

# IRON SHIPS.

Rev 13/9/13

No. 23896 Survey held at Liverpool Date, First Survey Dec 12/13 Last Survey Aug 13 1873

On the Ship "Deva" Master Chelkew

Age under 170.08	ONE OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>L'pool</u>
Spar Deck, 22.82	Half moulded breadth 15.85	Half Moulded Breadth 15.85	When built 1873 Launched May 13
Prop, or Qr. Dk. 4.84	Depth from upper part of Keel to top of Upper Deck Beams 21.85	Total Depth if three or more Decks 21.85	By whom built <u>Royden &amp; Son</u>
Tousses 4.84	Girth of Half Midship Frame (as per Rule) 32.30	Total Girth of Half Midship Frame 32.30	Owners <u>J. B. Walmsley</u>
Forecastle 797.94	1st Number 70.0	3rd Number 70.0	Port belonging to <u>L'pool</u>
Space, 36.55	Length 174.25	Length 174.25	Destined Voyage <u>S. America</u>
Tonnage, 781.19	2nd Number 12337.50	4th Number 12337.50	If Surveyed while Building, Afloat, or in Dry Dock.
Tonnage, as a, cut on Beam	Depths to Length. 8 to 9 times	Breadths to Length 8 to 9 times	<u>During the whole time of building &amp; fitting out.</u>

