

# IRON SHIPS.

No. 10/11/57

No. 14901 Survey held at Chester Date Dec 5 1857  
 on the Brig Cymbeline Master \_\_\_\_\_  
 Tonnage Gross Engine Room Register 219 Built at Chester  
 When Built 1857 By whom built G. Cram finished by his order or direction C. J. Bowring  
 Port belonging to Liverpool Destined Voyage \_\_\_\_\_  
 If Surveyed Afloat or in Dry Dock Whilst Building under Special Survey

Length aloft ..... 115 Feet. Inches. || Extreme Breadth.... 20 Feet. Inches. || Depth from top of Upper Deck } Feet. Inches. || Power of Engines.... || Horse No.

Description	Inches in Ship			Inches required per Rule			Description of Iron	Inches required per Rule			Horse No.	
	Inches	Inches	16ths	Inches	Inches	16ths		Inches	16ths	Inches		
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	114	✓	✓	114	✓	✓	Stem, if bar iron, moulding and thickness	6	2	✓	6	2
Floors, Size of Angle Iron, and No. / at bottom of Floor Plate	3	2 1/2	3/8	3	2	5/16	Stem, if plate iron, breadth and thickness	6	2	✓	6	2
depth and thickness of Floor Plate at mid line	13	-	3/8	13	-	6/16	Stern-post, if bar iron, moulding and thickness	6	2	✓	6	2
depth and thickness of Floor Plate at Bilge Keelson	4 1/2	-	3/8	-	-	-	Keel, if bar iron, depth and thickness	6	2	✓	6	2
Size of Reversed Angle Iron, and No. / at top of Floor Plate	2	2	5/16	2	2	4/16	Keel, if plate iron, breadth and thickness	6	2	✓	6	2
Frames, Size of Angle Iron, single or double Reversed Iron, to every frame or every alternate frame	3	2 1/2	3/8	3	2	5/16	Garboard Plates, thickness..	1/2	✓	1/2	-	-
Beams, Deck (No. 37) double Angle Iron or Bulb Iron with double Angle Iron on top	6	3/8	✓	6	3/8	✓	From Garboard to upper part of Bilge	7/16	✓	7/16	-	-
depth & thickness of plate amidships	2 1/2	2 1/2	5/16	2 1/2	2 1/2	5/16	From upper part of Bilge to Sheerstrakes	3/8	✓	3/8	-	-
double or single Angle Iron, on lower edge	2 1/2	2 1/2	5/16	2 1/2	2 1/2	5/16	Sheerstrakes	1/8	✓	1/8	-	-
average space between	2.8	-	✓	2.8	-	✓	Breadth & thickness of Butt Straps to outside plating	8 1/2 x 9 - 1/2	1/8	3/8	11	3/8
if wood (No. ) sided & moulded	-	-	✓	-	-	✓	Planksheers	None	16	3/8	11	3/8
Hold, or Lower Deck (No. 28) double Angle Iron or Bulb Iron with double Angle Iron on top	6	3/8	✓	6	3/8	✓	Gunwale Plate or Stringer on ends of Up. Dk Beams	Double	3	3	3/8	3 x 2 1/2 - 5/16
depth & thickness of plate amidships	2 1/2	2 1/2	3/8	2 1/2	2 1/2	3/8	Angle Iron on ditto	None	3	3	3/8	3 x 2 1/2 - 5/16
double or single Angle Iron, on lower edge	2 1/2	2 1/2	3/8	2 1/2	2 1/2	3/8	Waterway	None	3	3	3/8	3 x 2 1/2 - 5/16
average space between	2.8	-	✓	2.8	-	✓	Deck	Yellow P.P. Pine	3 1/2	-	-	-
if wood (No. ) sided & moulded	-	-	✓	-	-	✓	Ceiling in Hold	Pitch & Pine	2 1/2	2	-	-
Paddle, wood, sided and moulded or if Iron, size of Plate	-	-	✓	-	-	✓	Ceiling betwixt Decks	Yellow Pine	2	-	-	-
Engine	-	-	✓	-	-	✓	Beam Clamps	-	-	-	-	-
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	9	3/8	✓	9	3/8	✓	Shelf	-	-	-	-	-
Side or Bilge	3	1	2 1/2	3	1	2 1/2	Stringer Plates on ends of Hold or Lower Dk Beams	10 3/4	3/8	11	3/8	-
Number	3	2 1/2	5/16	3	2 1/2	5/16	Ceiling between Decks	-	-	-	-	-

