

IRON 477-0452

# IRON SHIP.

Rev 20808  
7/5/78

No. 4436 Survey held at Port Glasgow Date, First Survey 21<sup>st</sup> May 1877 Last Survey 6<sup>th</sup> May 1878  
On the Barque "Deanfield" Master Irvine

TONNAGE under Tonnage Deck } 1002.77  
 Ditto of Third, Spar, or Awning Deck. }  
 Ditto of Poop, or Raised Or. Dk. } 40.46  
 Ditto of Houses on Deck } 18.11  
 Ditto of Forecastle } 30.05  
 Gross Tonnage } 1121.69  
 Less Deck Space } 49.57  
 Less Engine Room } 1072.12  
 Register Tonnage as cut on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 SPAR, OR AWNING-DECKED VESSEL.  
 HALF BREADTH (moulded) ... 16.95  
 DEPTH from upper part of Keel to top of Upper Deck Beam } 23.45  
 GIRTH of Half Midship Frame (as per Rule) ... 35.3  
 1st NUMBER ... 75.7  
 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]  
 LENGTH ... 204.  
 2nd NUMBER ... 15.442  
 PROPORTIONS—Breadths to Length ... 6.01  
 Depths to Length—Upper Deck to Keel ...  
 Main Deck ditto ... 8.69

Built at Port Glasgow  
 When built 1877: 8 Launched 4<sup>th</sup> Apr 1878  
 By whom built Russell & Co  
 Owners R. C. Macnaughton & Co  
 Port belonging to Liverpool  
 Destined Voyage Melbourne  
 Surveyed while Building, Afloat, or in Dry Dock.

Official Number

LENGTH on deck as per Rule ... 204. BREADTH Moulded ... 33.9 DEPTH top of Floors to Upper Deck Beams ... 21.2 Power of Engines ... Horse. N° of Decks with flat laid ... 2 No. of Tiers of Beams ... 2

	Inches in Ship.		Inches per Rule.		Class	Inches in Ship.		Inches per Rule.		Horse.	N° of Decks with flat laid		N° of Tiers of Beams	
	In Ship.	In Ship.	Inches per Rule.	Inches per Rule.		In Ship.	In Ship.	Inches per Rule.	Inches per Rule.		per Rule	per Rule		
KEEL, depth and thickness	8	2 3/4	8	2 3/4	100A	8	2 3/4	8	2 3/4					
STEM, moulding and thickness	4 1/2	2 3/4	4 1/2	2 3/4		4 1/2	2 3/4	4 1/2	2 3/4					
STERN-POST for Rudder do. do. for Propeller	4 1/2	2 3/4	4 1/2	2 3/4		4 1/2	2 3/4	4 1/2	2 3/4					
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23			23		23						
FRAMES, Angle Iron, for 3/4 length amidships Do. for 1/2 at each end	5	3	5	3		5	3	5	3					
REVERSED FRAMES, Angle Iron	3	3	3	3		3	3	3	3					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 3/4 the half-bdth. as per Rule height extended at the Bilges	27		23 1/2			27		23 1/2						
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space	8		8			8		8						
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron, on Upper Edge Average space	3	3	3	3		3	3	3	3					
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space	8		8			8		8						
KEELSONS Centre line, single or double plate, box, or intercostal, Plates Rider Plate Bulb Plate to Intercostal Keelson Angle Irons Double Angle Iron Side Keelson Side Intercostal Plate (Wash) do. Angle Irons Attached to outside plating with angle iron	15	11	15	11		15	11	15	11					
BILGE Angle Irons do. Bulb Iron do. Intercostal plates riveted to plating for length	5	3 1/2	5	3 1/2		5	3 1/2	5	3 1/2					
BILGE STRINGER Angle Irons Intercostal plates riveted to plating for length	5	3 1/2	5	3 1/2		5	3 1/2	5	3 1/2					
SIDE STRINGER Angle Irons														
Transoms, material. Knight-heads. Hawse Timbers.	Iron													
Windlass	Iron Patent Pall Bitt													

