

# IRON SHIP. 212.15

No. 14019 Survey held at Newcastle Date, First Survey 21<sup>st</sup> Dec. 1877 Last Survey 24<sup>th</sup> June 1878

On the S. S. "Mary Louisa" Master Rev 11/1/78

**TONNAGE** under Tonnage Deck } 1858.08  
 Ditto of Third, Spar, or Awning Deck }  
 Ditto of Poop, or Raised Or. Dk } 53.61  
 Ditto of Houses on Deck } 24.51  
 Ditto of Forecastle Hatches } 37.46  
 Gross Tonnage } 1976.48  
 Less Crew Space } 56.77  
 Less Engine Room } 632.47  
 Register Tonnage as cut on Beam } 1287.24

**ONE, OR TWO DECKED, THREE DECKED VESSEL.**  
**SPAR, OR AWNING DECKED VESSEL.**

**HALF BREADTH** (moulded)... .. 17-4 1/2  
**DEPTH** from upper part of Keel to top of Upper Deck Beams 26.2  
**GIRTH** of Half Midship Frame (as per Rule) ... .. 39-4 1/2  
**1st NUMBER** ... .. 82.11  
**1st NUMBER, if a THREE-DECKED VESSEL** 7-0  
 [deduct 7 feet] 75.11  
**LENGTH** ... .. 283.6  
**2nd NUMBER** ... .. 21524  
**PROPORTIONS**—Breadths to Length ... .. 8.15  
 Depths to Length—Upper Deck to Keel ... .. 10.83  
 Main Deck ditto ... .. 14.79

Built at Newcastle  
 When built 1878 Launched 4<sup>th</sup> May  
 By whom built C. Mitchell & Co.  
 Owners Elliott, Lowrey & Dunford  
 Port belonging to London Newcastle  
 Destined Voyage Genoa  
 Surveyed while Building, Afloat, or in Dry Dock.

Official Number

**LENGTH** on deck as per Rule 283 **BREADTH** Moulded... 34 **DEPTH** top of Floors to Upper Deck Beams 24 **Feet. Inches.** 4 1/4 Power of Engines ... 200 **Horse.** 200 **N<sup>o</sup>. of Decks with flat laid** 2 **N<sup>o</sup>. of Tiers of Beams** 3

Dimensions of Ship per Register, length, 285 breadth, 35 depth, 24.4

	Inches in Ship.	Inches per Rule.
<b>KEEL</b> , depth and thickness ... ..	<u>9 1/2 x 2 1/2</u>	<u>9 1/2 x 2 1/2</u>
<b>STEM</b> , moulding and thickness... ..	<u>9 x 2 1/2</u>	<u>9 x 2 1/2</u>
<b>STERN-POST</b> for Rudder do. do. ... ..	<u>9 x 5</u>	<u>9 x 5</u>
for Propeller ... ..	<u>9 x 5</u>	<u>9 x 5</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..	<u>24</u>	<u>24</u>
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships ... ..	<u>5 3/8</u>	<u>5 3/8</u>
Do. for 1/3 at each end ... ..	<u>5 3/7</u>	<u>5 3/7</u>
<b>REVERSED FRAMES</b> , Angle Iron ... ..	<u>3 3/7</u>	<u>3 3/7</u>
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ... ..	<u>22</u>	<u>22</u>
thickness at the ends of vessel ... ..	<u>9 x 8</u>	<u>9 x 8</u>
depth at 3/4 the half-bdth. as per Rule ... ..	<u>11</u>	<u>11</u>
height extended at the Bilges... ..	<u>44</u>	<u>44</u>
<b>BEAMS, Upper, Spar, or Awning Deck</b> Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge ... ..	<u>7 3/16</u>	<u>7 3/16</u>
Average space... ..	<u>48</u>	<u>48</u>
<b>BEAMS, Main, or Middle Deck</b> Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron, on Upper Edge ... ..	<u>6 3/8</u>	<u>6 3/8</u>
Average space... ..	<u>24</u>	<u>24</u>
<b>BEAMS, Lower Deck, Hold, or Orlop</b> Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge ... ..	<u>8 1/2</u>	<u>8 1/2</u>
Average space... ..	<u>3 3/7</u>	<u>3 3/7</u>
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates ... ..	<u>1 8/13</u>	<u>1 8/13</u>
" Rider Plate ... ..	<u>11 3/4</u>	<u>11 3/4</u>
" Bulb Plate to Intercostal Keelson ... ..	<u>5 1/2</u>	<u>5 1/2</u>
" Angle Irons ... ..	<u>4 9</u>	<u>4 9</u>
" Double Angle Iron Side Keelson ... ..	<u>8</u>	<u>8</u>
" Side Intercostal Plate ... ..	<u>5 1/2</u>	<u>5 1/2</u>
" do. Angle Irons ... ..	<u>4 9</u>	<u>4 9</u>
" Attached to outside plating with angle iron ... ..	<u>3 3/7</u>	<u>3 3/7</u>
<b>BILGE</b> Angle Irons <u>Bulb bar 8 1/2</u> <u>5 1/2</u> <u>4 9</u> <u>5 1/2</u> <u>4 9</u>		
" do. Bulb Iron ... ..	<u>5 1/2</u>	<u>5 1/2</u>
" do. Intercostal plates riveted to plating for length <u>Jank Slider</u>	<u>8 1/2</u>	<u>8 1/2</u>
<b>BILGE STRINGER</b> Angle Irons ... ..	<u>5 1/2</u>	<u>5 1/2</u>
Intercostal plates riveted to plating for length <u>Bulb bar</u>	<u>8 1/2</u>	<u>8 1/2</u>
<b>SIDE STRINGER</b> Angle Irons ... ..		
Transoms, material. Knight-heads. Hawse Timbers. <u>Iron</u>		
Windlass <u>Iron Patent</u> Pall Bitt <u>Iron</u>		

