

# IRON SHIP

No. 13,029 Survey held at Sunderland Date, First Survey August 10<sup>th</sup> 1882 Last Survey February 10<sup>th</sup> 1883  
On the S.S. "Abington" Yard No. 143

Official Number  
TONNAGE under Tonnage Deck 1920.46  
Ditto of 2<sup>nd</sup> Spar or Awaiting Deck 7.32  
Ditto of Poop, or Raised Or. Dk. }  
Ditto of Houses on Deck } 83.42  
Ditto of Forecastle 41.87  
Gross Tonnage 2053.07  
Less Crew Space 63.87  
1989.20  
Less Engine Room 656.98  
Register Tonnage as cut on Beam 1332.22

~~ONE OR TWO DECKED, THREE DECKED VESSEL,~~  
~~SQUAD, OR AWNING DECKED VESSEL.~~  
Half Breadth (moulded) 18.50  
Depth from upper part of Keel to top of Upper Deck Beams 26.00  
Girth of Half Midship Frame (as per Rule) 41.00  
1st Number 85.50  
1st Number, if a 3-Decked Vessel .. deduct 7 feet 78.50  
Length 283.0  
2nd Number 22,215.  
Proportions— Breadths to Length. 7.6  
Depths to Length— Upper Deck to Keel. 10.8  
Main Deck ditto 15.2

Master W. J. Cotter  
Built at Sunderland  
When built 1882. Launched 23<sup>rd</sup> Dec  
By whom built Doxford & Sons  
Owners Repton and Co.  
Residence 24 George Sq. Glasgow  
Port belonging to Glasgow  
Destined Voyage New Orleans  
If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 283 Feet. Inches. —  
BREADTH Moulded... 37 Feet. Inches. —  
DEPTH top of Deck Beams to Upper Deck Beams 23 Feet. Inches. 0  
Do. do. Main Deck Beams 15 Feet. Inches. 6  
Power of Engines 200 Horse.  
No. of Decks with flat laid 3  
No. of Tiers of Beams 3

