

# IRON SHIPS.

No. 349 Survey held at Penfrew Date, First Survey 14<sup>th</sup> Feb/71 Last Survey 6<sup>th</sup> June 1872

On the S.S. "Adyria" Master ✓

Tonnage under Tonnage Deck <u>1467.69</u>	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>Penfrew</u>
Ditto of Third Spar, or Awning Deck. <u>✓</u>	Half moulded breadth... <u>15.2</u>	Half Moulded Breadth... <u>15.2</u>	When built <u>1872</u> Launched <u>25<sup>th</sup> May</u>
Ditto of Poop, or Raised Qr. Dk. <u>✓</u>	Depth from upper part of Keel to top of Upper Deck Beams... <u>19.3</u>	Total Depth if three or more Decks... <u>26.3</u>	By whom built <u>H. Simons &amp; Co.</u>
Ditto of Houses on Deck... <u>27.24</u>	Girth of Half Midship Frame (as per Rule)... <u>30.2</u>	Total Girth of Half Midship Frame... <u>37.2</u>	Owners <u>British India S.N. Co.</u>
Ditto of Forecastle <u>✓</u>	1st Number... <u>64.7</u>	3rd Number... <u>78.7</u>	Port belonging to <u>Glasgow</u>
Gross Tonnage <u>1494.93</u>	Length... <u>268.5</u>	Length... <u>268.5</u>	Destined Voyage <u>Glyde to India</u>
Net Tonnage <u>47.50</u>	2nd Number... <u>17.371</u>	4th Number... <u>21.130</u>	If Surveyed while Building, Afloat, or in Dry Dock.
Registered Tonnage, on Deck... <u>✓</u>	Depths to Length. <u>15.95 &amp; 11.05</u>	Breadths Length... <u>8.8</u>	
Engine Room <u>478.38</u>			
Registered Tonnage, as a Steamer, but on Beam <u>969.05</u>			

Length on deck as per Rule, 268 Feet, 6 Inches. Moulded Breadth, 30 Feet, 5 Inches. Depth from top of Floors to Upper and Main Deck Beams, as per Rule... 24 Feet, 5 Inches. Power of Engines, 200 Horse. N° of Decks with flat laid Two. N° of Tiers of Beams Three.