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
<b>Flat Keel Plates</b> , breadth and thickness ... ..	<u>36</u>	<u>12</u>	<u>36</u>	<u>12</u>
<b>PLATES</b> in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ... ..	<u>10 x 11 alter</u>	<u>7</u>	<u>10 x 11 alter</u>	<u>7</u>
Three strakes 1/16 thicker ... ..	<u>10 x 11 alter</u>	<u>7</u>	<u>10 x 11 alter</u>	<u>7</u>
fm up. part of Bilge to lr. edge of Sh'rstrake	<u>10 x 11 alter</u>	<u>7</u>	<u>10 x 11 alter</u>	<u>7</u>
Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	<u>40</u>	<u>13</u>	<u>40</u>	<u>13</u>
Up. or Spar Dk. Sh'rstrake, brdth & thickness	<u>16 3/4</u>	<u>9 3/4</u>	<u>14</u>	<u>8/16</u>
Butt Straps to outside plating, breadth & thickness	<u>10-0</u>	<u>10-0</u>		
Lengths of Plating ... ..	<u>4-0</u>	<u>4-0</u>		
Shifts of Plating, and Stringers... ..	<u>54</u>	<u>10</u>	<u>54</u>	<u>10</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	<u>4.4</u>	<u>9</u>	<u>4.4</u>	<u>9</u>
Angle Iron on ditto ... ..	<u>14</u>	<u>9</u>	<u>14</u>	<u>9</u>
Tie Plates fore and aft, outside Hatchways				
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling ... ..	<u>Iron</u>	<u>Gutter</u>		
Waterways do. do. ... ..	<u>5 x 4</u>	<u>5 x 4</u>		
Flat of Upper Deck do. do. ... ..	<u>nut and screw bolts</u>			
How fastened to Beams ... ..	<u>45</u>	<u>9</u>	<u>45</u>	<u>9</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... ..	<u>Yes</u>	<u>Yes</u>		
Is the Stringer Plate attached to the outside plating?	<u>4.4</u>	<u>9</u>	<u>4.4</u>	<u>9</u>
Angle Irons on ditto, No. <u>2</u> ... ..				
Tie Plates, outside Hatchways ... ..	<u>Iron</u>	<u>Iron</u>		
Diagonal Tie Plates on Beams, No. of pairs	<u>6/16</u>	<u>iron</u>	<u>6/16</u>	
Waterways materials and scantlings ... ..	<u>How fastened to Beams</u>			
Flat of Middle Deck do. do. ... ..	<u>37</u>	<u>9</u>	<u>37</u>	<u>9</u>
How fastened to Beams ... ..	<u>Yes</u>	<u>Yes</u>		
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... ..	<u>4.4</u>	<u>9</u>	<u>4.4</u>	<u>9</u>
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No. <u>2</u> ... ..	<u>Iron &amp; Sparring</u>			
Stringer or Tie Plates, outside Hatchways	<u>2 1/2</u>	<u>2 1/2</u>		
Flat of Lower Deck ... ..	<u>6 3/4</u>	<u>6 3/4</u>		
Ceiling betwixt Decks, thickness and material in hold do. do. ... ..	<u>3 1/2</u>	<u>3 1/2</u>		
Main piece of Rudder, diameter at head do. at heel ... ..	<u>Yes</u>			
Can the Rudder be unshipped afloat? <u>Yes</u>	<u>6/16</u>			
Bulkheads No. <u>5</u> Thickness of <u>6/16</u>				
Height up <u>Three to upper and two to main deck</u>				
How secured to sides of ship <u>between double frames</u>				
Size of Vertical Angle Irons <u>3.3.7</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.  
 The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to above Mn. Dk. stringer and to upper Dk. alternately  
**KEELSONS.** Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

**PLATING.** Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.  
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 7/8 ins. from centre to centre.  
 Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.  
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from cr. to cr.  
 Edges of Main Sheerstrake, double or single riveted. **Upper Sheerstrake**, double or single riveted.  
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.  
 Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting ✓

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble and double  
 Waterway, how secured to Beams by rivets (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? welded knees riveted to frame No. of Breasthooks, 5 Crutches, 5  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates by the Stockton C.:  
 Manufacturer's name or trade mark, Amfles & Barks by Hawks & Hopkins & Pitkes.

