

# 3683 IRON SHIPS.

Rev 1/8/66

Survey held at Newcastle Date 23. Nov. 1865 1865  
 the Ship "Benton" Master W. Wallace  
 Tonnage under tonnage deck 909.33 Built at Newcastle When built 1864 Launched 24 Aug  
 Ditto of poop or spar deck House 42.89 By whom built Warrace & Co Owners Henderson & Co  
 Ditto of engine room  
 Register tonnage 952.22 Port belonging to Newcastle Destined Voyage India  
 Surveyed while Building, Afloat, or in Dry Dock and while building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	Nº. of Decks
176			32	2	10	21	9	10			2
Dimensions of Ship per Register, length <u>175 2/10</u> breadth <u>32 2/10</u> depth <u>21 4/10</u>											
Keel, if bar iron, depth and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>		<u>900 in plate</u>		Plates in Garboard Strakes, breadth and thickness		<u>29 x 28</u>		<u>12 30 12 1/8</u>
" if plate iron, breadth and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>				Ditto from Garboard to upper part of Bilges		<u>11 1/8</u>		<u>12 1/8</u>
Stem, if bar iron, moulding and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>				" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		<u>10 1/8</u>		<u>11 1/8</u>
" if plate iron, breadth and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>				" from 3/4ths depth of Hold to lower edge of Sheerstrake		<u>9 1/8</u>		<u>10 1/8</u>
Stern-post, if bar iron, moulding and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>				" Sheerstrake, breadth and thickness		<u>30 11 30 12 1/8</u>		<u>12 1/8</u>
" if plate iron, breadth and thickness	<u>4 1/2 x 3</u>		<u>8 x 3</u>				Butt Straps to outside plating, breadth and thickness		<u>10.9 x 8 1/2</u>		<u>12 1/8 10 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>25 25 19 1/8</u>		<u>10 1/8</u>
Frames, Size of Angle Iron, single or double	<u>4 1/2 x 3 1/2</u>		<u>4 1/2 x 3 1/2</u>		<u>3 1/2</u>		Angle Iron on ditto		<u>5 x 4 5/8</u>		<u>5 x 4 1/2 x 9/16</u>
" Reversed Iron, if to every frame	<u>3</u>		<u>3</u>		<u>3 1/2</u>		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		<u>12 9/16</u>		<u>12 1/8</u>
" or every beam, same	<u>3</u>		<u>3</u>		<u>3 1/2</u>		Diagonal Tie Plates on ditto		<u>12 9/16</u>		<u>12 1/8</u>
Floors, depth and thickness of Floor Plate at mid line	<u>22 9/16</u>		<u>22 10/16</u>				Planksheer, materials and scantlings		<u>12 9/16</u>		<u>12 1/8</u>
" Ditto ditto at Bilge Keelson	<u>4</u>		<u>4</u>				Waterway ditto ditto		<u>12 9/16</u>		<u>12 1/8</u>
" Size of Reversed Angle Iron, and No. at top of Floor Plate	<u>3</u>		<u>3</u>		<u>3 1/2</u>		Flat of Upper Deck, thickness and material		<u>4. Pine 3 1/2</u>		<u>3 1/2</u>
Beams, Deck (No. of double Angle Iron, Plate, Tee, or Bulb Iron)	<u>8</u>		<u>8</u>		<u>8 5/8</u>		" how fastened to Beams		<u>As per Rule</u>		
" double or single Angle Iron, on edge	<u>3</u>		<u>3</u>		<u>3 1/2</u>		Ceiling betwixt Decks and in Hold, thickness and material		<u>Pine 2 1/2 x 2 1/4</u>		
" average space between	<u>3 1/2</u>		<u>3 1/2</u>		<u>3 1/2</u>		Clamps or Spirketting ditto		<u>As per Rule</u>		
" Hold, or Lower Deck (No. of double Angle, Tee, Plate, or Bulb Iron)	<u>8</u>		<u>8</u>		<u>8 5/8</u>		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		<u>19 9/16</u>		<u>19 1/8</u>
" double or single Angle Iron, on edge	<u>3</u>		<u>3</u>		<u>3 1/2</u>		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		<u>12 9/16</u>		<u>12 1/8</u>
" average space between	<u>3 1/2</u>		<u>3 1/2</u>		<u>3 1/2</u>		Stringers in Hold		<u>5 x 4 x 8/16</u>		<u>5 x 4 1/2 x 9/16</u>
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	<u>3 1/2</u>		<u>3 1/2</u>		<u>3 1/2</u>		Flat of Lower Deck, thickness and material		<u>4. Pine 3</u>		
" Engine	<u>14 9/16</u>		<u>14 10/16</u>		<u>14 10/16</u>		Main piece of Rudder, diameter at head		<u>5 1/2</u>		<u>5 3/4</u>
Keelson, single or double plate, box, or intercostal	<u>15 9/16</u>		<u>15 10/16</u>		<u>15 10/16</u>		" " at heel		<u>5 1/2</u>		<u>5 3/4</u>
" Size of Plates	<u>3 x 3 1/2</u>		<u>3 x 3 1/2</u>		<u>3 x 3 1/2</u>		(Can the Rudder be unshipped afloat)		<u>Yes</u>		
" Size of Angle Irons	<u>3 x 3 1/2</u>		<u>3 x 3 1/2</u>		<u>3 x 3 1/2</u>		Bulkheads, No. Thickness of		<u>4 1/4 - 4 1/8</u>		
" Side, single or double, plate, box, or intercostal	<u>5 - 4</u>		<u>5 - 4</u>		<u>5 - 4</u>		" Height up		<u>Upper deck</u>		
" Bilge (No. ) at each Bilge, single, or double, plate, or box	<u>2</u>		<u>2</u>		<u>2</u>		" how secured to the sides of the ship		<u>to clamps &amp; plates</u>		

