

# IRON SHIP.

No. 13235 Survey held at Newcastle Date, First Survey 22<sup>nd</sup> May Last Survey 22<sup>nd</sup> September 1876

On the S.P.S. "William's" Master J. Turner

TONNAGE under Tonnage Deck } <u>128.38</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Newcastle</u>
Do. of Third, Spar, or Running Deck } <u>118.44</u>	SPAR, OR AWNING DECKED VESSEL.	When built <u>1876</u> Launched <u>12<sup>th</sup> August 76.</u>
Do. of Poop, or Raised Q. Deck } <u>41.08</u>	HALF BREADTH (moulded) ... .. <u>10.0</u>	By whom built <u>C. Mitchell &amp; Co.</u>
Do. of Houses on Deck } <u>44.36</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>10.9</u>	Owners <u>W. Butler &amp; Co.</u>
Gross Tonnage <u>128.38</u>	GIRTH of Half Midship Frame (as per Rule) ... .. <u>18.6</u>	Port belonging to <u>Bristol</u>
Less Crew Space <u>9.94</u>	1st NUMBER ... .. <u>39.3</u>	Destined Voyage
Less Engine Room <u>118.44</u>	1st NUMBER if a THREE DECKED VESSEL <u>3463</u>	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage as cut on Beam <u>44.36</u>	LENGTH ... .. <u>88.3</u>	<u>While building</u>
	2nd NUMBER ... .. <u>3463</u>	
	PROPORTIONS—Breadths to Length ... .. <u>Over 4</u>	
	Depths to Length—Upper Deck to Keel ... .. <u>Over 8</u>	
	Main Deck ditto ... ..	

LENGTH on deck as per Rule ... 88 3 BREADTH—Moulded ... 20 0 DEPTH top of Floors to Upper Deck Beams ... 9 9 Power of Engines ... 95 Horse. N° of Decks with flat laid One N° of Tiers of Beams One

Dimensions of Ship per Register, length, 89.0 breadth, 20.1 depth, 9.5

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness ... ..	<u>Hollow Keel 9/16</u>	
STEM, moulding and thickness ... ..	<u>6 x 1 3/8</u>	
STERN-POST for Rudder do. do. ... ..	<u>6 x 2 1/2</u>	
for Propeller ... ..	<u>6 x 2 3/4</u>	
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..	<u>20</u>	<u>20</u>
FRAMES, Angle Iron, for 1/2 length amidships ... ..	<u>3 2 1/2 5</u>	(Class 90A)
Do. for 1/2 at each end ... ..	<u>3 2 1/2 5</u>	
REVERSED FRAMES, Angle Iron ... ..	<u>2 1/2 2 1/2 4</u>	
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... ..	<u>12 6 1/2</u>	
thickness at the ends of vessel ... ..	<u>4</u>	
depth at 1/2 the half-bdth. as per Rule ... ..	<u>1/2 inch 11-13 inch</u>	
height extended at the Bilges ... ..		
BEAMS, Upper, Spar, or Running Deck Single or double Angle Iron, Plate or Tee Bulb Iron ... ..	<u>5 3 6</u>	
Average space ... ..	<u>alternate frame</u>	
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron ... ..		
Average space ... ..		
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron ... ..		
Average space ... ..		
KEELSONS Centre line, single or double plate, box, or intercostal, Plates ... ..	<u>Central finch of tank 5</u>	
" Rider Plate ... ..		
" Bulb Plate to Intercostal Keelson ... ..		
" Angle Irons ... ..		
" Double Angle Iron Side Keelson ... ..		
" Side Intercostal Plate ... ..	<u>3 3 4</u>	
" do. Angle Irons ... ..	<u>3 3 6</u>	
" Attached to outside plating with angle iron ... ..	<u>2 1/2 2 1/2 6</u>	
BILGE Angle Irons ... ..	<u>4 long plate of tank</u>	
" do. Bulb Iron ... ..		
" do. Intercostal plates riveted to plating for length ... ..	<u>4</u>	
BILGE STRINGER Angle Irons ... ..		
Intercostal plates riveted to plating for length ... ..		
SIDE STRINGER Angle Irons ... ..		

