

# IRON SHIPS.

No. 4185

No. 9600 Survey held at Newcastle  
 on the S.S. "Llandaff" Date 23<sup>rd</sup> Dec 1865 to 26<sup>th</sup> Jan 1866  
 Tonnage Gross 411.43 Engine Room 100.23 Register 311.40 Built at Newcastle  
 When Built 1865 Launched 27<sup>th</sup> May By whom built Schlesinger, Davis & Co  
 Owners H. Bellacott Port belonging to Cardiff Destined Voyage Plymouth  
 Surveyed Afloat or in Dry Dock while building

Length aloft ..... 152.6 Extreme Breadth ..... 24.35 Depth from top of Upper Deck } 14.5  
 Beam to top of Floor ..... }  
 Power of Engines .... 65 Horse

Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ships.		Inches required per Rule.		Stem, if bar iron, moulding and thickness	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
	Inches.	16ths.	Inches.	16ths.					
Floors, Size of Angle Iron, and No. 1 & 2 at bottom of Floor Plate	<u>3 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>3/4</u>	if plate iron, breadth and thickness	<u>6 3/4</u>	<u>2 1/4</u>	<u>6 1/2</u>	<u>2 1/4</u>
depth and thickness of Floor Plate at mid line	<u>18</u>	<u>7/16</u>	<u>16</u>	<u>7/16</u>	if plate iron, breadth and thickness	<u>7 1/4</u>	<u>4 1/8</u>	<u>6 1/2</u>	<u>4 1/2</u>
depth and thickness of Floor Plate at Bilge Keelson	<u>6</u>	<u>7/16</u>		<u>7/16</u>	Keel, if bar iron, depth and thickness	<u>24</u>	<u>3/4</u>	<u>24</u>	<u>3/4</u>
Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	<u>2 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>2 1/2</u>	Garboard Plates, Breadth and thickness	<u>25 1/2</u>	<u>3/16</u>	<u>24</u>	<u>3/16</u>
Frames, Size of Angle Iron, single & double	<u>3 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>3/4</u>	From Garboard to upper part of Bilge	<u>7/16</u>		<u>7/16</u>	
Reversed Iron, & to every frame to tank or every alternate frame to keel	<u>2 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>2 1/2</u>	From upper part of Bilge to Sheerstrakes	<u>6 1/6</u>	<u>5/16</u>		<u>6 1/6</u>
Beams, Deck (No. 36) double Angle Iron, Plate, or Bulb Iron	<u>6</u>	<u>6/16</u>	<u>6</u>	<u>6/16</u>	Sheerstrakes, Breadth and thickness	<u>28 1/2</u>	<u>7/16</u>	<u>24</u>	<u>7/16</u>
double or single Angle Iron, on top edge	<u>2 1/4</u>	<u>2 1/4</u>	<u>5/16</u>	<u>2 1/4</u>	Butt Straps to outside plating, Breadth and thickness	<u>8 1/2</u>	<u>7/16</u>	<u>8 1/2</u>	<u>7/16</u>
average space between	<u>alternate framed</u>				Planksheers				
if wood (No. ) sided & moulded					Gunwale Plate or Stringer on ends of Up. Dk Beams	<u>23</u>	<u>7/16</u>	<u>21 3/4</u>	<u>7/16</u>
Hold, or Lower Deck (No. 20) double Angle Iron, Plate, or Bulb Iron	<u>6</u>	<u>6/16</u>	<u>6</u>	<u>6/16</u>	Angle Iron on ditto	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
double or single Angle Iron, on top edge	<u>2 1/4</u>	<u>2 1/4</u>	<u>5/16</u>	<u>2 1/4</u>	Diagonal Tie Plates on Beams	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
average space between	<u>every fourth frame</u>				Waterway	<u>9</u>	<u>7/16</u>	<u>9</u>	<u>7/16</u>
if wood (No. ) sided & moulded					Deck	<u>3</u>	<u>13</u>		
Paddle, wood, sided and moulded, or if Iron, size of Plate					Ceiling in Hold	<u>2 1/2</u>			
Engine					Ceiling betwixt Decks				
Keelson, single plate, box, or intercostal	<u>21 1/2</u>	<u>7/16</u>	<u>18 1/2</u>	<u>7/16</u>	Beam Clamps or Spirketting Shelf				
Size of Plates top of floors	<u>22</u>	<u>6/16</u>	<u>11</u>	<u>6/16</u>	Stringer Plates on ends of Hold or Lower Dk Beams	<u>16</u>	<u>7/16</u>	<u>16 1/2</u>	<u>7/16</u>
Size of Angle Irons	<u>3 1/2</u>	<u>3</u>	<u>6/16</u>	<u>3 1/2</u>	Ceiling between Decks	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>
Ditto Bilge (No. 2) double angle iron	<u>2 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>3</u>	Stringer or Tie Plates outside Hatchways	<u>9</u>	<u>7/16</u>	<u>9</u>	<u>7/16</u>
Transoms, material Plate or, if none, in what manner compensated for.	<u>4</u>	<u>3</u>	<u>7/16</u>	<u>3 1/2</u>	Deck Beam Clamps or Spirketting Shelf	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>

