

IRON SHIP.

No. 220 Survey held at Belfast Date, First Survey 9th Nov 44 Last Survey 10 August 45
 On the Iron Ship "East Croft" Master James Taylor Rimmer
 Tonnage under Tonnage Deck 1216.19 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck. 101.45 SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop or Raised Or. Dk. 4.55 HALF BREADTH (moulded)... 17.45
 Ditto of Houses on Deck 41.96 DEPTH from upper part of Keel to top of Upper Deck Beams 24.5
 Ditto of Forecastle 1364.35 GIRTH of Half Midship Beams (as per Rule) 36.4
 Gross Tonnage 54.98 1st NUMBER 48.65
 Less Crew Space 1312.32 2nd NUMBER 14.203
 Less Engine Room 1312.32 PROPORTIONS—Breadths to Length 6.14
 Register Tonnage (as cut on Beam) 1312.32 Depths to Length—Upper Deck to Keel 8.98
 Main Deck ditto 8.98

When built 1845 Launched 23rd June 45
 By whom built W. & A. Moffatt
 Owners John Gambles Esq.
 Port belonging to Warrington
 Destined Voyage to India
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 220 Breadth Moulded 25 Depth top of Floors to Upper Deck Beams 22 Power of Engines 10 Horse 10 No. of Decks with flat laid 1 No. of Tiers of Beams 1

Dimensions of Ship per Register, length, 228 breadth, 31.5 depth, 22.5

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
K. E.L. depth and thickness	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2
STERN POST for Rudder do. do.	8 1/2 x 2 1/4	8 1/2 x 2 1/4	8 1/2 x 2 1/4	8 1/2 x 2 1/4	8 1/2 x 2 1/4	8 1/2 x 2 1/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	24	24	24	24
FRAMES, Angle Iron, for 1/2 length amidships	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4
Do. for 1/2 at each end	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4	3 x 3 x 4
REVERSED FRAMES, Angle Iron	3 x 3 x 5	3 x 3 x 5	3 x 3 x 5	3 x 3 x 5	3 x 3 x 5	3 x 3 x 5
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24 x 10	24 x 10	24 x 10	24 x 10	24 x 10	24 x 10
thickness at the ends of vessel	8 x 9	8 x 9	8 x 9	8 x 9	8 x 9	8 x 9
depth at 1/2 the half-bdth. as per Rule	12	12	12	12	12	12
height extended at the Bilges	60	48	60	48	60	48
BEAMS, Upper, Spar, or Awning Deck	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8
Single or double Angle Iron, Plate or Tee Bulb Iron	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6
Average space	48	48	48	48	48	48
BEAMS, Main, or Middle Deck	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8
Single or double Angle Iron, Plate or Tee Bulb Iron	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6
Average space	48	48	48	48	48	48
BEAMS, Lower Deck, Hold, or Orlop	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8	8 1/2 x 8
Single or double Angle Iron, Plate or Tee Bulb Iron	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6
Average space	48	48	48	48	48	48
KEELSONS Centre line, single or double plate	16 x 12	16 x 12	16 x 12	16 x 12	16 x 12	16 x 12
Box, or Intercoastal, Plates	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10
Rider Plate	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Bulb Plate to Intercoastal Keelson	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Angle Irons	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Double Angle Iron Side Keelson	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Side Intercoastal Plate	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
do. Angle Irons	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Attached to outside plating with angle iron	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
BILGE Angle Irons	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
do. Bulb Iron	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
do. Intercoastal plates riveted to plating for length	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
BILGE STRINGER Angle Irons	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Intercoastal plates riveted to plating for length	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
SIDE STRINGER Angle Irons	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9	5 x 4 x 9
Transoms, material. Knight-heads. Hawse Timbers.	Iron	Iron	Iron	Iron	Iron	Iron
Windlass	Iron	Iron	Iron	Iron	Iron	Iron
Pall Bitt	Iron	Iron	Iron	Iron	Iron	Iron

Flat Keel Plates, breadth and thickness 36 x 11
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 34 x 11
 fm up. part of Bilge to l. edge of Sh'rstrake 10 1/2
 Main Sheerstrake, breadth and thickness 40 x 12
 of doubling at Sh'rstrake, & length applied 40 x 12
 from Mn. to Up. or Spar Dk. Sh'rstrake 40 x 12
 Up. or Spar Dk Sh'rstrake, brdth & thickness 40 x 12
 Butt Straps to outside plating, breadth & thickness 11 1/2 x 10 1/2
 Lengths of Plating 12 per
 Shifts of Plating, and Stringers 4
 Gunwale Plate on ends of 31 x 10
 Upper Deck Beams, breadth and thickness 31 x 10
 Angle Iron on ditto 5 x 4 x 9
 Tie Plates fore and aft, outside Hatchways 10 x 10
 Diagonal Tie Plates on Beams No. of Pairs 10 x 10
 Planksheer material and scantling 10 x 10
 Waterways do. do. 10 x 10
 Flat of Upper Deck do. do. 10 x 10
 How fastened to Beams 10 x 10
 Stringer Plate on ends of Main or Middle Deck 10 x 10
 Beams, breadth and thickness 10 x 10
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 10
 Tie Plates, outside Hatchways 10 x 10
 Diagonal Tie Plates on Beams, No. of pairs 10 x 10
 Waterways materials and scantlings 10 x 10
 Flat of Middle Deck do. do. 10 x 10
 How fastened to Beams 10 x 10
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 10 x 10
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 10
 Stringer or Tie Plates, outside Hatchways 10 x 10
 Flat of Lower Deck 10 x 10
 Ceiling between Decks, thickness and material 10 x 10
 in hold do. do. 10 x 10
 Main piece of Rudder, diameter at head 10
 do. at heel 10
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. 10 Thickness of 10
 Height up to upper deck 10
 How secured to sides of ship 10
 Size of Vertical Angle Irons 10 x 10 and distance apart 10 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from middle line to gunwale & rail all. Riveted through plates with 1/8 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from about middle line to upper & lower deck all and to alternately
 KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes
 LATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/8 in. diameter, averaging 3 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 1/2 ins. from centre to centre.
 Butts of 3 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 1/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/8 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. on lower edge
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
 Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 3
 Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 How secured to Beams with waterways (Explain by Sketch, if necessary.)
 How the various Decks, how secured to the sides? with corner iron & rivets No. of Breasthooks, 14 Crutches, 3
 A description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. with 1 1/2" W.C. & 2" W.C. & 3" W.C.
 Manufacturer's name or trade mark, W. & A. Moffatt
 The above is a correct description.
 Surveyor's Signature, W. & A. Moffatt Lloyd's Register
 Surveyor to Lloyd's Register

