

# IRON SHIP.

No. 2743 Survey held at Belfast & Glasgow Date, First Survey 2<sup>nd</sup> July 1880 Last Survey 14<sup>th</sup> March 1881  
 On the S. S. Ethelbert Master R. Walker

TONNAGE under  
 Tonnage Deck  
 Ditto of Third, Spar,  
 or Awning Deck.  
 Ditto of Poop, or  
 Raised Qr. Dk.  
 Ditto of Houses  
 on Deck  
 Ditto of Forecastle

Gross Tonnage 513.25  
 Less Crew Space 26.45

Less Engin. Room 164.24  
 Register Tonnage  
 as cut on 322.56

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 SPAR, OR AWNING-DECKED VESSEL.

HALF BREADTH (moulded) 12.25  
 DEPTH from upper part of Keel to top of Upper Deck Beams 14.25  
 GIRTH of Half Midship Frame (as per Rule) 23.9

1st NUMBER 50.40  
 1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet ✓

LENGTH 169.0  
 2nd NUMBER 8517.6

PROPORTIONS—Breadths to Length 6.89  
 Depths to Length—Upper Deck to Keel 11.8  
 Main Deck ditto ✓

Built at Belfast  
 When built 1881 Launched ✓  
 By whom built Workman, Clark & Co. Ltd.  
 Owners A. C. Colvill  
 Port belonging to Glasgow  
 Destined Voyage Mediterranean  
 X Surveyed while Building, Afloat, or in Dry Dock. ✓

LENGTH on deck as per Rule 169 0 BREADTH—Moulded 24 6 DEPTH top of Floors to Upper Deck Beams 13 1 Do. do. Main Deck Beams 13 1 Power of Engines 70 Horse. 70 N<sup>o</sup>. of Decks with flat laid one N<sup>o</sup>. of Tiers of Beams one

Dimensions of Ship per Register, length, 170 breadth, 24.65 depth, 12.85

KEEL, depth and thickness 7 1/2 x 2  
 STEM, moulding and thickness 7 1/4 x 1 3/4  
 STERN-POST for Rudder do. do. 6 1/2 x 3 3/4  
 " " for Propeller —  
 Distance of Frames from moulding edge to moulding edge, all fore and aft 21

IRONS, Angle Iron, for 3/4 length amidships 3 3 6  
 Do. for 1/2 at each end 3 3 5  
 REVERSED FRAMES, Angle Iron 2 1/2 2 1/2 5  
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 14 x 6  
 thickness at the ends of vessel 8 1/2 x 6  
 depth at 3/4 the half-bdth. as per Rule 7  
 height extended at the Bilges 28

BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 2 1/2 6  
 Single or double Angle Iron on Upper edge 21  
 BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 14 x 6  
 Single, or double Angle Iron, on Upper Edge 7  
 Average space 28

BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 2 1/2 6  
 Single or double Angle Iron on Upper Edge 21  
 Average space 21

KEELSONS Centre line, single or double plate, box, or intercostal; Plates 11 x 9  
 Rider Plate 7 1/2 x 9  
 Bulb Plate to Intercostal Keelson 7 1/2 x 9  
 Angle Irons 3 1/2 3 6  
 Double Angle Iron Side Keelson 3 1/2 3 6  
 Side Intercostal Plate 3 1/2 3 6  
 do. Angle Irons 3 1/2 3 6  
 Attached to outside plating with angle iron 3 1/2 3 6

BILGE Angle Irons 3 1/2 3 6  
 do. Bulb Iron 6 x 6  
 do. Intercostal plates riveted to plating for length 6 x 6

BILGE STRINGER Angle Irons 3 1/2 3 6  
 Intercostal plates riveted to plating for length 3 1/2 3 6

SIDE STRINGER Angle Irons 3 1/2 3 6

Transoms, material. Knight-heads. Hawse Timbers. ✓  
 Windlass Iron patent Pall Bitt ✓

The FRAMES extend in one length from keel to gunwale  
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to hold stringer and to upper deck 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 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 2 1/2 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 1/2 ins. from centre to centre.  
 Butts of two Strakes at Bilge for whole length, double 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 2 1/2 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 2 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 length amidships. Butts of Upper or Spar Sheerstrake, double riveted whole length amidships.  
 Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, double riveted for whole length.

Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 3  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble & double  
 Waterway, how secured to Beams futter (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? turned knees welded No. of Breasthooks, 3 Crutches, 2

