

# IRON SHIPS.

Rec 13/5/92 36vials  
141

No. 11000 Survey held at Newcastle Date, First Survey 2<sup>nd</sup> Oct 1871 Last Survey 20<sup>th</sup> March 1872

On the S.S. "Vanessa" Master G. J. Martin

Tonnage under Deck	995.21	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>Newcastle</u>
Ratio of Length to Breadth	101.63	Half moulded breadth	14.9	When built <u>1872</u> Launched <u>10<sup>th</sup> Feb 1872</u>
Ratio of Houses on Deck	45.59	Depth from upper part of Keel to top of Upper Deck Beams	19.1	By whom built <u>Messrs Palmer &amp; Co</u>
Ratio of Forecastle	39.42	Girth of Half Midship Frame (as per Rule)	30.9	Owners <u>Messrs. Fenwick &amp; Son</u>
Gross Tonnage	1101.05	1st Number	64.9	Port belonging to <u>LONDON</u>
Crew Space, as per Rule	62.24	Length	253	Destined Voyage <u>Yatta</u>
Engine Room	253.03	2nd Number	16549	If Surveyed while Building, Afloat, or in Dry Dock. <u>While building</u>
Registered Tonnage, as a Steamer, cut on Beam	266.50	Depths to Length	14.3	
		3rd Number		
		4th Number		
		Breadths to Length	8.5	

Length on deck as per Rule, 253 Feet. Inches. Moulded Breadth, 29 9 1/4 Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule, 17 7 Feet. Inches. Horse. Power of Engines, 190 N<sup>o</sup>. of Decks with flat laid Two N<sup>o</sup>. of Tiers of Beams Two

Dimensions of Ship per Register, length, 253.0 breadth, 30.0 depth, 14.25

	Inches in Ship.		Inches required per Rule.		Flat Keel Plates, breadth and thickness	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths. required per Rule.
	Inches.	16ths.	Inches.	16ths.					
Keel, if bar iron, depth and thickness	9	2 1/2	8 1/2	2 1/2	Plates in Garboard Strakes, breadth and thickness	36	11	36	11
Do. if centre through plate, depth and thickness	8	2 1/2	8	2 1/2	Do. from Garboard to upper part of Bilges	-	10	-	10
Stem, if bar iron, moulding and thickness	9	4 1/2	8	5	Do. of doubling at Bilge, or increased thickness, and length applied	-	12	-	12
Stern-post for Rudder do. do.	9	4 1/2	8	5	Do. from up. part of Bilge to lr. edge of Sh'rstrake	-	9	-	9
Stern-post for Propeller	9	4 1/2	8	5	Do. Main Sheerstrake, breadth and thickness	36	12	36	12
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23		Do. of d'bling at Sh'rstrake, & length applied	-	9	-	9
					Do. from Mn. to Up. or Spar Dk. Sh'rstrake	-	9	-	9
Frames, size of Angle Iron, for 1/2 length amidships	4	3	4	3	Do. Up. or Spar Dk. Sh'rstrake, brdth & thickness	9 1/2	9	9 1/4	10 1/4
Do. for 1/3 at each end	4	3	4	3	Butt Straps to outside plating, breadth & thickness	9 1/2	9	9 1/4	10 1/4
Reversed Frames, size of Angle Iron	3	3	3	3	Lengths of Plating	9	7	9	7
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	-	19 1/2	18	0	Shifts of Plating, and Stringers	3	10	3	10
Do. at the ends	-	19	17	7	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	52	9	52	9
Do. do. do. at Bilge Keelson	-	3	3	0	Angle Iron on ditto	5	3 1/2	5	3 1/2
Do. height extended at the Bilges	-	3	3	0	Tie Plates (fore and aft), outside Hatchways	14	9	14	9
Beams, Upper, Spar, or Awning Deck (No. 63) single or double Angle Iron, Plate or Tee Bulb Iron	-	7 1/2	7	7 1/2	Diagonal Tie Plates on Beams (No. of Pairs, 4)	14	9	14	9
Single or double Angle Iron on Upper edge	3	2 1/2	3	2 1/2	Planksheer material and scantling				
Average space	-	3	10	3	Waterways do. do.				
Beams, Main or Middle Deck (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	-	7 1/2	7	7 1/2	Flat of Upper Deck do. do.				
Single or double Angle Iron on Upper Edge	3	2 1/2	3	2 1/2	How fastened to Beams				
Average space	-	3	10	3	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Beams, Lower Deck, Hold or Orlop (No. 41) single or double Angle Iron, Plate or Tee Bulb Iron	-	7 1/2	7	7 1/2	(Is the Stringer Plate attached to the outside plating?)				
Single or double Angle Iron on Upper Edge	3	2 1/2	3	2 1/2	Angle Irons on ditto (No. )				
Average space	-	3	10	3	Tie Plates, outside Hatchways				
Keelson Centre line, single or double plate, box, or intercostal, size of Plates	-	26	9	26	Diagonal Tie Plates on Beams (No. of pairs, )				
Do. Bulb Plate to Intercostal Keelson	-	14	6	14	Waterways materials and scantlings				
Do. Size of Angle Irons	5	3 1/2	5	3 1/2	Flat of Middle Deck do. do.				
Do. Side Intercostal Keelson, size of Plates	-	5	3 1/2	5	How fastened to Beams				
Do. Angle Irons on tops of Floors	-	5	3 1/2	5	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	32	8	32	8
Do. Bilge Keelson, Bulb Iron	5	3 1/2	5	3 1/2	(Is the Stringer Plate attached to the outside plating?)				
Do. do. Intercostal plates riveted to plating for length	-	5	3 1/2	5	Angle Irons on ditto (No. 2)	4	4	4	4
Do. do. Bulb Angle Irons	-	5	3 1/2	5	Stringer or Tie Plates, outside Hatchways	5	3 1/2	5	3 1/2
Side Stringers (No. ) size of Angle Irons	5	3 1/2	5	3 1/2	Flat of Lower Deck				
Do. Intercostal plates riveted to plating for length	-	5	3 1/2	5	Ceiling betwixt Decks, thickness and material	2 1/2	Fir	2 1/2	

