

IRON SHIP.

(Received at London Office, 23 AUGUST 1886)

No. 3242 Survey held at Belfast
On the Iron Screw Steamer "Broughshane"Date, First Survey Jan 27thLast Survey August 17th

TONNAGE under 291.35

Tonnage Deck 13.69

Ditto of Third, Spar, or Awning Deck 8.39

Ditto of Reop, or Raised Qr. Dk. 11.25

Ditto of Houses on Deck 324.68

Gross Tonnage 297.14

Less Crew Space 165.18

Less Engine Room 131.96

Register Tonnage as cut on Beam

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

Half Breadth (moulded) 11.5

Depth from upper part of Keel to top of Upper Deck Beams 12.91

Girth of Half Midship Frame (as per Rule) 21.75

1st Number 46.16

1st Number, if a 3-Decked Vessel deduct 7 feet

Length 150.91

2nd Number 6966

Proportions— Breadths to Length 6.5

Depths to Length— Upper Deck to Keel 11.6

Main Deck ditto

Master John Paisley

Built at Belfast

When built 1886 Launched 3rd June

By whom built Workman Clark & Co

Owners The Autum Iron Ore Co

Residence Belfast

Port belonging to Belfast

Destined Voyage Coasting

If Surveyed while Building, Afloat, or in Dry Dock.

Specially Surveyed while building

LENGTH on deck as per Rule 150 11 BREADTH Moulded 23 0 DEPTH top of Floors to Upper Deck Beams 11 10 Power of Engines 70 No. of Decks with flat laid One No. of Tiers of Beams One

Dimensions of Ship per Register, length, 152.2 breadth, 23.1 depth, 11.85 Depth moulded 12.34

KEEL, depth and thickness 7 x 1 1/2

STEM, moulding and thickness 7 x 1 1/2

STERN-POST for Rudder do. do. 6 1/2 x 3 3/4

" " for Propeller 6 1/2 x 3 3/4

Distance of Frames from moulding edge to moulding edge, all fore and aft 21

FRAMES, Angle Iron, for 1/2 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 1 1/2 1 1/2 6

" thickness at the ends of vessel 1 1/2 1 1/2 5

" depth at 1/2 the half-bdth. as per Rule 6 1/2 6 1/2 5

" height extended at the Bilges 26 26

BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper edge 4 2 1/2 6

Average space 21

BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper Edge 4 2 1/2 6

Average space 21

BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper Edge 4 2 1/2 6

Average space 21

BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper Edge 4 2 1/2 6

Average space 21

KEELSONS Centre line, single or double plate, 10 8 10 5

" Rider Plate 6 1/2 8 6 1/2 8

" Bulb Plate to Intercoastal Keelson 3 3 6 3 3 6

" Double Angle Iron Side Keelson 3 3 6 3 3 6

" Side Intercoastal Plate 3 3 6 3 3 6

" do. Angle Irons 3 3 6 3 3 6

" Attached to outside plating with angle iron 3 3 6 3 3 6

BILGE Angle Irons 3 3 6 3 3 6

" do. Bulb Iron 3 3 6 3 3 6

" do. Intercoastal plates riveted to plating for length 3 3 6 3 3 6

BILGE STRINGER Angle Irons 3 3 6 3 3 6

Intercoastal plates riveted to plating for length 3 3 6 3 3 6

SIDE STRINGER Angle Irons 3 3 6 3 3 6

The FRAMES extend in one length from Centre line to Up. Fl. 13 1/2, 4 R 2 becks Riveted through plates with 3/4 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Bilge Stringer 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 in. diameter, averaging 5 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1 1/2 in. diameter, averaging 3 1/2 ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1 1/2 in. diameter averaging 3 ins. from centre to centre.

" Butts of Two Strakes at Bilge for 3rd length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.

" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1 1/2 in. diameter, averaging 3 1/2 ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1 1/2 in. diameter, averaging 3 ins. from cr. to cr.

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

" Butts of Main Sheerstrake, treble riveted for 3rd length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships." Butts of Main Stringer Plate, treble riveted for 3rd 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 4 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble and No. of Breasthooks, Two Crutches, Two

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

Manufacturer's name or trade mark, James Watt & Co. Reverse frames, beams, stringers, angles; Borman Long & Co. Keelson, stringer, floor.

The above is a correct description. Hull plates from Bowesfield. Keelson angles from Ballyell and

Builder's Signature, Surveyor's Signature, James Charters

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

BELS3-0297

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 in butts of parboard plates*

Masts, Bowsprit, Yards, &c., are *all* 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 pole masts of pitch pine the foremast 72 1/2 ft long & the Mainmast 68 ft long 14" dia. lengths taken from heel to truck. One pitch pine yard on foremast.

