

IRON SHIPS.

Per 18/8/73

No. 10,650 Survey held at Sunderland Date, First Survey March 20th 1873 Last Survey August 9th 1873
 On the SS Vindomora Official number 68,452 Master Ward

Tonnage under Tonnage Deck } 839.38
 Ditto of Third Spar or Awning Deck }
 Ditto of Poop, or Raised Qr. Dk. } 210.96
 Ditto of Houses on Deck } 3.12
 Ditto of Forecastle } 26.32
 Gross Tonnage } 1079.78
 Crew Space, as per Rule } 41.87
 Register Tonnage, cut on Beam } 1037.91
 Engine Room } 345.53
 Register Tonnage, as a Steamer, cut on Beam } 692.38

ONE, OR TWO DECKED, SPAR, OR AWNING DECKED VESSELS.
 Half moulded breadth 14.96
 Depth from upper part of Keel to top of Upper Deck Beams 18.50
 Girth of Half Midship Frame (as per Rule) ... 30.42
 1st Number 63,88
 Length 216.67
 2nd Number 13,840
 Depths to Length. Under 12
THREE DECKED VESSELS.
 Half Moulded Breadth....
 Total Depth of three or more Decks
 Total Girth of Half Midship Frame
 3rd Number
 Length
 4th Number
 Breadths to Length ... Under 8

Built at Sunderland
 When built 1872.1873 Launched July 10/73
 By whom built J. L. Thompson
 Owners Bell Symonds & Co
 Port belonging to London
 Destined Voyage Soulon
 If Surveyed while Building, Afloat, or in Dry Dock. Whilst Building

PLANS CASE

Length on deck as per Rule, 216 Feet. 6 Inches. Moulded Breadth, 29 Feet. 11 Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 18 Feet. 6 Inches. Power of Engines, 99 Horse. No. of Decks with flat laid one No. of Tiers of Beams 2

Dimensions of Ship per Register, length, 219.8 breadth, 30.4 depth, 16.8

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	8 x 2 3/8	8 x 2 3/8	Flat Keel Plates, breadth and thickness		
Do. if centre through plate, depth and thickness	8 x 2 3/8	7 1/2 x 2 3/8	Plates in Garboard Strakes, breadth and thickness	36	9
Stem, if bar iron, moulding and thickness	8 x 4	8 x 4	Do. from Garboard to upper part of Bilges		8
Stern-post for Rudder do. do.	8 x 4	8 x 4	Do. of doubling at Bilge, or increased thickness, and length applied		9 one strake
Stern-post for Propeller	8 x 3 3/4	8 x 3 3/4	Do. fin up. part of Bilge to lr. edge of Sh'rstrake		8
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	(Class 90 A)	Do. Main Sheerstrake, breadth and thickness	36	12
			Do. of d'bling at Sh'rstrake, & length applied		
			Do. from Mn. to Upr. or Spar Dk. Sh'rstrake.		
			Do. Up. or Spar Dk Sh'rstrake, brdth & thickness		
			Butt Straps to outside plating, breadth & thickness	10	1 1/2
			Lengths of Plating	5	spaces
			Shifts of Plating, and Stringers	2	spaces
			Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness		
			Angle Iron on ditto		
			Tie Plates (fore and aft), outside Hatchways		
			Diagonal Tie Plates on Beams (No. of Pairs)		
			Planksheer material and scantling		
			Waterways do. do.		
			Flat of Upper Deck do. do.		
			How fastened to Beams		
			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	43	9
			(Is the Stringer Plate attached to the outside plating?)	Yes	
			Angle Irons on ditto (No. 1)	4 1/2 x 3 1/2 x 8	4 1/2 x 3 1/2 x 8
			Tie Plates, outside Hatchways	10 1/2	9
			Diagonal Tie Plates on Beams (No. of pairs)		10
			Waterways materials and scantlings		
			Flat of Middle Deck do. do.		
			How fastened to Beams		
			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	27 1/2	8
			(Is the Stringer Plate attached to the outside plating?)	Yes	
			Angle Irons on ditto (No. 2)	4 x 8 x 8	4 x 8 x 8
			Stringer or Tie Plates, outside Hatchways	4 x 8 x 8	4 x 8 x 8
			Flat of Lower Deck		
			Ceiling betwixt Decks, thickness and material		
			Do. in hold do. do.	2 1/2 in Baltic Pine	
			Main piece of Rudder, diameter at head	5 1/2	5
			Do. do. at heel	4 3/4 x 3 1/2	3
			(Can the Rudder be unshipped afloat? Yes)		
			Bulkheads No. 4 Thickness of		6/16
			Do. Height up	Upper Deck	
			Do. How secured to the sides of the ship	Double frames	
			Do. Size of Vertical Angle Irons, and their distance apart,	3 x 3 x 3/4	and their distance apart, 2/6
			Do. Are the outside Plates doubled two spaces of Frames in length?	Yes	