Workmanship.

Are the butts of plating planed or otherwise fitted? *Hammed*
 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 facing surfaces? *Yes*
 Do any rivets break into or through the seams or butts of the plating? *No*

Masts, Bowsprit, Yards, &c., are *throughout* in *efficient* 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 *Fore & Main Masts 83 ft 4 in, 30 dia. plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8*
3 1/2 to 7/16. Mizen Mast 49 ft 2 1/2, 24 dia. plate 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. Bowsprit 22 ft 2 in, 22 dia. plate 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. All of 8 plates & 8 Angles, edges single, and Butts quadruple, table & double riveted. 4 1/2 No. Yards 78.6 x 19 plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. 4 1/2 No. 64.6 x 16 plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. 4 1/2 No. 64.6 x 16 plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. 4 1/2 No. 64.6 x 16 plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8. 4 1/2 No. 64.6 x 16 plates 7/16, 1/2, 3/4 Angles 3/4, 1/2, 3/8.

NUMBER for EQUIPMENT 18350				ANCHORS.				BOWERS			
N ^o .	SAILS.	CABLES, &c.	Chain	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	N ^o .	Weight.	Test per Certificate.
	Fore Sails,			134	1 1/2	29.18	29.18	29.18	1	52.1.6	30.7.20
	Fore Top Sails,			134	1 1/2	29.18	29.18	29.18	1	29.3.4	28.9.3
	Fore Topmast Stay Sails								1	24.1.0	26.11.1
	Main Sails,			90	1 1/2	90.16	90.16	90.16			
	Main Top Sails,			90	1 1/2	90.9 1/2	90.9 1/2	90.9 1/2			
				90	1 1/2	90.6	90.6	90.6			

Standing and Running Rigging *Wool & Hemp* sufficient in size and *good* in quality. She has *up* Long Boat and *up* others
 The Windlass is *Good & efficient* Capstan *Good* and Rudder *Good* Pumps *Good & efficient*
 Engine Room Skylights. How constructed? *—* How secured in ordinary weather? *—*

What arrangements for deadlights in bad weather? *—*
 Coal Bunker Openings. How constructed? *—* How are lids secured? *—* Height above deck? *—*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Four scuppers, and four large hinged ports in Bulwarks on each side*

Cargo Hatchways. How formed? *Iron Coomings*
 State size Main Hatch *19.6 x 10* Forehatch *4.6 x 6* Quarterhatch *4.6 x 6.6*

If of extraordinary size, state how framed and secured? *The main hatch reduced 8 feet at fore end*
 What arrangement for shifting beams? *The portable beam & one fore & aft beam*
 Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <u>22</u>	Date <u>24 Sept 74</u>	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	<u>November 9, 12, 14, 24, Dec 1, 2, 9, 18, 21, 28, 31, Jan 7, 6, 12, 18, 26, 29, Feb 6, 10, 15, 19, March 7, 6, 12, 19, 24, April 2, 13, 23, 29, May 4, 14, 20, 28, June 9, 14, 23, 25, July 2, 5, 8, 12, 14, 19, 24, 28, 30, Aug 2, 3, 9, 8 10</u>
Order for Ordinary Survey No.	Date		2nd. On the plating during the process of riveting	
			3rd. When the beams were in and fastened, and before the decks were laid....	
			4th. When the ship was complete, and before the plating was finally coated or cemented..	
No. <u>91</u> in builder's yard.			5th. After the ship was launched and equipped	

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

This two decked vessel, with poop 49 feet long and Forecastle 31 feet, has been built in accordance with the accompanying approved Station (with the exception that angle irons have been introduced in lieu of the fore and aft tie plates as shown on the lower deck beams) and in other respects with the Rules for the 100 A. Class.

The material and workmanship throughout are of a superior description, and the iron work is also very efficiently preserved from oxidation by Cement and paint. She is likewise fitted with donkey boiler and steam with, with a connection from same to work the Windlass.

not as in regular
8-12-5
Cement and Paint
Outside Paint

I am of opinion this Vessel should be Classed *100 A* and the lengths of poop, forecastle, *49 feet*, and the length of double, or part double bottom, *31 feet*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *Mr. [Signature]*

Special ... £ 59 : 3 : 6 *11 Aug 1875*
 Certificate ... *Gratis*

(Travelling Expenses, if any, £ *None*.)
 Committee's Minute *17th August 1875*

Character assigned *100 A*

This vessel appears eligible to be classed 100 A. The collective mark the bower anchors is higher than required.