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? good  
 Manufacturer's name or trade mark, Workman & Co. Ltd.  
 The above is a correct description.  
 Builder's Signature, W. Workman Surveyor's Signature, J. W. Scullard  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Flat Keel Plates, breadth and thickness 30 9 30 9  
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges 30 9 30 9  
 of doubling at Bilge, or increased thickness, and length applied for half length  
 fin up part of Bilge to l.r. edge of Sh'rstrake. 7 7  
 Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. 33 10 33 10  
 Up. or Spar Dk Sh'rstrake, brdth & thickness 33 10 33 10  
 Butt Straps to outside plating, breadth & thickness 11 1/2 11 9 3/4 11 7 1/2  
 Lengths of Plating 12 3/4 10 5  
 Shifts of Plating, and Stringers 42 42  
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 24 8 24 8  
 Angle Iron on ditto 3 1/2 x 3 x 6 3 1/2 x 3 x 6  
 Tie Plates fore and aft, outside Hatchways Iron Deck 9/16 Brank 5  
 Diagonal Tie Plates on Beams No. of Pairs ✓  
 Planksheer material and scantling ✓  
 Waterways do. do. ✓  
 Flat of Upper Deck do. do. P. Pine 3 3  
 How fastened to Beams Gal. riv. & screw bolts  
 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. 3  
 Tie Plates, outside Hatchways 3  
 Diagonal Tie Plates on Beams, No. of pairs 3  
 Waterways materials and scantlings 3  
 Flat of Middle Deck do. do. 3  
 How fastened to Beams 3  
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 12 4 12 4  
 Is the Stringer Plate attached to the outside plating? yes  
 Angle Irons on ditto, No. 4  
 Stringer or Tie Plates, outside Hatchways 3 1/2 x 3 x 6  
 Flat of Lower Deck ✓  
 Ceiling betwixt Decks, thickness and material hatter 8 space  
 in hold do. P. Pine do. 2 1/2 2 1/2  
 Main piece of Rudder, diameter at head 4 1/4 4 1/4  
 do. at heel 2 1/2 2 1/2  
 Can the Rudder be unshipped afloat? yes  
 Bulkheads No. 3 Thickness of 4 4  
 Height up upper deck  
 How secured to sides of ship double frames  
 Size of Vertical Angle Irons 2 1/2 x 2 1/2 x 5/8 and distance apart 30 ins.  
 Are the outside Plates doubled two spaces of Frames in length? yes



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

*Two wood pole masts as auxiliary to the steam power.*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.		CABLES, &c.					Bower Anchors		10" 1" 14	12-6-2-7	10 Cwt	12 tons
N <sup>o</sup> .	Chain	195-3	1 1/8	22 3/4	195-1 1/8	22 3/4	State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.		9" 2" 14	11-13-1-21	10 --	--
Fore Sails,	Iron Str'm Chain	60-2 1/2	3/4	6 3/4	60-1 1/8	6-12-78	Glasgow's proving house Liphon. 2/12/80		8" 2" 0	10-12-2-0	8 1/2 --	10.6
Fore Top Sails,	Ditto do.						Stream		3-3-7	6-5-1-7	3 3/4	6 2/30
Fore Topmast Stay Sails,	Hmpn Strm Cbl	75	8		75-8		Kedge		1-3-3	4-7-0-21	1 3/4	4 2/30
Main Sails,	Hawser ...	75	7		90-6		Ditto		0-3-4	--	3/4	--
Main Top Sails,	Towlines	75	4-2-12									
and	Warp ...	45	3 1/2-2-12									
	quality											

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* Long Boat and

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

Engine Room Skylights. How constructed? *thoroughly of Lead.*

How secured in ordinary weather? *always shipped*

What arrangements for deadlights in bad weather? *thoroughly glazed.*

Coal Bunker Openings. How constructed? *curcular cast iron* How are lids secured? *lugs*

Height above deck? *8"*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Two scuppers and two ports forward and three scuppers and three ports aft on each side.*

Cargo Hatchways. How formed? *Plates and angles*

State size *Main Hatches 14" 0" x 9" 4"* Fore hatch *17" 4" x 9" 6"* Quarter hatch *fore 5" 3" x 6" 0"*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Deep portable beams and oak fore & afters.*

Hatches, If strong and efficient? *yes*

Order for Special Survey No. <i>99</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>July 1880. 2-9-14-31 August 4-9-12-19-30 Sept 7-13-17-21 Oct 7-12-14-19 Nov 5-17-23 Dec 5-11-13-17-21</i>
Date <i>24 June 1880</i>		2nd. On the plating during the process of riveting	<i>1-6-10-14-16-31 Jan 1881-11-19-21 Feb 12-14</i>
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>sent to Glasgow to take in machinery. March 12-14.</i>
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. <i>3</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This raised quarter decked vessel has been built in accordance with the drawings submitted and approved by the secretaries letter of the 1<sup>st</sup> June 1880, and in other respects to the Rules for the 100 A grade.*

*The raised quarter deck is 80 ft long, at the fore end of which there is a bridge deck 18 ft long with cabin under. The fore-castle is 38 ft long only partly enclosed.*

*The fore and after ballast tanks were tested by a head of water to the height of the load line and found satisfactory.*

*Workmanship and Materials Good.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of *38 ft* fore-castle, *80 ft* or raised quarter deck, and the length of double, *off 35 ft* or part double bottom.

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

I am of opinion this Vessel should be Classed *+ 100 A.1.*

The amount of the Entry Fee ... £ *5 : 0 : 0* is received by me, *J.W. Scullard*

Special ... £ *25 : 13 : 0* 19 March 1881

Certificate ... *Grates*

(Travelling Expenses, if any, £ *5 : 5 : 0*).

Committee's Minute

Tuesday March, 22nd 1881.

Character assigned

LRF/PUN/Bel 51/404R

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

This vessel appears eligible

to be classed 100 A.1

as recommended

me from deck

22/3/81