Dimensions of Ship per Register, length, 285.2 breadth, 37.4 depth, 22.85

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	46 x 1 1/16	19/16	FLAT KEEL PLATES, breadth and thickness		
STEM, moulding and thickness	10 x 2 3/4	10 x 2 3/4	PLATES in Garboard Strakes, br'dth & thickness	36	12
STERN-POST for Rudder do. do.	10 x 6	10 x 6	From Garboard to upper part of Bilges	11	11
" " for Propeller	24	24	Of d'bling at Bilge, or increased thickness, and length applied		
Distance of Frames from moulding edge to moulding edge, all fore and aft			From up. prt of Bilge to Ir. edge of Sh'rstrake	11	11
FRAMES, Angle Iron, for 3/4 length amidships	5 3 8	5 3 8	Main Sheerstrake, breadth and thickness	40	13
Do. for 1/4 at each end	5 3 7	5 3 7	Of d'bling at Sh'stk. & Ing. applied		
REVERSED FRAMES, Angle Iron	3 1/2 3 8	3 1/2 3 8	From M'n. to Upr. or Spar Dk. Sh'rstrake		
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	Cellular Bottom		Up. or Spar Dk Sh'rstrake, br'dth & thickn'ss		
" thickness at the ends of vessel	Floors and Girders		Butt Straps to outside plating, breadth & thickness	9 1/2	19
" depth at 3/4 the half-bdth. as per Rule	as per approved		Lengths of Plating	Six spaces of frames	9 1/4
" height extended at the Bilges	Midship Section		Shifts of Plating, and Stringers	Two & four	20
BEAMS, Upper, Spar, or Awaiting Deck	6 3 8	6 3 8	Gunwale Plate on ends of Awaiting, Spar, or Upper Deck Beams, breadth and thickness	40	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2 3 7	3 1/2 3 7	Angle Iron on ditto	4.4.9	4.4.9
Single or double Angle Iron on Upper edge	on every frame		Tie Plates fore and aft, outside Hatchways	Iron Deck	
Average space			Diagonal Tie Plates on Beams No. of Pairs		
BEAMS, Main, or Middle Deck	6 1/2 3 9	6 1/2 3 9	Flat of Up., Spar, or Awaiting Dk.*	Iron plates	6
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2 3 7	3 1/2 3 7	How fastened to Beams	Rivets	Rivets
Single or double Angle Iron, on Upper Edge	on every frame		Stringer Plate on ends of Main or Middle Deck	40	9
Average space			Beams, breadth and thickness	40	9
BEAMS, Lower Deck			Is the Stringer Plate attached to the outside plating?	Yes	
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Angle Irons on ditto, No.	Two	4.4.9
Single or double Angle Iron on Upper Edge			Tie Plates, outside Hatchways	Iron Deck	4.4.9
Average space			Diagonal Tie Plates on Beams, No. of pairs		
BEAMS, Hold, or Stowage	10 x 10	10 10	Flat of Middle Deck* do. do.	Iron plates	6.5
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 4 9	4 4 9	How fastened to Beams	Rivets	Rivets
Single or double Angle Iron on Upper Edge	10 spaces of frs		Stringer Plates on ends of Lower Deck, Hold or Stowage Beams	38	9
Average space			Is the Stringer Plate attached to the outside plating?	Yes	
KEELSONS Centre line, single or double plate, or Keel box, or Intercostal, Plates	46	10	Angle Irons on ditto, No.	Three	4.4.9
" Rider Plate	Cellular Bottom		Stringer on Tie Plates, outside Hatchways	6	4.9
" Bulb Plate to Intercostal Keelson	Transverse floors		Flat of Lower Deck*	6.4.9	6.4.9
" Angle Irons	and Girders				
" Double Angle Iron Side Keelson	as per approved		Ceiling betwixt Decks, thickness and material	Spr. 2 battens & Spar	
" Side Intercostal Plate	Mid. Section		" in hold do. do.	do 2 1/2 solid & 1 1/2	
" Attached to outside plating with angle iron			Main piece of Rudder, diameter at head	7 1/2	7 3/4
BILGE Angle Irons	6 4 9	6 4 9	do. at heel	3 3/4	3 3/4
" do. Bulb Iron			Can the Rudder be unshipped afloat?	Yes	
" do. Intercostal plates riveted to plating for length			Bulkheads No. 5 No. per Rule 4		
BILGE STRINGER Angle Irons	6 4 9	6 4 9	" Thickness of	7.6	
Intercostal plates riveted to plating for 3/5 length	9	9	" Height up	4 to upper Dk one to main Dk	
SIDE STRINGER Angle Irons			" How secured to sides of ship	between two frames	

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.  
The REVERSED ANGLE IRONS on floors and frames extend from middle line to above W.D.E. ST. angle and to gunwale 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 1/8 in. diameter, averaging 5 3/8 ins. from centre to centre.  
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 ins. from centre to centre.  
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.  
" Butts of four Strakes at Bilge for half 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 7/8 in. diameter, averaging 3 3/8 ins. from cr. to cr.  
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
" Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.  
" Breadth of laps of plating in double riveting 5 1/4 in Breadth of laps of plating in single riveting nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double No. of Breasthooks, Six Crutches, four  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates, Struction Hall, S. Co  
Manufacturer's name or trade mark, Bulbs & Angles Stockton Hall, S. Co, and Near Rolling Mills W. Hartlepool, S. Co  
The above is a correct description.  
Builder's Signature, William Doxford & Sons Surveyor's Signature, Joseph Nelly  
Surveyor to Lloyd's Register of British and Foreign Shipping.

**Workmanship.** Are the butts of plating planed or otherwise fitted? *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? *yes*  
 Are the fillings between the ribs and plates solid single pieces? *yes*  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *yes*  
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*  
 Do any rivets break into or through the seams or butts of the plating? *at the Butts in a few Cases only*

Masts, Bowsprit, Yards, &c., are *Iron & Wood* in *good* condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.  
 State also Length and Diameter of Lower Masts and Bowsprit *please see sketches*  
*5 1/2" thick plate bent cold with grain 55° and this across 55°*  
*maker of Plates Stockton, Mass. I. C.*