Transoms, material None or, if none, in what manner compensated for. Clamps, Stringer Plates & Angle Iron  
 Knight-heads None Bulkheads, No. 2 Thickness of 1/8, 5/16 & 3/8  
 Hawse Timbers None are they free from defects? Yes how secured to the sides of the ship Between double frames  
 The Frames or Ribs extend in one length from Keel to gunwale rivetted through plates with (3/4 in.) rivets, about (4 1/2 in.) apart.  
 The reverse angle irons on the floors extend in one length across the middle line from above the bilge to on both sides on alternate frames  
 Keelson, how are the various lengths of plates or angle irons connected? With Butt Plates & angle iron  
 Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/8 in.) diameter averaging (2 1/4 in.) from centre to centre of rivet.  
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 ins.) from centre to centre of rivets.  
 Butts from Keel to turn of bilge, worked carvel with a lining piece (1 1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/4 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes & above also  
 Edges from bilge to planksheer, worked carvel with a lining piece (1 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/4 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes & above also  
 Butts from bilge to planksheers, worked carvel with a lining piece (1 1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter averaging (2 1/4 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (1 1/2 in.) Breadth of laps in single rivetting (2 1/2 in.)  
 Planksheer, how secured to the plating of the sides } Explain by sketch, } See sketch on the other side.  
 Waterway " " planksheer and to the Beams } if necessary. }  
 Side trussing 10 1/2 in breadth and thickness of plates 3/8 how secured? Rivetted to reversed angle iron  
 Deck trussing 10 1/2 x 3/8 on each side Hatchways " " ? Rivetted to beam angle iron & gunwale plate  
 Deck Beams, how secured to the side? Rivetted to ribs & gunwale plate  
 Hold or Lower Deck " Rivetted to ribs & stringer plate  
 Paddle " " \_\_\_\_\_  
 No. of breasthooks 48 crutches 28 ribs feet connected? Stringer plates & clamps  
 What description of iron is used for the angle iron and plate iron in the vessel? Best Staffordshire Builder's Signature \_\_\_\_\_

1534 Iron

**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes.

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 piece

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes 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? Some

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N <sup>o</sup> .		Fathoms.	Inches.	N <sup>o</sup> .	Weight.
2	Fore Sails,	Chain	180	7 large	Bower, 3 12-1-7
2	Fore Top Sails,	Hempen Stream Cable	90	7 1/2	12-0-0
2	Fore Topmast Stay Sails,	Hawser	60	5 1/2	11-2-2
2	Main Sails,	Towlines	90	6 1/2	4-2-7
1	Main Top Sails,	Warp	90	4 1/2	Kedge, 1 2-1-23
and other well found		All of <u>Good</u> quality.			

Her Standing and Running Rigging are sufficient in size and Good in quality.

She has one Long Boat and Jolly Boat

The present state of the Windlass is Good Capstan 2 1/2" Good and Rudder Good Pumps 4 Good

**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 the several parts of the frame, when in place, and before the plating was wrought March 27-1857
  - 2nd. On the plating during the progress of rivetting April 29 - May 27 - June 3 & 17, August 15, & 20.
  - 3rd. When the beams were in and fastened, and before the decks were laid Sept 28<sup>th</sup>
  - 4th. When the ship was complete, and before the plating was finally coated Oct 28<sup>th</sup>
  - 5th. After the ship was launched Several times to see 5<sup>th</sup>

This vessel was built under Special Survey for the 12 years grade, and whilst building several defective plates on the outside were replaced with sound ones.

She was commenced by George Bram and finished by one or more of his creditors. The stringer <sup>plate</sup> and clamp between decks are a trifle narrower than required by the Rules, but this is more than compensated by other scantlings above the Rules, viz- the Upper Stringer Plate is 5 in wider & has double angle. The beams and ribs being also larger.

She has two water tight bulkheads up to the Main Deck, in the wake of Fore and Main Rigging, - being the worst part in which they could be placed. I pointed this out to the Builder who said the owners would have them there. They are however well fastened according to Rule, & the butts of Upper Deck Stringer Plates near them have butt pieces from beam to beam.



In what manner are the surfaces preserved from oxidation? Red paint

I am of opinion this Vessel should be classed A1-12 Years

The amount of the Fee .....£ 3 : : : is received by me,

Special .....£ 10 : 10 : 9/10/57 R.M.

Certificate (if required) .....£ None

Committee's Minute 11<sup>th</sup> December 1857

Character assigned 1 for 12 Years  
Built of Iron

Leahouse Martindale

I see no objection to the class assigned



"Compendium" 1890