Transoms, material Iron or, if none, in what manner compensated for.
 Knight-heads Iron Hawse Timbers Iron
 Windlass Iron Patent Pall Bitt Nil
 The Frames extend in one length from Keel to Summers Riveted through plates with (3/4 in.) Rivets, about 6 apart.
 The Reverse Angle Irons on the floors and frames extend across the middle line to angles or to beam stringer and to Summers 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 single at upper edge, with Rivets (3/4 in.) diameter, averaging (3 3/4 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 3/4 ins.) from centre to centre.
 Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (2 1/8 in.) thick, double or single Riveted; with Rivets (3/4 in.) diameter averaging (3 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? in alternate strakes
 Do. of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/2 thicker than their plates. 8
 Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/2 thick, or clencher, double or single riveted; with rivets (3/4 in.) diameter, averaging (3 3/4 ins.) from centre to centre.
 Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge to Summers and at lower edge Double
 Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (10.8.13/16) thick, double or single Riveted; with Rivets (3/4 x 1/8 in) diameter, averaging (3 1/2 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 3/4) Breadth of laps of plating in single Riveting (2 3/4)
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single 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.) Butter frames
 Beams of the various Decks, how secured to the sides? Riveted to frames & stringer No. of Breasthooks, 5 Crutches, 3
 What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Shipping purpose.
 Manufacturer's name or trade mark, Bolckow, Pauppan & Co. for plates & S. Fyfe & Co. for angles

We certify that the above is a correct description of the several particulars therein given.
 Surveyor's Signature, Joseph L. Thompson Surveyor's Signature, Martindale

IRON 454-0527

Workmanship. Are the butts of plating planed Planed fitted? 11729 Jm
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? well fitted
 Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? solid pieces
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes generally 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? A few in butts only

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

Masthead Section attached.

No.	Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
	SAILS.											
	CABLES, &c.	240	1 7/8	37 1/2	17/16	37 1/2						
	Chain						Bowers	3	18-2-20	19.13.0.14	18-0-0	19-0-0-0
	Fore Sails, (State Machine where Tested, and name of Superintendent).								18-2-14	15.10.5.21	18-0-0	18-0-0
	Fore Top Sails,								15-2-26	17.3.0.14	15-1-6	16-0-0
	Fore Topmast Hempen Stream	80	9 1/2	Strain by 55 1/2			Stream	1	8-2-14		8-0-0	
	Stay Sails Cable	60	7/8	Strain by 55 1/2			Kedges	2	4-0-0		4-0-0	2-0-0
	Main Sails, Hawser	80	7/8	Strain by 55 1/2					2-0-2		2-0-0	
	Main Top Sails, Towlines	80	5/8									
	Warp	80	4 1/2									
	All of <u>good</u> quality.	140	4									

Her Standing and Running Rigging Complete sufficient in size and good in quality. She has 2 Life Long Boats and 1 other.
 The present state of the Windlass is 2 Capstans & 2 Steam Winches and Rudder Good Pumps Good
 Engine Room Skylights.—How constructed? Strong Wood Frame How secured in ordinary weather? Iron Cars & Pins
 What arrangements are there for deadlights in such for bad weather? Iron Bars & Pins, & Bulls eyes set into Strong Wood Frame.
 Coal Bunker Openings.—How constructed? Strong Wood framing on main deck & iron on deck How are lids secured? Bars How high above deck? 7 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? Side Ports

Cargo Hatchways.—How formed? Strong plates & angle iron State size 23 ft by 11 ft with a deck plate Beam 2 1/2 inch & double angles on top, 4 Iron Pillars & Strong Wood for 8 in
 If of extraordinary size, state how framed and secured? in

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 19 ft 2 in by 10 ft secured same as above

Order for Special Survey No. 2407 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Bullhead
 Date 24th March 1873 Surveys held 2nd. On the plating during the progress of riveting and surveyed 18th March 20th 21st April 16 18 22 26 May 1
 Order for Ordinary Survey No. 2 while building 3rd. When the beams were in and fastened, and before the decks were laid 3 6 12 14 20 24 26 28 30 June 7 9 11 13 14 15 20 26 27
 Date as per as per 4th. When the ship was complete, and before the plating was finally coated or cemented 23 27 July 1 3 5 7 10 12 15 17
 No. 114 in builder's yard. Section 18. 5th. After the ship was launched and equipped 24 26 Aug 5 7 9

General Remarks,
 This vessel is built under the Old Rules.
 She has a Full Poop 125 feet long from the Sternpost, the Sheerstrake is doubled at the break of Poop for about 25 feet & the Main Deck Stringer plate is increased in thickness at the same place.
 There is a double bottom in the After hold extending from the After Engine Room Bulkhead into the very narrow run off ^{68 ft long} also a double bottom in the very fore end of the vessel about 36 feet long.
 The Topgallant Fore castle is 29 feet long.

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 Red paint & cement in bottom Outside Red paint

I am of opinion this Vessel should be Classed *90A1

The amount of the Entry Fee £ 5 : 0 : 0 is received by me, Senhouse Martindale
 Special £ 50 : 19 : 0 J.W.
 Certificate : :
 (Travelling Expenses) (if any) £

Committee's Minute 19th August 1873
 Character assigned 90A1
part double bottom

