

# IRON SHIPS.

No. 9902 Survey held at Newcastle Date 5<sup>th</sup> Decr 1865 to 6<sup>th</sup> June 18 66  
 on the "S. S. Trevethick" Master Thos. Atkinson  
 Tonnage under tonnage deck 766.72 Built at Newcastle When built 1866 Launched 24<sup>th</sup> Feb  
 Ditto of poop or spar deck  
 Ditto of engine room 160.01 By whom built Palmer's Shipbuilding Co. Owners W. J. Hutchison  
 Total Register tonnage 598.71 Port belonging to Newcastle Designed Voyage London  
 Gross Tonnage 766.72  
 Surveyed while Building, Afloat, or in Dry Dock while building

Feet.	Inches.	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Horse.	No. of Decks	
Length aloft	<u>201.6</u>	Extreme Breadth	<u>28.1</u>		<u>17.65</u>		Power of Engines	<u>100</u>	
(Dimensions of Ship per Register, length <u>201.6</u> breadth <u>28.1</u> depth <u>17.4</u> )									
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule for 700 tons Scale.		Plates in Garboard Strakes, breadth and thickness				Inches. In Ship. 16ths. In Ship. Inches. required per Rule. 16ths. required per Rule.
" if plate iron, breadth and thickness	<u>7 1/8 x 2 1/8</u>		<u>7 1/4 x 2 3/4</u>		Ditto from Garboard to upper part of Bilges				<u>40</u> <u>9/16</u> <u>30</u> <u>9/16</u>
Stem, if bar iron, moulding and thickness	<u>7 1/8 x 2 1/8</u>		<u>7 1/4 x 2 3/4</u>		" from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3rds the entire depth of Hold				<u>9/16</u> <u>9/16</u>
" if plate iron, breadth and thickness	<u>0 1/8 x 5 1/4</u>		<u>7 1/4 x 5 1/2</u>		" from 2/3rds depth of Hold to lower edge of Sheerstrake				<u>9/16</u> <u>9/16</u>
Stern-post, if bar iron, moulding and thickness	<u>0 1/8 x 5 1/4</u>		<u>7 1/4 x 5 1/2</u>		" Sheerstrake, breadth and thickness				<u>32</u> <u>9/16</u> <u>30</u> <u>9/16</u>
" " if plate iron, breadth and thickness	<u>0 1/8 x 5 1/4</u>		<u>7 1/4 x 5 1/2</u>		Butt Straps to outside plating, breadth and thickness				<u>23</u> <u>9/16</u> <u>9/16</u> <u>9/16</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>		<u>21</u>		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness				<u>9 x 8 1/2</u> <u>9/16</u> <u>9/16</u>
Frames, Size of Angle Iron, single or double	<u>4</u>	<u>3</u>	<u>7/16</u>	<u>4 1/4</u>	<u>3</u>	<u>7/16</u>	Angle Iron on ditto	<u>24</u> <u>7/16</u> <u>29</u> <u>9/16</u>	
" " Reversed Iron, if to every frame or every frame	<u>3</u>	<u>3</u>	<u>6/16</u>	<u>3</u>	<u>2 3/4</u>	<u>7/16</u>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>13</u> <u>7/16</u> <u>4 1/2 x 3 1/2</u> <u>7/16</u> <u>4 3/4 x 3 3/4</u> <u>9/16</u>	
Floors, depth and thickness of Floor Plate at mid line	<u>18</u>		<u>18</u>		Diagonal Tie Plates on ditto				<u>12</u> <u>7/16</u> <u>10 1/2</u> <u>9/16</u>
" Ditto ditto at Bilge Keelson	<u>7 1/2</u>		<u>7 1/2</u>		Planksheer, materials and scantlings				<u>12</u> <u>7/16</u> <u>10 1/2</u> <u>9/16</u>
" Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	<u>3</u>	<u>3</u>	<u>6/16</u>	<u>3</u>	<u>2 3/4</u>	<u>7/16</u>	Waterway ditto ditto	<u>12</u> <u>7/16</u> <u>10 1/2</u> <u>9/16</u>	
Beams, Deck (No. <u>49</u> ) double Angle Iron, Plate, Tee, or Bulb Iron	<u>7</u>	<u>7/16</u>	<u>7</u>	<u>7/16</u>	Flat of Upper Deck, thickness and material				<u>3 1/2</u> <u>yellow Pine</u>
" " double or single Angle Iron, on top edge	<u>2 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>5/16</u>	" how fastened to Beams	<u>3 1/2</u> <u>yellow Pine</u>	
" " average space between	<u>3 feet 6 inches</u>		<u>3 feet 6 inches</u>		Ceiling between Decks and in Hold, thickness and material				<u>2 1/2</u> <u>Pine</u>
" Hold, or Lower Deck (No. <u>38</u> ) double Angle, Tee, Plate, or Bulb Iron	<u>7</u>	<u>7/16</u>	<u>7</u>	<u>7/16</u>	Clamps or Spiketting plate ditto				<u>10</u> <u>9/16</u>
" " double or single Angle Iron, on top edge	<u>2 3/4</u>	<u>2 3/4</u>	<u>5/16</u>	<u>3</u>	<u>2 3/4</u>	<u>7/16</u>	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>24</u> <u>7/16</u> <u>22</u> <u>9/16</u>	