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads Iron Hawse Timbers Iron

Windlass Iron Patent Pall Bitt

The Frames extend in one length from Keel to gunwale Riveted through plates with (3/4 in.) Rivets, about 6 1/2 apart.

The Reverse Angle Irons on the floors and frames extend across the middle line of the 18 in. strength angle iron and to the 8 in. ditto 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 (1/2 in.) diameter, averaging (5 1/2 ins.) 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 1/2 ins.) from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1 1/8) thick, double or single Riveted; with Rivets (3/4 in.) diameter averaging (3 1/4 ins.) 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 1/4 ins.) 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 (9/16) thick, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/4 ins.) 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 1/2) Breadth of laps of plating in single Riveting (2 5/8)

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and treble as per rule

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? stayed 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 Patent Iron

Manufacturer's name or trade mark, Palmer's Patent Iron

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, J. Caldwell Surveyor's Signature, J. Caldwell

IRON 1541031

**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 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? Solid single piece  
 Do the holes for riveting 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 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 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 riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit Fore 70' x 2 1/4" dia Main 72' 6" x 2 1/4" dia. Mizzen 54 x 1 1/2"  
The Fore, main & Mizzen masts are of iron. plates 9/16" thick. Edges double riveted. Butts double and triple riveted.

10084 Iron

N <sup>o</sup> .	SAILS.	CABLES, &c.	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.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Number for equipment	10.203											
	Fore Sails,	Chain	300	19/16	440.0.0	19/16	43 20	Bowers	1	24.0.7	23.19.2.21	23.2.0	23 20
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).							1	23.2.0	23.10.0.0	23.2.0	23 20
	Fore Topmast Stay Sails	Hempen Stream Cable							1	20.1.6	21.1.2.7	19.3.23	20 20
	Main Sails,	Hawser	90	1		1		Stream	1	10.0.18		10.0.0	
	Main Top Sails,	Towlines	90	1 1/4		9/16		Kedges	1	5.0.18		5.0.0	
	and	Warp	90	3/4		6							
		All good quality.	140	3/8									

Her Standing and Running Rigging Iron sufficient in size and good in quality. She has 2 Life Long Boats and two others  
 The present state of the Windlass is new Capstan new and Rudder good Pumps good

Engine Room Skylights.—How constructed? In crumpling How secured in ordinary weather? flush with glass  
 What arrangements are there for deadlights in such for bad weather? Solid shutters

Coal Bunker Openings.—How constructed? In bulk How are lids secured? locks How high above deck? 6 in

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

Cargo Hatchways.—How formed? In crumpling State size 16.9 x 9.0 & 14.9 x 9.0

If of extraordinary size, state how framed and secured? Reinforcing size. Framed with heavy beams.

What arrangement for shifting beams? In shifting beams

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 16' 9" x 9' and 14.9 x 9'

- Order for Special Survey No. 841 DATES of
- 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 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
- Date 26 June 1871 Surveys held Quilt under  
 Order for Ordinary Survey No. — while building —  
 Date — as per —  
 No. 285 in builder's yard. Section 18. Special Survey

**General Remarks,**

*There is a double bottom in the Fore and After holds of the vessel length of 15.4 feet. The plates of inner bottom are 9/16" and the flange plates 7/16" thick.*

*Length of Forecastle 39 feet, Length of raised Quarter deck 80 feet*

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

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

I am of opinion this Vessel should be Classed 100 A 1 (pt double bottom)

The amount of the Entry Fee .....£ 5: .. is received by me,  
 Special .....£ 53: ..  
 Certificate .... : ..

(Travelling Expenses) (if any) £ —

Committee's Minute 11<sup>th</sup> May 72

Character assigned 100 A 1

H. Murray, J. Thomson, 44 Great Exchange, F.C.

I concur in the opinion that this vessel should be classed 100 A 1.  
 1871 Rules  
 Lloyd's Register  
 Foundry

A. D. E. M. B.  
 T. G. W. pt double bottom