Dimensions of Ship per Register, length, 269.8 breadth, 30.6 depth, 24.2

	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.
	In Ship.	In Ship.	16ths in Ship.	Inches.	Inches.	16ths required per Rule.					
Keel, if bar iron, depth and thickness	<u>9 1/2</u>	<u>2 1/2</u>	<u>✓</u>	<u>9 1/2</u>	<u>2 1/2</u>	<u>✓</u>	Plates in Garboard Strakes, breadth and thickness	<u>38</u>	<u>12/16</u>	<u>36</u>	<u>12/16</u>
Do. if centre through plate, depth and thickness	<u>9</u>	<u>2 1/2</u>	<u>✓</u>	<u>8 1/2</u>	<u>2 1/2</u>	<u>✓</u>	Do. from Garboard to upper part of Bilges	<u>11/16</u>		<u>11/16</u>	
Stem, if bar iron, moulding and thickness	<u>9</u>	<u>5</u>	<u>✓</u>	<u>8 1/2</u>	<u>5</u>	<u>✓</u>	Do. of doubling at Bilge, or increased thickness, and length applied	<u>Two Strakes</u>	<u>13/16</u>	<u>Two Strakes</u>	<u>13/16</u>
Stern-post for Rudder do.	<u>9</u>	<u>5</u>	<u>✓</u>	<u>8 1/2</u>	<u>5</u>	<u>✓</u>	Do. fm up. part of Bilge to lr. edge of Sh'rstrake	<u>10/16</u>		<u>10/16</u>	
Stern-post for Propeller	<u>24</u>		<u>✓</u>	<u>24</u>		<u>✓</u>	Do. Main Sheerstrake, breadth and thickness	<u>36</u>	<u>12/16</u>	<u>36</u>	<u>12/16</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>24</u>		<u>✓</u>	<u>24</u>		<u>✓</u>	Do. of d'bling at Sh'rstrake, & length applied	<u>7/16</u>		<u>7/16</u>	
Frames, size of Angle Iron, for 1/2 length amidships	<u>4</u>	<u>3</u>	<u>7/16</u>	<u>4</u>	<u>3</u>	<u>7/16</u>	Do. from Mn. to Upr. or Spar Dk. Sh'rstrake	<u>7/16</u>		<u>7/16</u>	
Do. for 1/4 at each end	<u>4</u>	<u>3</u>	<u>6/16</u>	<u>4</u>	<u>3</u>	<u>6/16</u>	Do. Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>36</u>	<u>10/16</u>	<u>30</u>	<u>10/16</u>
Reversed Frames, size of Angle Iron	<u>3</u>	<u>3</u>	<u>7/16</u>	<u>3</u>	<u>3</u>	<u>7/16</u>	Butt Straps to outside plating, breadth & thickness	<u>16 3/4</u>	<u>2 10</u>	<u>2 14/16</u>	<u>7/16</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>23</u>	<u>10/16</u>	<u>✓</u>	<u>23</u>	<u>10/16</u>	<u>✓</u>	Lengths of Plating	<u>10 feet</u>		<u>10 feet</u>	
Do. at the ends	<u>9/16</u>	<u>8/16</u>	<u>✓</u>	<u>9/16</u>	<u>8/16</u>	<u>✓</u>	Shifts of Plating, and Stringers	<u>5</u>		<u>5</u>	
Do. do. do. at Bilge Keelson	<u>10/16</u>	<u>9/16</u>	<u>8/16</u>	<u>10/16</u>	<u>9/16</u>	<u>8/16</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>45</u>	<u>8/16</u>	<u>45</u>	<u>8/16</u>
Do. height extended at the Bilges	<u>Twice</u>		<u>✓</u>	<u>Twice</u>		<u>✓</u>	Angle Iron on ditto	<u>4.4</u>	<u>9/16</u>	<u>4.4</u>	<u>9/16</u>
Beams, Upper, Spar, or Awning-Deck (No. <u>✓</u> ) single or double Angle Iron, Plate or Tee Bulb Iron	<u>7</u>	<u>7/16</u>	<u>7/16</u>	<u>7</u>	<u>7/16</u>	<u>7/16</u>	Tie Plates (fore and aft), outside Hatchways	<u>15</u>	<u>8/16</u>	<u>15</u>	<u>8/16</u>
Single or double Angle Iron on Upper edge	<u>48</u>		<u>✓</u>	<u>48</u>		<u>✓</u>	Diagonal Tie Plates on Beams (No. of Pairs, 5)	<u>15</u>	<u>8/16</u>	<u>15</u>	<u>8/16</u>
Average space	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	Planksheer material and scantling	<u>13 x 5</u>	<u>Teak</u>		
Beams, Main or Middle Deck (No. <u>✓</u> ) single or double Angle Iron, Plate or Tee Bulb Iron	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	Waterways do. do.	<u>3 1/2</u>	<u>Teak</u>	<u>33/8</u>	
Single or double Angle Iron on Upper edge	<u>48</u>		<u>✓</u>	<u>48</u>		<u>✓</u>	How fastened to Beams	<u>nut &amp; screw bolts</u>			
Average space	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<u>43</u>	<u>9/16</u>	<u>43</u>	<u>9/16</u>
Beams, Lower Deck, Hold or Orlop (No. <u>✓</u> ) single or double Angle Iron, Plate or Tee Bulb Iron	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	(Is the Stringer Plate attached to the outside plating?)	<u>Yes</u>		<u>Yes</u>	
Single or double Angle Iron on Upper Edge	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	Angle Irons on ditto (No. <u>2</u> )	<u>4.4</u>	<u>9/16</u>	<u>4.4</u>	<u>9/16</u>
Average space	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	Tie Plates, outside Hatchways	<u>14</u>	<u>9/16</u>	<u>14</u>	<u>9/16</u>
