for EQUIPMENT			App <sup>d</sup> 23/6/88		Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W <sup>g</sup> t req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.									
		Chain .....	60	1 1/8	105-1 1/8	72 68		Bower Anchors	1	10-1-0	12-4-1-14	10-0-0	11164
		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)											
Fore Sails,		Iron Stream Chain	45	1 1/8	75-5 1/8	72 70			1	10-0-14	12-2-0-2	10-0-0	11173
Fore Top Sails,		<del>Steel Wire</del>	75	5/8	75-5 1/8	72 58		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	8-0-0	10-2-2-0	8-0-0	11170
Fore Topmast Stay Sails,		<del>Hawser Steel</del>	Tested at Sunderland by J. H. Bitt.						1	Tested at Tipton by J. H. Bitt.			
		Towline, Hemp.	75	6	75-6	Russian hemp		Stream Anchor	1	2-2-4	5-2-2-0	2-2-0	11190
		or Steel Wire ..	90	3 1/2	90-3 1/2								
Main Sails,		Hawser .....	75	4 1/2	75-4 1/2	Mainilla		Kedge ....	1	2-0-0	4-10-0-0	2-2-0	11207
Main Top Sails, and		Warp .....	90	4	90-4			2nd Kedge.	1	1-3-0	1-3-0		including Steel
		quality	good and strong										

Standing and Running Rigging. The steel wire sufficient in size and good in quality. She has 2 Life Boats and 2 others.

The Windlass is Clarke, Chapman, Parsons & Co. and Rudder good. Pumps as approved.

Engine Room Skylights. How constructed? Open. How secured in ordinary weather? ✓

What arrangements for deadlights in bad weather? Temporary skylight fitted for rough out.

Coal Bunker Openings. How constructed? 4 cast iron shutters. How are lids secured? Bayonet fixing. Height above deck? 7 inch.

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? 1 Gangway, 2 Scuppers & 2 pipes on each side forward; 1 Gangway, 2 Scuppers & 2 pipes on each side aft.

Cargo Hatchways. How formed? Steel coamings 13" high.

State size Main Hatch 10' 0" x 6' 0" on each side. Fore hatch 3' 6" x 5' 0". Quarterhatches 10' 0" x 6' 0" on each side.

If of extraordinary size, state how framed and secured? ✓

What arrangement for shifting beams? ✓

Hatches, If strong and efficient? Yes. 2 1/2" teak.

Order for Special Survey No. 1381

Date 6<sup>th</sup> June 1888

Order for Ordinary Survey No. 197

Date 19<sup>th</sup> June 1888

No. 197 in builder's yard.

State dates of letters respecting this case 1888. May 31. June 12. 16. 23. Sept 8.

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

1888  
June 13. 15. 21. 26. 27. 28. : July 3. 4. 16. 18. 20. 26. 30.  
Aug. 2. 6. 7. 8. 9. 15. 18. 27. 30.  
Sept. 5. 6. 8. 11. 14. 18. 21. 22. 25. 26. 27.  
Oct. 2. 3. 4. 5. 6. 8. 12. 19. 23. 24. 26. 27. 29. 30. 31.  
Nov. 1. 5. 6. 8. 9. 12. 14. 15. 16. 19. 20. 23. 24. 26. 28. 30. Dec. 1 (65 visits)

General Remarks (State quality of workmanship, &c.)

The workmanship is good and the vessel has been constructed in accordance with the approved plans (4 in No.) attached hereto. The forgings were made by the builders, examined and found satisfactory. The collision bulkhead has been tested by hose and found good. The Committee's Circulars relating to steel have also been complied with.

Sketch of midship section forwarded 27/11/88

Forecastle 28ft.

Asphalt per G. K. L. 9/11/89.

State if one, two, or three decked vessel, and shade, and the length of poop, bridge, fore-castle, or raised quarter-deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside Paint Outside Paint

I am of opinion this Vessel should be Classed A.1. Steel "For River purposes only" one deck & shade deck.

The amount of the Entry Fee £ 3 : 0 : 0 is received by me,

Special £ 27 : 16 : 0 3<sup>rd</sup> Decr 1888

(to be sent as per margin). Certificate ... gratis:

(Travelling Expenses, if any, £ Nil.)

Committee's Minute

Character assigned

+ Sub 13/88

Arch

A1 Steel

For River Purposes only

10k shade &c

Surveyor to Lloyd's Register of British and Foreign Shipping.

From the further information now afforded it is submitted that vessel appears eligible to be classed A.1. Steel

For River purposes only "as recommended."

W. & shade &c

Lloyd's Register Foundation