

IRON 456-0031

# IRON SHIP.

No. 10419 Survey held at Sunderland Date, First Survey April 1<sup>st</sup> 1873 Last Survey November 11<sup>th</sup> 1873

On the Iron Steamer Arena Yard Number 28 Master Roberts

TONNAGE under Tonnage Deck	547.92
Ditto of Third, Spar, or Awning Deck	—
Ditto of Poop, or Reared Deck	155.00
Ditto of Houses, Mast on Deck, or Forecastle	2.91
Ditto of Forecastle	22.20
Gross Tonnage	728.03
Less Crew Space	35.95
Less Engine Room	232.97
Register Tonnage (net on Beam)	459.11

ONE, OR TWO DECKED, THREE DECKED VESSEL.	
SPAR, OR AWNING DECKED VESSEL.	
HALF BREADTH (moulded)	13.95
DEPTH from upper part of Keel to top of Upper Deck Beams	16.60
GIRTH of Half Midship Frame (as per Rule)	27.65
1st NUMBER	58.2
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet	
LENGTH	198
2nd NUMBER	11523
PROPORTIONS—Breadths to Length	under 8
Depths to Length—Upper Deck to Keel	
Main Deck ditto	under 12

Built at Sunderland  
 When built 1873 Launched Sept 10<sup>th</sup> 1873  
 By whom built Davison & Stothoc  
 Owners Wilson Bickell & Co  
 Port belonging to Liverpool  
 Destined Voyage Not given  
 If Surveyed while Building, Afloat, or in Dry Dock. Wilst. Moulding

LENGTH on deck as per Rule	198	Feet. Inches.	BREADTH—Moulded	13	11 1/2	Feet. Inches.	DEPTH top of Floors to Upper Deck Beams	15	4	Feet. Inches.	Power of Engines		Horse.	Nº. of Decks with flat laid	one	Nº. of Tiers of Beams	one
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Dimensions of Ship per Register, length, 200, breadth, 28 1/2, depth, 15

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	7 1/2 x 2 1/4	7 1/2 x 2 1/4
STEM, moulding and thickness	7 x 2 1/4	7 x 2 1/4
STERN-POST for Rudder do. do.	7 x 4 1/2	7 x 4 1/2
for Propeller	7 x 4 1/2	7 x 4 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	22
(Class <u>90A</u> )		
	Inches in Ship.	Inches per Rule.
FRAMES, Angle Iron, for 1/2 length amidships	3 1/2	3
No. for 1/2 at each end	3 1/2	3
REVERSED FRAMES, Angle Iron	3	2 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	15	8 1/2
thickness at the ends of vessel	7 1/2	7
depth at 1/2 the half-bdth. as per Rule	7 1/2	7 1/2
height extended at the Bilges	Free the amidship depth	
	Inches in Ship.	Inches per Rule.
BEAMS, Upper, Spar, or Awning Deck	6 1/2	6 1/2
Single or double Angle Iron, Plate or Tee Bulb Iron	2 1/2	2 1/2
Single or double Angle Iron on Upper edge	2 1/2	2 1/2
Average space	alternate frames	
	Inches in Ship.	Inches per Rule.
BEAMS, Main or Middle Deck	6 1/2	6 1/2
Single or double Angle Iron, Plate or Tee Bulb Iron	2 1/2	2 1/2
Single, or double Angle Iron, on Upper Edge	2 1/2	2 1/2
Average space	alternate frames	
	Inches in Ship.	Inches per Rule.
BEAMS, Lower Deck, Hold or Orlop	6 1/2	6 1/2
Single or double Angle Iron, Plate or Tee Bulb Iron	2 1/2	2 1/2
Single or double Angle Iron on Upper Edge	2 1/2	2 1/2
Average space	alternate frames	
	Inches in Ship.	Inches per Rule.
KEELSONS Centre line, single or double plate, box, or intercostal plates	12 1/4	10
Rider Plate	7	8 1/2
Bulb Plate to Intercostal Keelson	4 1/2	3
Angle Irons	7 1/2	4 1/2
Double Angle Iron Side Keelson	4 1/2	3
Side Intercostal Plate		
do. Angle Irons		
Attached to outside plating with angle iron		
	Inches in Ship.	Inches per Rule.
BILGE Angle Irons	4 1/2	3
do. Bulb Iron	6 1/2	6 1/2
do. Intercostal plates riveted to plating for length		
	Inches in Ship.	Inches per Rule.
BILGE STRINGER Angle Irons	4 1/2	3
Intercostal plates riveted to plating for length		
SIDE STRINGER Angle Irons		
Transoms, material. Knight-heads. Hawse Timbers.		
Windlass <u>Patent Iron</u> Pall Bitt <u>nil</u>		

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	30	8	30	8
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 1/2 length	30 1/2	11	30	11
fm up. part of Bilge to Ir. edge of Sh'rstrake	30 1/2	11	30	11
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	10.14.9 1/4	16.17	8.7.10.9	12.13.14
Up. or Spar Dk Sh'rstrake, brdth & thickness	5			
Butt Straps to outside plating, breadth & thickness	2			
Lengths of Plating	2			
Shifts of Plating, and Stringers	2			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	3 1/2	8	3 1/2	8
Angle Iron on ditto	4 1/2 x 3 x 7	4 1/2 x 3 x 7		
Tie Plates fore and aft, outside Hatchways	9	8	9	8
Diagonal Tie Plates on Beams No. of Pairs				
Planksheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.				
How fastened to Beams				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No.				
Tie Plates, outside Hatchways				
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams in the hold	25	7	25	7
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No.	Three			
Stringer or Tie Plates, outside Hatchways	4 1/2 x 3 x 7	4 1/2 x 3 x 7		
Flat of Lower Deck				
Ceiling betwix Decks, thickness and material in hold	1 1/2			
do. do.	2 1/2			
Main piece of Rudder, diameter at head	5			
do. at heel	4 1/2			
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 4 Thickness of 5/16				
Height up 1/2 above bk. after one 1/2 below main deck with iron lip				
How secured to sides of ship	Double frames			
Size of Vertical Angle Irons 3 x 2 1/2 x 1/16 and distance apart 30 ins.				
Are the outside Plates doubled two spaces of Frames in length?	Yes			

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.  
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Upper Deck and Hold Stringer 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 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 3/4 in. diameter, averaging 3 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.  
 Butts of 2 Strakes at Bilge for 1/2 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 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 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 length.  
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 1/4

Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?  
 how secured to Beams Gutter frames (Explain by Sketch, if necessary.)  
 of the various Decks, how secured to the sides? Riveted to beams & stringers No. of Breasthooks, 5 Crutches, 4  
 what description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angled & Bulb's & Square  
 manufacturer's name or trade mark, Plates Charlton Iron Works & Stockton Malleable Iron Co

The above is a correct description.  
 Builder's Signature, Davison & Stothoc Surveyor's Signature, Joseph James