Transoms, material Plank or, if none, in what manner compensated for.  
 Knight-heads, and Hawse Timbers Leak & Oak  
 The Frames extend in one length from Keel to gunwale  
 The reverse angle irons on the floors extend in one length across the middle line from Keel to gunwale  
 " " " on the frames " " " from Keel to gunwale  
 Keelson, how are the various lengths of plates or angle irons connected? by double straps  
 Plates, Garboard, double rivetted to keel, double at upper edge, with rivets ( 1 1/8 ins.) diameter, averaging ( 4 1/2 in.) apart.  
 " Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets ( 3/8 in.) diameter, averaging ( 3 1/4 in.) apart.  
 " Butts from Keel to turn of bilge, worked carvel with butt straps ( 1 1/8 in.) thick, double or single rivetted; with rivets ( 3/8 in.) diameter, averaging ( 3 1/2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No  
 " Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick or clencher, double or single rivetted; with rivets ( 3/8 in.) diameter, averaging ( 3 1/4 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No  
 " Edges of Sheerstrake, double or single rivetted? At upper edge single At lower edge double  
 " Butts from bilge to planksheers, worked carvel with butt straps ( 1 1/8 in.) thick, double or single rivetted; with rivets ( 3/8 in.) diameter, averaging ( 3 1/2 in.) apart. Breadth of laps in double rivetting ( 4 3/4 ) Breadth of laps in single rivetting ( 4 1/8 )  
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?  
 Planksheer, how secured to the plating of the sides { Explain by sketch } See midship section  
 Waterway " " planksheer and to the Beams { if necessary. }  
 Deck Beams, how secured to the side? Welded knees rivetted to beams & girders  
 Hold or Lower Deck ditto do  
 Paddle " " No. of breasthooks 5 crutches 6  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? "  
 Manufacturer's name or trade mark H. & Co. "Bedlington", "Meddlesbio", "Shottay Birdge"  
 We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature Marshall Brothers Surveyor's Signature W. L. L. L.