Keelson Centre line, single or double plate, box, or intercostal, size of Plates	<u>16</u>	<u>13/16</u>	<u>✓</u>	<u>16</u>	<u>13/16</u>	<u>✓</u>	Diagonal Tie Plates on Beams (No. of pairs, 5)	<u>14</u>	<u>9/16</u>	<u>14</u>	<u>9/16</u>
Do. Bulb Plate to Intercostal Keelson	<u>8 1/2</u>	<u>9/16</u>	<u>✓</u>	<u>8 1/2</u>	<u>9/16</u>	<u>✓</u>	Waterways materials and scantlings				
Do. Size of Angle Irons	<u>5 1/2</u>	<u>4</u>	<u>9/16</u>	<u>5 1/2</u>	<u>4</u>	<u>9/16</u>	Flat of Middle Deck do. do.	<u>3 1/2</u>		<u>3 1/2</u>	
Do. Side Intercostal Keelson, size of Plates	<u>9/16</u>		<u>✓</u>	<u>9/16</u>		<u>✓</u>	How fastened to Beams	<u>nut &amp; screw bolts</u>			
Do. Angle Irons on tops of Floors	<u>5</u>	<u>4</u>	<u>9/16</u>	<u>5</u>	<u>4</u>	<u>9/16</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>33</u>	<u>9/16</u>	<u>33</u>	<u>9/16</u>
Do. Bilge Keelson, Bulb Iron	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	<u>4 1/2</u>	<u>7/16</u>	<u>7/16</u>	(Is the Stringer Plate attached to the outside plating?)	<u>Yes</u>		<u>Yes</u>	
Do. do. Intercostal plates riveted to plating for length	<u>5</u>	<u>4</u>	<u>9/16</u>	<u>5</u>	<u>4</u>	<u>9/16</u>	Angle Irons on ditto (No. <u>2</u> )	<u>4.4</u>	<u>9/16</u>	<u>4.4</u>	<u>9/16</u>
Do. do. Angle Irons	<u>5</u>	<u>4</u>	<u>9/16</u>	<u>5</u>	<u>4</u>	<u>9/16</u>	Stringer or Tie Plates, outside Hatchways	<u>4.4</u>	<u>9/16</u>	<u>angle iron</u>	
Side Stringers (No. <u>1</u> ) size of Angle Irons	<u>5</u>	<u>4</u>	<u>9/16</u>	<u>5</u>	<u>4</u>	<u>9/16</u>	Flat of Lower Deck				
Do. Intercostal plates riveted to plating for length	<u>5</u>	<u>4</u>	<u>9/16</u>	<u>5</u>	<u>4</u>	<u>9/16</u>	Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>a. Elm &amp; Pine</u>		
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.							Do. in hold do. do.	<u>6</u>		<u>6</u>	
Knight-heads <u>Iron</u> Hawse Timbers <u>Iron</u>							Do. do. do. at heel	<u>3 1/4</u>		<u>3 1/4</u>	
Windlass <u>Patent</u> Pall Bitt <u>Iron</u>							(Can the Rudder be unshipped afloat?)	<u>Yes</u>			
The Frames extend in one length from <u>Keel</u> to <u>Upper Deck</u>							Bulkheads No. <u>5</u> Thickness of <u>6/16</u>			<u>6/16</u>	
The Reverse Angle Irons on the floors and frames extend from the middle line to <u>Main</u> and to <u>Upper Deck</u> alternately							Do. Height up <u>to Deck</u>				
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>							Do. How secured to the sides of the ship <u>between double frame</u>				
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets ( <u>7/8</u> in.) diameter, averaging ( <u>3 7/8</u> ins.) from centre to centre.							Do. Size of Vertical Angle Irons, <u>3.3.6</u> and their distance apart, <u>30</u>				
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( <u>7/8</u> in.) diameter, averaging ( <u>3 7/8</u> ins.) from centre to centre.							Do. Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes ( <u>14 5/16</u> thick, double or single Riveted; with Rivets ( <u>7/8</u> in.) diameter averaging ( <u>3 7/8</u> ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>No</u>											
Do. of <u>3</u> Strakes at Bilge for <u>1/2</u> length, treble riveted with Butt Straps <u>1/16</u> 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 ( <u>7/8</u> in.) diameter, averaging ( <u>4</u> ins.) from centre to centre.											
Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge <u>Single</u> At lower edge <u>Double</u>											
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps ( <u>10/16</u> ) thick, double or single Riveted; with Rivets ( <u>7/8</u> in.) diameter, averaging ( <u>4</u> 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 <u>1/2</u> length amidships. Breadth of laps of plating in double Riveting ( <u>6 times</u> ) Breadth of laps of plating in single Riveting ( <u>3 1/2 times</u> )											
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>Treble and Double</u>											
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? <u>Truss riveted to frame</u> No. of Breasthooks, <u>5</u> Crutches, <u>5</u>											
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>B. Miller</u>											
Manufacturer's name or trade mark, <u>Mosend &amp; Blochain</u>											