" " average space between	<u>2nd &amp; 4th frame</u>		<u>2nd &amp; 4th frame</u>		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams				<u>5 x 3 x 1/2</u> <u>4 1/4 x 3 3/4 x 9/16</u>
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	<u>2nd &amp; 4th frame</u>		<u>2nd &amp; 4th frame</u>		Stringers in Hold				<u>4 1/2 x 3 1/2 x 7/16</u> <u>4 3/4 x 3 3/4 x 9/16</u>
" Engine	<u>25</u> <u>9/16</u>		<u>23</u> <u>9/16</u>		Flat of Lower Deck, thickness and material				<u>5 1/4</u> <u>5</u>
Keelson, single or double plate, box, or intercostal	<u>14</u> <u>9/16</u>		<u>14</u> <u>9/16</u>		Main piece of Rudder, diameter at head				<u>5 1/4</u> <u>5</u>
" Size of Plates top of floors	<u>3</u>	<u>3</u>	<u>6/16</u>	<u>4 1/4</u>	<u>3 3/4</u>	<u>9/16</u>	" " " at heel	<u>3</u> <u>3</u>	
" Size of Angle Irons	<u>3</u>	<u>3</u>	<u>6/16</u>	<u>4 1/4</u>	<u>3 3/4</u>	<u>9/16</u>	(Can the Rudder be unshipped afloat)	<u>Yes</u>	
" Side, single or d'ble, plate, box, or intercostal	<u>4 1/2</u>	<u>3 1/2</u>	<u>7/16</u>	<u>4 3/4</u>	<u>3 3/4</u>	<u>9/16</u>	Bulkheads, No. <u>3</u> Thickness of	<u>6/16</u>	
" Bilge (No. <u>2</u> ) at each Bilge, single, or double, plate, or box	<u>4 1/2</u>	<u>3 1/2</u>	<u>7/16</u>	<u>4 3/4</u>	<u>3 3/4</u>	<u>9/16</u>	" Height up	<u>upper deck</u>	
Transoms, material	<u>Plate</u> or, if none, in what manner compensated for.								
Knight-heads, and Hawse Timbers	<u>chocks</u>								
The Frames extend in one length from	to <u>Garboard</u> rivetted through plates with ( <u>3/4</u> in.) rivets, about ( <u>5/2</u> ) apart								
The reverse angle irons on the floors extend in one length across the middle line	from <u>at double</u> to <u>bottom</u> to <u>bilge</u> and <u>from</u> <u>thence</u> to <u>angle iron</u> on <u>hold beam</u> <u>stringer</u> <u>plate</u> & <u>alternately</u> to <u>deck</u>								
Keelson, how are the various lengths of plates or angle irons connected?	<u>Butt Straps</u>								
Plates, Garboard, double or	rivetted to keel, double or and at upper edge, with rivets ( <u>1 x 3/4</u> ins.) diameter, averaging ( <u>6 1/2</u> ins.) apart.								
" Edges from Garboards to upper part of bilge, worked clencher, double or single	rivetted; with rivets ( <u>3/4</u> in.) diameter, averaging ( <u>2 3/4</u> ins.) apart.								
" Butts from Keel to turn of bilge, worked carvel with butt straps ( <u>9/16 x 9/16</u> ) thick, double or single	rivetted; with rivets ( <u>3/4</u> in.) diameter, averaging ( <u>2 3/4</u> ins.) apart.								
Do the butt straps lap over and rivet through the lands of the strake below?	<u>No</u>								
" Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single	rivetted; with rivets ( <u>3/4</u> in.) diameter, averaging ( <u>2 3/4</u> in.) apart.								
Do the butt straps lap over and rivet through the lands of the strake below?	<u>No</u>								
" Edges of Sheerstrake, double or single	rivetted? At upper edge <u>single</u> At lower edge <u>double</u>								
" Butts from bilge to planksheers, worked carvel with butt straps ( <u>9/16 x 9/16</u> ) thick, double or single	rivetted; with rivets ( <u>3/4</u> in.) diameter, averaging ( <u>2 3/4</u> ins.) apart. Breadth of laps in double rivetting ( <u>4 1/4</u> ) Breadth of laps in single rivetting ( <u>2 1/2</u> )								
Butt Straps of Keelsons, Stringer and Tie Plates, double or single	rivetted? <u>double rivetted</u>								
Planksheer, how secured to the plating of the sides	{ Explain by sketch } <u>Gutter waterway</u>								
Waterway " " planksheer and to the Beams	{ if necessary. }								
Deck Beams, how secured to the side?	<u>Bracket ends</u>								
Hold or Lower Deck ditto	<u>do</u>								
Paddle " "	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>Angle iron Palmer's Best Farrow, Plates Corbett</u>								
Manufacturer's name or trade mark	<u>Angle iron Palmer's Best Farrow, Plates Corbett</u>								
We certify that the above is a correct description of the several particulars therein given.									
Builder's Signature	<u>For Palmer's Shipbuilding Iron Co. Limited</u>				Surveyor's Signature				
	<u>William G. Ireland</u>				<u>J. H. Linton</u>				