The above is a correct description.  
 Builder's Signature, C. Mitchell & Co. Surveyor's Signature, W. Dohson  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 478 = 0453

**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*  
 Are the fillings between the ribs and plates solid single pieces? *Yes*  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*  
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*  
 Do any rivets break into or through the seams or butts of the plating? *A few* 2.12.15 Iron

Masts, Bowsprit, Yards, &c., are *Iron & Wood* in *good* condition, and sufficient in size and length. If 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, 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 *Two Iron Masts. Foremast 78 ft long, Dia = 22 in. Main Mast 73 1/2 ft long, dia = 22 in, Two plates in the round 9/16 & 5/16 thick, double riveted edges, double & treble riveted butts. Plates from Consett.*

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.		No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
								Bowers	Stream					
		Chain	270	1 13/16	59 10	270. 1 13/16	59 8	1	Bowers	1	32.3.7	30.14.22	32.0.0	30 2/20
		Chain	120	3 1/2	90.11	120. 3 1/2	90.11	1	Bowers	1	32.0.0	30 1/8	32.0.0	30 2/20
		Chain	90	1 1/8	90.11	90. 1 1/8	90.11	1	Bowers	1	27.1.0	26 9/16	27.0.23	26 10/20
		Chain	120	3 1/2	90.11	120. 3 1/2	90.11	1	Bowers	1	32.0.0	30 1/8	32.0.0	30 2/20
		Chain	90	1 1/8	90.11	90. 1 1/8	90.11	1	Bowers	1	27.1.0	26 9/16	27.0.23	26 10/20
		Chain	180	4 1/2	90.7	180. 4 1/2	90.7	1	Stream	1	10.2.14	12.10.3.21	13.0.0	
		Chain	180	4 1/2	90.7	180. 4 1/2	90.7	1	Stream	1	5.0.21	7.11.3.14	6.2.0	
		Chain	180	4 1/2	90.7	180. 4 1/2	90.7	1	Kedges	1	2.2.14	5/8	3.1.0	

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *Two* *Large* Boats and *Two* *Others*  
 The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good and efficient.*

Engine Room Skylights.—How constructed? *Iron enclosed 12" with leak tight cover* How secured in ordinary weather? *by bars*

What arrangements for deadlights in bad weather? *Solid shutters and dead eyes.*

Coal Bunker Openings.—How constructed? *Iron* How are lids secured? *by bars* Height above deck? *9 in*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *eight ports and eight scuppers cut in the bulwarks on each side.*

Cargo Hatchways.—How formed? *of Iron*

State size *Main Hatch 20' x 12'* Forehatch *8' x 8'* Quarterhatch *16' x 12'*

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

What arrangement for shifting beams? *deep web plate*

Hatches, If strong and efficient? *Yes.*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No. in builder's yard.
1218	28 Nov 1877			260

DATES OF SURVEYS held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought. *1877 Dec 1. 1878 Jan 21. 24. Feb 1. 4. 6. 14.*
- 2nd. On the plating during the process of riveting. *18. 21. 26. 28. 30. 31. 19. 22. 28. April 1. 9. 16. 29.*
- 3rd. When the beams were in and fastened, and before the decks were laid. *May 1. 7. 10. 13. 15. 17. 21. 23. 27. 28. 31. June 12.*
- 4th. When the ship was complete, and before the plating was finally coated or cemented. *20. 21. 24.*
- 5th. After the ship was launched and equipped.

**General Remarks** (State quality of workmanship, &c.)  
*This is a sister vessel to the 'Glandon' report N° 14002, and she has been built in accordance with approved tracings attached to the report on that vessel, and in conformity with the rules for the contemplated class; Water ballast tanks are fitted under the engines & boilers, part of the fore hold, and in the after hold, the total length of the tanks is 188 feet. The tanks were satisfactorily tested to the load line. She has a Forecastle 36 ft long, and a Poop 26 ft in length. The workmanship throughout is well executed.*

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.  
 How are the surfaces preserved from oxidation? Inside *Cement and Paint* Outside *Paint*

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

The amount of the Entry Fee ... £ 0 : : : is received by me, *J. M. Overby*  
 Special Certificate ... £ 70 : : : 10 July 1878

(Travelling Expenses, if any, £ —).  
 Committee's Minute *23rd July, 1878.*

Character assigned *100 A 1*  
*Lloyd's Reg. dbl bot 188 ft 2 Dns Iron Deck 3 In Bars DW Double bottom 188 ft*

H. M. Overby, Newcastle-on-Tyne