N <sup>o</sup> .	SAILS.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprtd.	ANCHORS.		Test per Certificate.	W <sup>g</sup> t req'd per Rule.	Machine where Tested & Suprtd.		
							N <sup>o</sup> .	Weight. Ex. Stock.					
	<b>NUMBER for EQUIPMENT</b> <i>26, 616</i>												
	<b>CABLES, &amp;c.</b>												
	Chain	<i>270</i>	<i>1 13/16</i>	<i>270.1 1/16</i>	<i>270.1 1/16</i>	<i>Feb 7/83</i>	<b>Bower Anchors</b>	<i>11489</i>	<i>32.2.0</i>	<i>30.10.0</i>	<i>32.0.0</i>	<i>Feb 6/83</i>	
	Fore Sails,							<i>11491</i>	<i>31.3.7</i>	<i>30.0.2</i>	<i>32.0.0</i>	<i>7/83</i>	
	Fore Top Sails,							<i>11457</i>	<i>27.3.0</i>	<i>26.10.3</i>	<i>27.1.0</i>	<i>Jan 29/83</i>	
	Fore Topmast Stay Sails,												
	Main Sails,							<b>Stream Anchor</b>	<i>11458</i>	<i>10.2.0</i>	<i>12.8.3</i>	<i>10.2.0</i>	<i>Jan 29/83</i>
	Main Top Sails,							<b>Kedge</b>	<i>11448</i>	<i>5.0.2</i>	<i>7.1.3</i>	<i>5.1.0</i>	<i>11-22/83</i>
	and							<b>2nd Kedge</b>	<i>11433</i>	<i>2.3.5</i>	<i>5.7.2</i>	<i>2.2.0</i>	<i>11-11/83</i>
	Standing and Running Rigging												

The Windlass is *Hartfield's patent* *Capstan 4 inches* and Rudder *good* Pumps *good*  
 Engine Room Skylights.—How constructed? *Wood Sky Light* How secured in ordinary weather? *with bars and pins*  
 What arrangements for deadlights in bad weather? *Thick shutters pt fitted with bulls eyes and pt thick glass 4 ft*  
 Coal Bunker Openings.—How constructed? *Iron Coaming* How are lids secured? *Hatch bars* Height above deck? *9" and 30"*  
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Scuppers; part filled with Iron Bulwarks and part with Iron guard Rails*  
 Cargo Hatchways.—How formed? *Iron Coaming fitted in the usual manner*  
 State size Main Hatch *20 ft x 12 ft* Forehatch *12 ft x 10 ft* Quarterhatch *20 ft x 12 ft & 12 ft x 10 ft*  
 If of extraordinary size, state how framed and secured? *Fitted with Iron Shifting Beams and Web-plate Beams and wood fore and aft Carlings*  
 What arrangement for shifting beams? *plate Beams and wood fore and aft Carlings*  
 Hatches, if strong and efficient? *Solid and Efficient.*

Order for Special Survey No. *3084* *Built under S.S. and Surveyed 1882 Augst. 10 16 18 22 24*  
 Date *27 Decr 83* *26 29 31 Sept 7 11 15 19 23 25 27 Octr 2 4 9 10 14 19 20 24 26 31 Nov*  
 Order for Ordinary Survey No. *143* *23 15 20 24 Dec 14 5 11 13 18 22 83 Jan 4 8 10 18 19 25 27 Feb 2*  
 Date \_\_\_\_\_ *6810*  
 No. *143* in builder's yard. DATES of Surveys held while building as per Section 18.

General Remarks (State quality of workmanship, &c.) *Good* *Letters 4 Mar. 1883 June, 8 Nov 80*  
*This Vessel has been built under Special Survey in accordance with the Rules and the accompanying drawings, having a "Cellular" Double Bottom. She has a Topgallant Forecastle 33 ft long; Bridge House 68 ft, and Steering Wheel Cover 10 ft long. She has a Cellular Double bottom all fore and aft 234 ft long, containing 367 tons, having 4 1/2 divisions; each Tank has been pressed as per Rules and proved efficient.*

How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*  
 I am of opinion this Vessel should be Classed *100 A-1 Three Decked*  
 The amount of the Entry Fee ... £ *5 : 0 : 0* is received by me, *SW*  
 Special ... £ *74 : 14 : 6* *Feb 18 83*  
 Certificate ...  
 (Travelling Expenses, if any, £ nil.)  
 Committee's Minute  
 Character assigned  
 Tuesday, 20th February 18 83.  
 Lloyd's Register of British and Foreign Shipping Foundation