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

Builder's Signature, H. Simons & Co. Surveyor's Signature, J. Mowbray

IRON 451 - 0187

10210 Iron

**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? one 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? a 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 Schooner Rigged Iron Masts

Tested at Tipton 15<sup>th</sup> April 1872 by Sam<sup>l</sup> Trepanna.

one full suit and spare

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.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain .....	300	1 10/16	47 1/2	1 10/16	47 1/2	Bowers ....	1	25.3.7	25.10.1.7	25 1/2	25 2/10
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).						(State Machine where Tested, and name of Superintendent).	1	25.2.21	25.8.0.14		
	Fore Topmast Stay Sails	Hempen Stream	100	14/16	13.15.0			Stream ....	1	22.0.7	22.8.1.21	21.2.20	22 2/20
	Main Sails,	Chain Cable	90	11		11		Kedges ....	1	10.2.12	10.14.2	10 1/2	
	Main Top Sails,	Hawser .....	90	10 1/2		10 1/2			1	5.1.0	6.12.0	5 1/4	
	and	Towlines ...	90	6 1/2		6 1/2			1	2.3.0	4.15.3	2 3/4	
		Warp .....											
		All of <u>best</u> quality.											

Her Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has Two Life Boat and Bothers

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good & Efficient

Engine Room Skylights.—How constructed? of Iron, Lean Skylight over How secured in ordinary weather? by bars

What arrangements are there for deadlights in such for bad weather? Thick Glass and Wire Guards

Coal Bunker Openings.—How constructed? Iron Castings How are lids secured? by Stud How high above deck? flush

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? Flush Deck

Cargo Hatchways.—How formed? Iron plates State size 7-0 x 7-0

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

What arrangement for shifting beams? ✓

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 11-6 x 8-0

Order for Special Survey No. 442 DATES of Surveys held  
 Date July 1871 1st. On the several parts of the frame, when in place, and before the plating was wrought } Under Special Survey  
 Order for Ordinary Survey No. ✓ while building 2nd. On the plating during the progress of riveting }  
 Date ✓ as per 3rd. When the beams were in and fastened, and before the decks were laid } from 14<sup>th</sup> Feb 1871  
 No. 177 in builder's yard. Section 18. 4th. When the ship was complete, and before the plating was finally coated or cemented } to 6<sup>th</sup> June 1872  
 5th. After the ship was launched and equipped }

**General Remarks,**

This vessel has been built in conformity with the appended Midship Section, and the Rules in force for 1870 with a view to Class 100A. 3 DE

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 Cement & Paint Outside Paint

I am of opinion this Vessel should be Classed 100 A. 1 (3 Deck)

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

June 1872 Special .....£ 61 : 14 :  
 Certificate .... £ 10 : 0 : 0

(Travelling Expenses)  
 (if any) £ 5 : 5 : 2

Committee's Minute 18<sup>th</sup> June 1872

Character assigned 100 A. 1

J. B. M. C. 3 decks

*[Handwritten signature: A. Mowbray]*

*[Stamp: I am certain the opinion that this vessel should be classed 100A. 1 3 decks - Lloyds Reg. Rules 1870]*