on deck 176 3	Feet. Inches. Moulded Breadth 15 11	Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 20 0	Feet. Inches. Power of Engines, 20 0	Horse. No. of Decks, 2	No. of Tiers of Beams, 2																																																																																																																																																																																																																																																					
Dimensions of Ship per Register, length, 174.25 breadth, 31.7 depth, 19.8																																																																																																																																																																																																																																																										
<table border="1"> <thead> <tr> <th></th> <th>Inches in Ship.</th> <th>Inches required per Rule.</th> <th>Inches in Ship.</th> <th>Inches required per Rule.</th> <th>Inches in Ship.</th> <th>Inches required per Rule.</th> </tr> </thead> <tbody> <tr> <td>if bar iron, depth and thickness</td> <td>9 x 2 3/8</td> <td>8 x 2 3/8</td> <td>9 x 2 3/8</td> <td>8 x 2 3/8</td> <td>9 x 2 3/8</td> <td>8 x 2 3/8</td> </tr> <tr> <td>if centre through plate, depth and thickness</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> </tr> <tr> <td>if bar iron, moulding and thickness</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> </tr> <tr> <td>post for Rudder do. do.</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> <td>7 x 2 3/8</td> </tr> <tr> <td>post for Propeller</td> <td>22</td> <td>(Class 100-A)</td> <td>22</td> <td>(Class 100-A)</td> <td>22</td> <td>(Class 100-A)</td> </tr> <tr> <td>distance of Frames from moulding edge to moulding edge, all fore and aft</td> <td>22</td> <td></td> <td>22</td> <td></td> <td>22</td> <td></td> </tr> <tr> <td>Frames, size of Angle Iron, for 1/2 length amidships</td> <td>4 1/2 3 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. for 1/2 at each end</td> <td>4 1/2 3 6</td> <td>4 1/2 3 6</td> <td>4 1/2 3 6</td> <td>4 1/2 3 6</td> <td>4 1/2 3 6</td> <td>4 1/2 3 6</td> </tr> <tr> <td>Reversed Frames, size of Angle Iron</td> <td>3 3 7</td> <td>3 3 7</td> <td>3 3 7</td> <td>3 3 7</td> <td>3 3 7</td> <td>3 3 7</td> </tr> <tr> <td>Floors, depth and thickness of Floor Plate at mid line for half the length amidships</td> <td>22</td> <td>9</td> <td>21 1/2</td> <td>9</td> <td>22</td> <td>9</td> </tr> <tr> <td>Do. at the ends</td> <td>-</td> <td>8</td> <td>-</td> <td>7</td> <td>-</td> <td>7</td> </tr> <tr> <td>Do. do. do. at Bilge Keelson</td> <td>12</td> <td>-</td> <td>-</td> <td>-</td> <td>12</td> <td>-</td> </tr> <tr> <td>Do. height extended at the Bilges</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> </tr> <tr> <td>Beams, Upper, Spar, or Awning Deck (No. )</td> <td>8</td> <td>7</td> <td>8</td> <td>7</td> <td>8</td> <td>7</td> </tr> <tr> <td>single or double Angle Iron, Plate or Tee Bulb Iron</td> <td>Butterley's</td> <td>8</td> <td>8</td> <td>8</td> <td>Butterley's</td> <td>8</td> </tr> <tr> <td>Single or double Angle Iron on Upper edge</td> <td>-</td> <td>-</td> <td>3</td> <td>3</td> <td>-</td> <td>3</td> </tr> <tr> <td>Average space</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> </tr> <tr> <td>Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Single, or double Angle Iron, on Upper Edge</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Average space</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Beams, Lower Deck, Hold or Orlop (No. )</td> <td>8</td> <td>7</td> <td>8</td> <td>7</td> <td>8</td> <td>7</td> </tr> <tr> <td>single or double Angle Iron, Plate or Tee Bulb Iron</td> <td>Butterley's</td> <td>8</td> <td>8</td> <td>8</td> <td>Butterley's</td> <td>8</td> </tr> <tr> <td>Single or double Angle Iron on Upper Edge</td> <td>-</td> <td>-</td> <td>3</td> <td>3</td> <td>-</td> <td>3</td> </tr> <tr> <td>Average space</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> <td>44</td> <td>-</td> </tr> <tr> <td>Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates</td> <td>13</td> <td>10</td> <td>13</td> <td>10</td> <td>13</td> <td>10</td> </tr> <tr> <td>Do. Bulb Plate to Intercoastal Keelson</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. Size of Angle Irons</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. Side Intercoastal Keelson, size of Plates</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. Angle Irons on tops of Floors</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. Bilge Keelson, Bulb Iron</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. do. Intercoastal plates riveted to plating for length</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. do. Angle Irons</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Side Stringers (No. ) size of Angle Irons</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> <td>4 1/2 3 1/2 7</td> <td>4 1/2 3 7</td> </tr> <tr> <td>Do. Intercoastal plates riveted to plating for length</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>							Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	if bar iron, depth and thickness	9 x 2 3/8	8 x 2 3/8	9 x 2 3/8	8 x 2 3/8	9 x 2 3/8	8 x 2 3/8	if centre through plate, depth and thickness	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	if bar iron, moulding and thickness	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	post for Rudder do. do.	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	post for Propeller	22	(Class 100-A)	22	(Class 100-A)	22	(Class 100-A)	distance of Frames from moulding edge to moulding edge, all fore and aft	22		22		22		Frames, size of Angle Iron, for 1/2 length amidships	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	Do. for 1/2 at each end	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	Reversed Frames, size of Angle Iron	3 3 7	3 3 7	3 3 7	3 3 7	3 3 7	3 3 7	Floors, depth and thickness of Floor Plate at mid line for half the length amidships	22	9	21 1/2	9	22	9	Do. at the ends	-	8	-	7	-	7	Do. do. do. at Bilge Keelson	12	-	-	-	12	-	Do. height extended at the Bilges	44	-	44	-	44	-	Beams, Upper, Spar, or Awning Deck (No. )	8	7	8	7	8	7	single or double Angle Iron, Plate or Tee Bulb Iron	Butterley's	8	8	8	Butterley's	8	Single or double Angle Iron on Upper edge	-	-	3	3	-	3	Average space	44	-	44	-	44	-	Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron	-	-	-	-	-	-	Single, or double Angle Iron, on Upper Edge	-	-	-	-	-	-	Average space	-	-	-	-	-	-	Beams, Lower Deck, Hold or Orlop (No. )	8	7	8	7	8	7	single or double Angle Iron, Plate or Tee Bulb Iron	Butterley's	8	8	8	Butterley's	8	Single or double Angle Iron on Upper Edge	-	-	3	3	-	3	Average space	44	-	44	-	44	-	Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	13	10	13	10	13	10	Do. Bulb Plate to Intercoastal Keelson	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. Size of Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. Side Intercoastal Keelson, size of Plates	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. Angle Irons on tops of Floors	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. Bilge Keelson, Bulb Iron	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. do. Intercoastal plates riveted to plating for length	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. do. Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Side Stringers (No. ) size of Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	Do. Intercoastal plates riveted to plating for length	-	-	-	-	-	-
	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.																																																																																																																																																																																																																																																				
if bar iron, depth and thickness	9 x 2 3/8	8 x 2 3/8	9 x 2 3/8	8 x 2 3/8	9 x 2 3/8	8 x 2 3/8																																																																																																																																																																																																																																																				
if centre through plate, depth and thickness	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8																																																																																																																																																																																																																																																				
if bar iron, moulding and thickness	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8																																																																																																																																																																																																																																																				
post for Rudder do. do.	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8																																																																																																																																																																																																																																																				
post for Propeller	22	(Class 100-A)	22	(Class 100-A)	22	(Class 100-A)																																																																																																																																																																																																																																																				
distance of Frames from moulding edge to moulding edge, all fore and aft	22		22		22																																																																																																																																																																																																																																																					
Frames, size of Angle Iron, for 1/2 length amidships	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. for 1/2 at each end	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6	4 1/2 3 6																																																																																																																																																																																																																																																				
Reversed Frames, size of Angle Iron	3 3 7	3 3 7	3 3 7	3 3 7	3 3 7	3 3 7																																																																																																																																																																																																																																																				
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	22	9	21 1/2	9	22	9																																																																																																																																																																																																																																																				
Do. at the ends	-	8	-	7	-	7																																																																																																																																																																																																																																																				