IRON 439-03714



4749 Iron

**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter 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? no ship observed

Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? solid with single pieces

Do the holes for rivetting plate to frames, butt straps, 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, 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 rivetting, quality of Materials, and if stamped with Maker's name.

She has SAILS.		CABLES, &c., tested at <u>Lynn Proving House</u>					ANCHORS, tested at <u>Lynn Proving House</u>				
No.		No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to. Tons.	No.	No. on Anchor seen by me.	No. and date on Certificate	Weight. Ex. stock.	Tested to. Tons.
one	Fore Sails,	Chain .....	999 24.1.66	165	1 1/2	37.4.0.0		1998	1998.29.12.65	18.0.8	19.2.0.21
	Fore Top Sails,	Hempen Chain	1050 5.2.66	105	1 1/2	37.4.0.0		2003	2003.29.12.65	18.0.8	19.2.0.21
	Fore Topmast Stay Sails,	Stream Cable		90	1 1/2			2030	2030.30.12.65	15.3.12	17.5.2.7
part	Main Sails,	Hawser .....		90	8			Stream..... including stock 0.0.0			
	Main Top Sails,	Towlines .....		90	6						
and		Warp .....		90	5						
		All of <u>new</u> quality.		90	4						
Her Standing and Running Rigging		is sufficient in size and <u>good</u> in quality.									
She has		<u>one</u> Long Boat and <u>two</u> others									
The present state of the Windlass is		<u>Good</u> Capstan <u>Good</u> and Rudder <u>Good</u> Pumps <u>2</u> deck Pumps & <u>Engine</u> Pumps									

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

No. 540. Surveys held 2nd. On the plating during the progress of rivetting

Date 22 Nov 1865 while building 3rd. When the beams were in and fastened, and before the decks were laid

Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated

No. — Section 18. 5th. After the ship was launched

Date —

State if she has a quarter Spar Deck 66 feet Peep or Forecastle

General Remarks, This vessel has a double bottom about 116 feet long, she is constructed similar to the S.S. "Conservator," Report No 9531 & Classed A

In what manner are the surfaces preserved from oxidation? Inside Asphalte & Paint

Ditto ditto Outside Paint

I am of opinion this Vessel should be Classed A I

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

Sum Special .....£ 30: 7: "

Certificate (if required) .....£ " : " : "

Committee's Minute 8th June 18 66

Character assigned A I

H. Siltman

This vessel appears eligible for the A I Class as per survey above 7 June 1866 H.C.

Survey of Steamer & Iron, 44 Boat Exchange, F.C.