NUMBER for EQUIPMENT	7662-9	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.	CABLES, &c.											
Fore Sails,	Chain	195	18	223	160 fms 1 1/2	tested at Dept of Navy	Bower Anchors	1	12-0-12	12-2-0-21	8 1/2	1st Bower a stockless anchor tested by J. H. Norton 31/5/86 at Ribblesdale Comm. machine - remainder of anchors tested by G. R. Scott 13/5/86
Fore Top Sails,	Iron Stream Chain or Steel Wire ..	60	1 1/2	108	60 fms 1/2	6 R. Scott 27/2/86		1	10-0-0	12-0-0-0	8 1/2	
Fore Topmast Stay Sails,	or Hempen Strm Cable							1	9-1-7	11-9-0-7	7	
Main Sails,	Towline, Hemp. or Steel Wire ..	75	7 1/2		75 fms 7 1/2		Stream Anchor	1	3-3-3	6-5-1-7	2 1/2	
Main Top Sails, and	Hawser	90	5 1/2		90 fms 5 1/2		Kedge ...	1	1-3-0	4-4-1-14	1 1/2	
	Warp						2nd Kedge ...	1	0-3-0	No Test.		
	quality <i>good</i>											

Standing and Running Rigging *gal* Iron wire sufficient in size and *good* in quality. She has *One* Long Boat and a dingy.

The Windlass is *Emersons hand* & *Good* Capstan *Good* and Rudder *Good* Pumps *Good* & as per approved plans

Engine Room Skylights.—How constructed? *22" x 5 1/2" Comings about 13. R.R.* How secured in ordinary weather? *Screw bolts & nuts*

What arrangements for deadlights in bad weather? *Solid top with bulls eye glasses.*

Coal Bunker Openings.—How constructed? *Trunk hatch to B.R. R.* How are lids secured? *by hatch bars* Height above deck? *22" above B.R. R.*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *four clearing ports 20" x 14 1/2"*

and three scuppers on each side of vessel.

Cargo Hatchways.—How formed? *of Iron Comings standing 34" above deck and attached stertles with A. Is*

State size Main Hatch *17-3" x 10-9"* Forehatch *5-0" x 8-0"* Quarterhatch *17-3" x 10-0"*

If of extraordinary size, state how framed and secured? *One dup web plate in main and quarterhatches*

What arrangement for shifting beams? *and a strong wood fore and after in all hatches.*

Hatches, If strong and efficient? *yes, made of yellow pine 3" thick, Solid.*

Order for Special Survey No. 0	Date <i>Jan 6 1886</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Jan. 27 Feb. 4-24. March 11, 16, 24</i>
Order for Ordinary Survey No. —	Date —	2nd. On the plating during the process of riveting	<i>April 2, 12, 16, 19, 29 May 2, 5, 10, 14, 17</i>
No. <i>43</i> in builder's yard.	DATES of Surveys held while building as per Section 18.	3rd. When the beams were in and fastened, and before the decks were laid....	<i>24 & 28 June 2, 2, 3 28 July, 19, 26, 31</i>
State dates of letters respecting this case	<i>Secretary's Letter 29th Dec. 1885, & 4th Aug. 1886.</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>Aug. 3, 4, 10, 14, 1886</i>
		5th. After the ship was launched and equipped	<i>May 7</i>

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the enclosed approved tracings viz: the midship section and the profile and pumping arrangements with the Secretary's of above dates and in other respects in accordance with the rules of the Society.*

The vessel has a forecastle 27 ft long, a bridge 40 ft & a raised quarter deck 21 ft 6 in.; a deep ballast tank for'd and a peak tank aft have been fitted, their bulkheads stiffened as required and the tanks satisfactorily pressed. Each tank 33 tons Capacity.

The scantlings, Kulson arrangements & riveting, are in excess of rule requirements generally, and the equipment as supplied is to the next higher numeral than rules require.

The workmanship and material throughout are good and satisfactory.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of *poop*, bridge, forecastle, & raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Cement to upper turn of bilge & Outside paint*

I am of opinion this vessel should be Classed *100 A1* with the distinguishing mark *+*.

The amount of the Entry Fee£ 2 : : : is received by me, *J. S.*

Special£ 16 : 5 : : 20.8. 1886

(to be sent as per margin). Certificate *Gratis* : :

(Travelling Expenses, if any, £ —)

Committee's Minute

Character assigned

FRIDAY 27 AUGUST 1886

18

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

It is submitted that this vessel appears eligible to be classed 100 A1 as per margin.

Equipment letter of

TPT 38 tons APT 33 tons

Lloyd's Register Foundation