Do. do. do. at Bilge Keelson	12	-	-	-	12	-																																																																																																																																																																																																																																																				
Do. height extended at the Bilges	44	-	44	-	44	-																																																																																																																																																																																																																																																				
Beams, Upper, Spar, or Awning Deck (No. )	8	7	8	7	8	7																																																																																																																																																																																																																																																				
single or double Angle Iron, Plate or Tee Bulb Iron	Butterley's	8	8	8	Butterley's	8																																																																																																																																																																																																																																																				
Single or double Angle Iron on Upper edge	-	-	3	3	-	3																																																																																																																																																																																																																																																				
Average space	44	-	44	-	44	-																																																																																																																																																																																																																																																				
Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron	-	-	-	-	-	-																																																																																																																																																																																																																																																				
Single, or double Angle Iron, on Upper Edge	-	-	-	-	-	-																																																																																																																																																																																																																																																				
Average space	-	-	-	-	-	-																																																																																																																																																																																																																																																				
Beams, Lower Deck, Hold or Orlop (No. )	8	7	8	7	8	7																																																																																																																																																																																																																																																				
single or double Angle Iron, Plate or Tee Bulb Iron	Butterley's	8	8	8	Butterley's	8																																																																																																																																																																																																																																																				
Single or double Angle Iron on Upper Edge	-	-	3	3	-	3																																																																																																																																																																																																																																																				
Average space	44	-	44	-	44	-																																																																																																																																																																																																																																																				
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	13	10	13	10	13	10																																																																																																																																																																																																																																																				
Do. Bulb Plate to Intercoastal Keelson	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. Size of Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. Side Intercoastal Keelson, size of Plates	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. Angle Irons on tops of Floors	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. Bilge Keelson, Bulb Iron	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. do. Intercoastal plates riveted to plating for length	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. do. Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Side Stringers (No. ) size of Angle Irons	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7	4 1/2 3 1/2 7	4 1/2 3 7																																																																																																																																																																																																																																																				
Do. Intercoastal plates riveted to plating for length	-	-	-	-	-	-																																																																																																																																																																																																																																																				
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.																																																																																																																																																																																																																																																										
Knight-heads <u>Iron</u> Hawse Timbers <u>Iron</u>																																																																																																																																																																																																																																																										
Windlass <u>G. Heart</u> Pall Bitt																																																																																																																																																																																																																																																										
The Frames extend in one length from <u>Keel</u> to <u>Gunnwale</u> Riveted through plates with (3/4 in.) Rivets, about 5" apart.																																																																																																																																																																																																																																																										
The Reverse Angle Irons on the floors and frames extend from the middle line to <u>hold beams</u> , and to <u>Gunnwale</u> alternately																																																																																																																																																																																																																																																										
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>																																																																																																																																																																																																																																																										
Plates, Garboard, double or <u>single</u> Riveted to Keel, double or <u>single</u> at upper edge, with Rivets (1/4 in.) diameter, averaging (3/2 in.) from centre to centre.																																																																																																																																																																																																																																																										
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or <u>single</u> Riveted; with Rivets (1/4 in.) diameter, averaging (2 3/4 ins.) from centre to centre.																																																																																																																																																																																																																																																										
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (8.9 in.) thick, double or <u>single</u> Riveted; with Rivets (3/4 in.) diameter averaging (2 1/2 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 2 Strakes at Bilge for 1/2 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 <u>single</u> riveted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) from centre to centre.																																																																																																																																																																																																																																																										
Do. Edges of Sheerstrake, Main, double or <u>single</u> Riveted. Upper, double or <u>single</u> Riveted. At upper edge to <u>Gunnwale</u> At lower edge <u>double</u>																																																																																																																																																																																																																																																										
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (8.9 in.) thick, double or <u>single</u> Riveted; with Rivets (3/4 in) diameter, averaging (2 1/2 ins) from centre to centre.																																																																																																																																																																																																																																																										
Do. Butts of Main Sheerstrake, double or <u>treble</u> Riveted. Butts of Upper or <u>Spar</u> Sheerstrake, and Upper Deck Stringer Plate, double or <u>treble</u> 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 ( )																																																																																																																																																																																																																																																										
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or <u>single</u> Riveted? <u>Double &amp; treble as per Rule</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>By welded knee plates</u> No. of Breasthooks, <u>4</u> Crutches, <u>4</u>																																																																																																																																																																																																																																																										
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Consolidated Co. Butterley</u>																																																																																																																																																																																																																																																										
Manufacturer's name or trade mark, <u>C. &amp; J. Iron Works, (Long) Hall C. &amp; J. Iron Works</u>																																																																																																																																																																																																																																																										