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

Knight-heads, and Hawse Timbers Chocked

The Frames or Ribs extend in one length from Keel to Gunwale

The reverse angle irons on the floors extend in one length across the middle line from to side of tank & alternate framed to deck

Keelson, how are the various lengths of plates or angle irons connected? Butt straps

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/4 ins.) diameter averaging (4 1/2 ins.) from centre to centre of rivet.

Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (5/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre of rivets.

Butts from Keel to turn of bilge, worked carvel with a lining piece (3/16 thick), double or single rivetted; rivets (3/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Edges from bilge to sheerstrake, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (5/8 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Edge of Sheerstrake, double or single rivetted?

Butts from bilge to planksheers, worked carvel with a lining piece (3/16 thick), double or single rivetted; rivets (5/8 in.) diameter averaging (2 1/2 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)

Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? double rivetted

Sheer, how secured to the plating of the sides Explain by sketch

Waterway Gutter waterway

Beams, how secured to the side? Three plates rivetted to frames

Hold or Lower Deck No

Breasthooks 4 crutches 4 how are pointers compensated?

Description of iron used for the angle iron and plate iron in the vessel? Iron stamped 6.6 x 1/2 Plates shot by 3



ship. Are the loads in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and the diameter of the rivets where single rivetting is admitted? yes  
 Do the edges of the carvel plating throughout their length without requiring any making good of deficiencies? no slips observed  
 Do the fillings between the rivets consist of single pieces, or are they in short lengths of various thicknesses? sliced with single pieces  
 Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? generally so and are the rivet holes well and sufficiently countersunk in the outer plate? 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, Yards, &c., are in good condition, and sufficient in size and length.

She has SAILS.  
 No. One  
Just  
 and

CABLES, &c.		Fathoms.	Inches.
Chain	<u>marked Lloyd's Type</u> C. 14. 6. 65	210	1 1/2
Stream Cable	<u>Chain</u> Hempen Stream Cable	90	5/8
Hawser	.....	"	7
Towlines	.....	"	5
Warp	.....		
All of <u>New</u> quality.			

ANCHORS, and their weights.	
Marked Lloyd's Type	Weights
12 N. 22. 5. 65	10. 7. 26. 12. 8. 3. 0
12 N. 14. 6. 65	10. 1. 14. 12. 6. 2. 7
12 E. 21. 6. 65	10. 0. 0. 12. 0. 0. 0
Stream,	..... 1. 3. 7
Kedge,	..... 2. 1. 14 1. 0. 1

Her Standing and Running Rigging is is sufficient in size and good in quality.

She has one Long Boat and one other  
 The present state of the Winchlass is Good and Rudder Good Pumps 2 Deck Pump & Engine Pump

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

- DATES of Surveys held while building, as per Section 17.
- 1st. On several parts of the frame, when in place, and before the plating was wrought
  - 2nd. On the plating during the progress of rivetting
  - 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
  - 5th. After the ship was launched
- } Special Survey  
 } Order No 493-21

This vessel has a double bottom extending from the fore side of Engine Room to the fore Bulkhead, about 83 feet, double angle iron bridge keeldons 4 x 3 x 7/16 have been fitted forward and aft properly shifted over the double bottom, she has a raised Quarter deck which measures 37.95 tons, the total tonnage is now found to exceed what the Builders anticipated, she has been built agreeable to the accompanying section, and to the 300 tons scale, the workmanship has been generally satisfactorily performed, I beg therefore respectfully to submit this for the favourable consideration of the Committee for the C Class,

In what manner are the surfaces preserved from oxidation? Red Lead, Cement in bottom,

I am of opinion this Vessel may be classed A 1

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

\* June 1885 Special ..... £ 20 : 11 :  
 Certificate (if required) ..... £ : : :

Committee's Minute 30th June 1885

Character assigned A 1

J. H. Silvester  
 Surveyor  
 Lloyd's Register  
 Founders

\* June 1885, Surveyor