

# IRON SHIPS.

Survey held at Newcastle Date, First Survey 11 May Last Survey 27 Nov. 1871  
"Bildovala" Master J. J. Scott

ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.		THREE DECKED VESSELS.	
Half moulded breadth ....	15.5	Half Moulded Breadth ....	
Depth from upper part of Keel to top of Upper Deck Beams ....	18.6	Total Depth if three or more Decks ....	
Girth of Half Midship Frame (as per Rule) ..	30.8	Total Girth of Half Midship Frame ....	
1st Number ....	84.6	3rd Number ....	
Length ....	215	Length ....	
2nd Number ....	138.9	4th Number ....	
Depths to Length.	12.8	Breadths to Length ....	6.9

Built at Newcastle  
 When built 1871 Launched Nov 9/71  
 By whom built Palmer Shipbuilding Co.  
 Owners Henry J. Perkins  
 Port belonging to London  
 Destined Voyage Barcelona  
 If Surveyed while Building, Afloat, or in Dry Dock. Whilst building

Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule .... 17.0  
 Power of Engines, 99 Horse. N<sup>o</sup>. of Decks with flat laid the  
 N<sup>o</sup>. of Tons 1000

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Flat Keel Plates, breadth and thickness .....	8 x 2 3/8	8 x 2 3/8	Plates in Garboard Strakes, breadth and thickness	30	11
Plates from Garboard to upper part of Bilges ..	7 1/2 x 2 3/8	7 1/2 x 2 3/8	Do. from Garboard to upper part of Bilges ..	10	10
Do. of doubling at Bilge, or increased thickness, and length applied .....	9 x 4 3/8	7 1/4 x 4 3/8	Do. of doubling at Bilge, or increased thickness, and length applied .....		
Do. from up. part of Bilge to Ir. edge of Sh'rstrake	23	(Class 100A)	Do. from up. part of Bilge to Ir. edge of Sh'rstrake	30	9
Do. Main Sheerstrake, breadth and thickness			Do. Main Sheerstrake, breadth and thickness	30	12
Do. of doubling at Sh'rstrake, & length applied			Do. of doubling at Sh'rstrake, & length applied		
Do. from Main to Up. or Spar Dk. Sh'rstrake			Do. from Main to Up. or Spar Dk. Sh'rstrake		
Do. Up. or Spar Dk. Sh'rstrake, breadth & thickness			Do. Up. or Spar Dk. Sh'rstrake, breadth & thickness	9 3/4	9 1/2
Butt Straps to outside plating, breadth & thickness			Butt Straps to outside plating, breadth & thickness	9 1/2	9 1/2
Lengths of Plating .....			Lengths of Plating .....	9.7	9.7
Shifts of Plating, and Stringers .....			Shifts of Plating, and Stringers .....		
Gunwale Plate on ends of Awning, Spar, &c.			Gunwale Plate on ends of Awning, Spar, &c.		
Upper Deck Beams, breadth and thickness ..			Upper Deck Beams, breadth and thickness ..	34	9
Angle Iron on ditto .....			Angle Iron on ditto .....	5 x 3 1/2	7
Tie Plates (fore and aft), outside Hatchways ....			Tie Plates (fore and aft), outside Hatchways ....	10	9
Diagonal Tie Plates on Beams (No. of Pairs, 7)			Diagonal Tie Plates on Beams (No. of Pairs, 7)	10	9
Planksheer material and scantling .....			Planksheer material and scantling .....		
Waterways do. do. ....			Waterways do. do. ....		
Flat of Upper Deck do. do. ....			Flat of Upper Deck do. do. ....		
How fastened to Beams .....			How fastened to Beams .....		
Stringer Plate on ends of Main or Middle Deck			Stringer Plate on ends of Main or Middle Deck		
Beams, breadth and thickness .....			Beams, breadth and thickness .....		
(Is the Stringer Plate attached to the outside plating?)			(Is the Stringer Plate attached to the outside plating?)		
Angle Irons on ditto (No. 2) .....			Angle Irons on ditto (No. 2) .....	8 1/2 x 3 1/2	8 1/2 x 3 1/2
Tie Plates, outside Hatchways .....			Tie Plates, outside Hatchways .....	5 x 3 1/2	7
Diagonal Tie Plates on Beams (No. of pairs, )			Diagonal Tie Plates on Beams (No. of pairs, )		
Waterways materials and scantlings .....			Waterways materials and scantlings .....		
Flat of Middle Deck do. do. ....			Flat of Middle Deck do. do. ....		
How fastened to Beams .....			How fastened to Beams .....		
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams .....			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams .....	23	8
(Is the Stringer Plate attached to the outside plating?)			(Is the Stringer Plate attached to the outside plating?)		
Angle Irons on ditto (No. 2) .....			Angle Irons on ditto (No. 2) .....	8 1/2 x 3 1/2	8 1/2 x 3 1/2
Stringer or Tie Plates, outside Hatchways ....			Stringer or Tie Plates, outside Hatchways ....	5 x 3 1/2	7
Flat of Lower Deck .....			Flat of Lower Deck .....		
Ceiling betwixt Decks, thickness and material ..			Ceiling betwixt Decks, thickness and material ..	2 1/2	1/2 in
Do. in hold do. do. ....			Do. in hold do. do. ....	2 1/2	1/2 in
Main piece of Rudder, diameter at head .....			Main piece of Rudder, diameter at head .....	5 1/2	3
Do. do. at heel .....			Do. do. at heel .....	3	3
(Can the Rudder be unshipped afloat? Yes)			(Can the Rudder be unshipped afloat? Yes)		
Bulkheads No. 4 Thickness of 6/16			Bulkheads No. 4 Thickness of 6/16		
Do. Height up upper deck			Do. Height up upper deck		
Do. How secured to the sides of the ship Double frame			Do. How secured to the sides of the ship Double frame		
Do. Size of Vertical Angle Irons, 3 x 3 1/2, and their distance apart, 30			Do. Size of Vertical Angle Irons, 3 x 3 1/2, and their distance apart, 30		
Do. Are the outside Plates doubled two spaces of Frames in length? No			Do. Are the outside Plates doubled two spaces of Frames in length? No		