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

Builder's Signature, Thomas Royden & Sons Surveyor's Signature, Robert Wheeler

11. Sept 1873.

IRON-5540087



Workmanship. Are the butts of plating planed or otherwise fitted? Planed 11805 Iron  
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? Single pieces  
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? None

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are 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, show the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name. Bowsprit - 18 ft long, iron  
State also Length and Diameter of Lower Masts and Bowsprit Fore Mast - 54 x 25. Main Mast - 57 x 25. Mizen Mast - 50 x 25 - lengths given above

Fore & Main Masts formed of 2 plates in dia 6 1/2 thick, with 3 angle iron 4 x 3 x 7/16 Seams single riveted, butts & Mizen Mast 2" - 6 1/2 - 4 5/16 - 3" - 3 1/2 x 3 x 6/16 & treble straps fitted outside  
Bowsprit - 2" - 6 1/2 - 3" - 4 x 3 x 7/16  
Fore & Main Yards, also Cross Jack Mast - fore, Main & Mizen topsail Yards - formed of 2 plates in dia - 3.4.5 - 4 1/2 thick  
Two angle iron in each 2 1/2 x 2 1/2 x 6/16 - seams single riveted & butts double.

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.	Test as per Certificate.	Wt req'd per Rule.	Test per
No.	SAILS.	CABLES, &c.	272	19/16	44	19/16	43-10	549	24.0.12	23.19.2.21	23.2.0	23.
	Fore Sails,	Chain .....	Breasting strain applied to 3 links cut one of each length of 15 fms = 61 1/2 tons.									
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	J. Tregenna. Lloyd's Tipton Proving Machine									
	Fore Topmast Stay Sails	Hempen Stream Cable	90	14/16	-	-	-	-	-	-	-	-
	Main Sails,	Hawser .....	90	10	-	10	-	-	-	-	-	-
	Main Top Sails,	Towlines ...	90	8	-	8	-	-	-	-	-	-
	and	Warp .....	90	6	-	5	-	-	-	-	-	-
		All of best quality.	90	5	-	-	-	-	-	-	-	-

Her Standing and Running Rigging Wire & Hemp sufficient in size and best in quality. She has four Long Boats and in good order  
The present state of the Windlass is Good Capstans 2 Good and Rudder Good Pumps iron Good

Engine Room Skylights. How constructed? — How secured in ordinary weather? —  
What arrangements are there for deadlights in such for bad weather? —

Coal Bunker Openings. How constructed? — How are lids secured? — 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 coming on board? By side ports formed in bulwarks

Cargo Hatchways. How formed? Iron plated State size 11 ft x 7 ft

If of extraordinary size, state how framed and secured? Not extraordinary size

What arrangement for shifting beams? —

Hatches, themselves, whether strong and efficient? Yes Main Hatchways. State size 11 ft x 7 ft

Order for Special Survey No. 560 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought During the  
Date July 1873 Surveys held 2nd. On the plating during the progress of riveting  
Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid Whole time of  
Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented  
No. — in builder's yard. Section 18. 5th. After the ship was launched and equipped Building & fitting out

General Remarks,

The Side plating of raised quarter is 9/16 thick - beams 7 x 7/16 Tee bulb iron, stringer plates 32 x 7/16, tie plates 9 x 7/16, & deck & Pine 3 1/2 thick.

There are two pairs of diagonal tie plates 9 x 7/16 fitted on hold beams abreast of fore & main masts, & she is well built & fully equipped -

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

I am of opinion this Vessel should be Classed 100 A 1

The amount of the Entry Fee ..... £ 5 : : " is received by me,  
Special ..... £ 39 : 18 : " 29/13  
Certificate .... : Entho

(Travelling Expenses) (if any) £ —

Committee's Minute Liverpool, 12<sup>th</sup> September, 1873.

Character assigned 100 A 1 Built under Special Survey

A+C.P. Com: 73.

J. C. L. Munday

13/9/73