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Plates in Garboard Strakes, breadth and thickness ... ..	<u>9</u>	<u>6</u>	<u>5</u>	
from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ... ..				
fm up. part of Bilge to l. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>30</u>	<u>6 1/2</u>	<u>7</u>	
Butt Straps to outside plating, breadth & thickness	<u>8</u>	<u>5 1/2</u>	<u>8</u>	
Lengths of Plating ... ..	<u>6 frame spaces</u>			
Shifts of Plating, and Stringers ... ..	<u>2</u>	<u>1</u>	<u>1</u>	
Gunwale Plate on ends of Running Spar, or Upper Deck Beams, breadth and thickness ... ..	<u>Iron deck 9/16</u>			
Angle Iron on ditto ... ..	<u>3 x 3 x 9/16</u>			
Tie Plates fore and aft, outside Hatchways				
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling				
Waterways do. do. ... ..				
Flat of Upper Deck do. do. ... ..	<u>Iron 9/16 riveted</u>			
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				
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No. Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material in hold do. do. do. ... ..	<u>2</u>		<u>2</u>	
Main piece of Rudder, diameter at head do. at heel ... ..	<u>3 1/2</u>		<u>3 1/2</u>	
Can the Rudder be unshipped afloat? <u>Yes</u>				
Bulkheads No. <u>3</u> Thickness of <u>4/16</u>				
Height up <u>Deck</u>				
How secured to sides of ship <u>Double frame</u>				
Size of Vertical Angle Irons <u>2 1/2 x 2 1/2 x 1/2</u> and distance apart <u>50</u> ins.				
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				

Transoms, material. Knight-heads. Hawse Timbers. Iron  
Windlass Patent Pall Bitt —

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 7/8 in. Rivets, about 5 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to upper bilge on every frame 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 3/4 in. diameter, averaging 5 1/4 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 2 1/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 2 1/4 ins. from centre to centre.

Butts of Strakes at Bilge for length, treble riveted with Butt Straps 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 2 1/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 2 1/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, double riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for 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

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single riveted?

Waterway, how secured to Beams riveted (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Iron plates riveted to frame No. of Breasthooks, 2 Crutches, 2

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles Hawkesbury

Manufacturer's name or trade mark, Plates Bell & Co. Ltd.

The above is a correct description.

Builder's Signature, For C. Mitchell & Co Surveyor's Signature, Geo. Cooper

W. Doleau Surveyor to Lloyd's Register of British and Foreign Shipping.

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Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*

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? *A few*

Masts, Bowsprit, Yards, &c., are *Red Pine* 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

NUMBER for EQUIPMENT *3463*

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight, Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		Chain	120	4 1/2	8 1/2 tons	120-4 1/2	8 5/16	Bowers	1	3.2.8	6.0.3.21	3.2.0	5-18/20
		Breaker Strain			12 3/4		12 3/4		1	3.2.0	5-18.3.0	3.2.0	5-18/20
		Swivel War P.H.											
		Date of Certificate											
		Hmpn Strm Cbl	90	6		90-5 1/2							
		Hawser ...	90	4		11 3							
		Towlines											
		Warp ...											
		quality <i>Good</i>											

and Standing and Running Rigging *Hemp* sufficient in size and *Good* in quality. She has *One* Long Boat and *one other*

The Windlass is *Good* Capstan and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Iron Cornings Wood tops glazed* How secured in ordinary weather? *Bolted to angles*

What arrangements for deadlights in bad weather? *Wire gratings and Canvas covers*

Coal Bunker Openings.—How constructed? *Cast-iron Cornings* How are lids secured? *By studs* Height above deck? *3"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Three ports each side besides mooring pipes*

Cargo Hatchways.—How formed? *Iron Cornings and headledges*

State size Main Hatch *13ft 4 x 6 feet* Forehatch *10 feet x 6 feet* Quarterhatch

If of extraordinary size, state how framed and secured? *Ordinary size*

What arrangement for shifting beams? *none fitted*

Hatches, If strong and efficient? *yes.*

Order for Special Survey No. <i>112</i>	2 <sup>nd</sup> 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under Special Survey</i>
Date <i>24 May 1876</i>		2nd. On the plating during the process of riveting	<i>1876 May 22. 30. June 10. 14. 20. July 3. 7. 12. 18.</i>
Order for Ordinary Survey No.	3rd.	When the beams were in and fastened, and before the decks were laid...	<i>21. 24. Aug 3. 9. 10. 16. 24. Sep 2. 7. 12. 16. 22.</i>
Date	4th.	When the ship was complete, and before the plating was finally coated or cemented..	
No. <i>227</i> in builder's yard.	5th.	After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.)

*This vessel is built in accordance with the approved tracings attached and the Secretary's letter of the 11<sup>th</sup> May 1876. She is fitted with a tank before the collision bulkhead 16 feet long and one in the hold 41 ft 8 1/2 long. Each tested and found satisfactory. The general quality of the workmanship is good.*

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement Varnish & Paint* Outside *Paint*

I am of opinion this Vessel should be Classed *90 A1*

The amount of the Entry Fee ... £ *2* : : : is received by me, *Deputy*  
Special ... £ *0* : *10* : *29* 1876  
Certificate ... : : :  
(Travelling Expenses, if any, £ — )

Committee's Minute *3 October 1876*

Character assigned *90 A1*

*Lloyd's Register*  
*Double bottom*  
*57 ft*  
*2/17*