Transoms, material Iron or, if none, in what manner compensated for.  
 Knight-heads Iron Hawse Timbers Iron  
 Windlass Compensated Pall Bitt None  
 The Frames extend in one length from Keel to gunwale Riveted through plates with ( 3/4 in.) Rivets, about 7 apart.  
 The Reverse Angle Irons on the floors and frames extend from the middle line to 4 1/2 ft. from gunwale and to gunwale alternately  
 Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes  
 Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets ( 5/8 in.) diameter, averaging ( 5/8 in.) from centre to centre.  
 Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( 3/4 in.) diameter, averaging ( 3/4 in.) from centre to centre.  
 Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes ( 10/16 ) thick, double or single Riveted; with Rivets ( 5/8 in.) diameter averaging ( 3 1/2 in.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No  
 Do. of 3 Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than their plates.  
 Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single riveted; with rivets ( 3/4 in.) diameter, averaging ( 3 1/2 in.) from centre to centre.  
 Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single At lower edge double  
 Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps ( 7/16 ) thick, double or single Riveted; with Rivets ( 3/4 in.) diameter, averaging ( 3 1/2 in.) from centre to centre.  
 Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for 1/2 length amidships. Breadth of laps of plating in double Riveting ( 4 1/4 ) 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 treble riveted  
 Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Laid down No. of Breasthooks, 4 Crutches, 3  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Palmer's  
 Manufacturer's name or trade mark, Palmer's

We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature, Palmer Shipbuilding & Iron Co. Surveyor's Signature, J. J. Scott

100150-0336



Workmanship. Are the butts of plating planed or otherwise fitted? Planed  
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiency? Yes  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes or  
well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes  
Are there any rivets which either break into or have been put through the seams or butts of the plating? Very few

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron  
Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are  
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 Foremast 95 ft x 21" diam. Mainmast

For plate in circumferenced 7/16" thick. Edges double  
Butts double and table riveted.

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.
SAILS.									
N <sup>o</sup> .	CABLES, &c.								
Fore Sails,	Chain	270	1 1/16	37.30.0	1 1/16	34	Bowers	1	18.1.21
Fore Topmast Stay Sails	(State Machine where tested and name of Superintendent)	90	9				Stream	1	18.0.6
Main Sails,	Hawser	90	1 1/16					1	15.2.9
Main Top Sails,	Towlines	90	7					1	8.0.0
and	Warp	50	8					1	6.1.0
	All of good quality.						Kedges	1	2.0.15

Her Standing and Running Rigging Wire shunt sufficient in size and good in quality. She has one life Long Boat

The present state of the Windlass is good Capstan Union and Rudder good Pumps good

Engine Room Skylights.—How constructed? Iron coverings How secured in ordinary weather? Lashed on

What arrangements are there for deadlights in such for bad weather? Solid lead sashes & bulls

Coal Bunker Openings.—How constructed? Iron pipes How are lids secured? Studs How high above deck?

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coil?

Scuppers on each side

Cargo Hatchways.—How formed? Iron coverings State size 22' 6" x 15' 8" 18' 6" x 15' 8"

If of extraordinary size, state how framed and secured? Framed with half beams and iron shifting beams

What arrangement for shifting beams? Iron shifting beams & two iron pins & plates

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 22' 6" x 15' 8"

Order for Special Survey No. <u>1</u>	DATES OF	1st.	On the several parts of the frame, when in place, and before the plating was wrought	<u>1891 May 11. June 2.</u>
Date <u>13 March 1891</u>	Surveys held	2nd.	On the plating during the progress of riveting	<u>21.26. July 5.12.15.</u>
Order for Ordinary Survey No. <u>4</u>	while building	3rd.	When the beams were in and fastened, and before the decks were laid	<u>20 Aug 10. 25. 29. Sept</u>
Date <u>13 March 1891</u>	as per	4th.	When the ship was complete, and before the plating was finally coated or cemented	<u>5.7.12.13.16.19.22.</u>
No. <u>279</u>	in builder's yard.	5th.	After the ship was launched and equipped	<u>25.28. Oct 2.10.17. 24.26. Nov 2.4.8.11. 18.21.27.</u>

#### General Remarks,

This vessel is similar in all respects to the "Chavarré"  
(Report No 11673).

There is a double bottom extending from the Foremast  
to the Aftermost bulkhead. Plating of inner bottom  
5/16" thick & plating plates 7/16" thick.

Forecastle 32 feet long. Raised quarter deck  
70 feet long. Peak 30 feet long.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

In what manner are the surfaces preserved from oxidation? Inside Paint & Cement Outside Paint

I am of opinion this Vessel should be Classed 100 A 1 (Inspected) not marked double bottom

The amount of the Entry Fee .....£ 5: : is received by me,

Special .....£ 15: 15: :  
Certificate ..... : 5: :

Travelling Expenses)  
(any) £

Committee's Minute 12<sup>th</sup> March 1892

Character assigned 100 A 1

This vessel is entitled  
to be classed as recommended  
100 A 1.

Lloyd's Register  
Foundation