Flat Keel Plates, breadth and thickness ...  
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...  
 fin up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness  
 Butt Straps to outside plating, breadth & thickness  
 Lengths of Plating ...  
 Shifts of Plating, and Stringers ...  
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ...  
 Angle Iron on ditto ...  
 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. ...  
 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? Yes  
 Angle Irons on ditto, No. one ...  
 Tie Plates, outside Hatchways ...  
 Diagonal Tie Plates on Beams, No. of pairs ...  
 Waterways materials and scantlings ...  
 Flat of Lower 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? Yes  
 Angle Irons on ditto, No. 2 ...  
 Stringer or Tie Plates, outside Hatchways ...  
 Flat of Lower Deck do. do. ...  
 Ceiling betwixt Decks, thickness and material ...  
 in hold do. ...  
 Main piece of Rudder, diameter at head ...  
 do. at heel ...  
 Can the Rudder be unshipped afloat? Yes  
 Bulkheads No. one Thickness of 4 1/2  
 Height up Main Deck  
 How secured to sides of ship Double frames  
 Size of Vertical Angle Irons 2x2x7/16 and distance apart 30 ins.  
 Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 in. apart.  
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main Deck masonry and to 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 1/2 in. diameter, averaging 5 1/2 ins. from centre to centre.  
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/2 in. diameter, averaging 3 3/4 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/2 in. diameter averaging 3 3/4 ins. from centre to centre.  
 Butts of 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 single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.  
 Edges of Main Sheerstrake, double 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 length.  
 Breadth of laps of plating in double riveting 1 1/2 Breadth of laps of plating in single riveting  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?  
 Waterway, how secured to Beams Iron Gutter (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, 4 Crutches, 4  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best  
 Manufacturer's name or trade mark, Angle Iron Messrs. Plate Co. Russell & Co.  
 The above is a correct description.  
 Builder's Signature, Russell & Co. Surveyor's Signature, H. J. Russell & Co.  
 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? *Very few* 20808 Lm

Masts, Bowsprit, Yards, &c., are *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 *The Main Mast 76ft dia 27 Main 77ft dia 27 Mizzen 76 1/2 ft dia 22 Bowsprit 30ft*  
*Fore & Main Mast & Bowsprit plates 6 5/16 dia 27 all in three plates edges single riveted, butts straps outside 1/6 thickness*  
*Mizzen Mast — in 5 5/16 } Main plates and double & triple riveted with 3 angle Irons in each all*  
*throughout 4 x 3 x 7/16 except Mizzen which are 3 x 3 x 7/16*

No.	SAILS.	CABLES, & Chains	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.		No.	Weight Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
								Bowers	Stream					
	Fore Sails,	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	500	29.3.10	30.11.2.7	30.0.0.0	28 1/2	
	Fore Top Sails,	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	506	20.3.12	27.15.0.14	25.2.0.0	25 1/2	
	Fore Topmast Stay Sails,	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	4712	27.1.5	26.12.0.27			
	Main Sails,	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	4924	9.3.10	11.15.2.14	12.0.0.0		
	Main Top Sails,	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	4989	4.2.16	7.1.1.0	6.0.0.0		
	and	2 1/2"	15.0	3	35.2.2.08	270 3/4	55 1/2 x 7 1/2	21/11/77	4946	5.1.26	4.16.1.0	3.0.0.0		

Standing and Running Rigging *Wire & Hempen* sufficient in size and *good* in quality. She has *Life* Long Boat and *3* others  
 The Windlass is *Emmerson & Walker Patent* Capstan *Winche* and Rudder *Efficient* Pumps *2 Iron (Wallace Patent)*  
**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? *Pots & scuppers*

**Cargo Hatchways.**—How formed? *in Cornings*  
 State size **Main Hatch** *15.4 x 10.0* Forehatch *7.8 x 6.0* Quarterhatch *7.8 x 7.0*  
 If of extraordinary size, state how framed and secured? \_\_\_\_\_  
 What arrangement for shifting beams? *two in Main Hatch*  
**Hatches,** If strong and efficient? *Yes*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
256	26 March 1877			13		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped
						<i>Built under S.D. and surveyed 1877</i>	<i>May 21, 31, June 9.10, July 13, 31 August</i>	<i>4, 14, 24, Sept 7, 14, Oct 3, 5, 8, 17, 23,</i>	<i>November 5, 8, 1878, Jan 10, 17, 24, 31</i>	<i>Feb 7, 8, 16, 26, March 1, 10, 22, 25 April 2, 6, 1878</i>

**General Remarks** (State quality of workmanship, &c.)  
*This Vessel has been built in conformity with the Rules and Midship section and Bow plan appended to Report on Sister Ship - "Cadzow Forest" No 7381, which were submitted and approved by the Committee in letter dated 31st March 1877. The workmanship and materials are of good quality.*

*Fore & Main lower Yards 74ft dia 10" plates 4 5/16 in 2 plates edges single riveted,*  
*do lower Top sail 64ft dia 16" plates 4 5/16 butts lapped & triple riveted 2 angle Irons*  
*in each all throughout 2 x 2 x 7/16 those in top sail yards are 2 x 2 x 7/16.*  
*30ft 26ft*

State if one, two, or three, decked vessel, or if open, or covering-decked; and the lengths of poop, fore-castle, or raised quarter-deck, and the length of double, or part double-bottom.  
 How are the surfaces preserved from oxidation? Inside *Portland Cement to alum & Belje* Outside *Red lead & Paint Comp 2 - on bottom -*

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,  
 Special ... £ 51: 16: 0 *2nd May 1878*  
 Certificate ... £ 0: 0: 0  
 (Travelling Expenses, if any, £ ) £ 56: 16: 0

Committee's Minute *7th May 1878*  
 Character assigned *100 A.1*  
*DBW - Arch*  
 This vessel appears eligible to be classed as recommended by 100 A.1. Lloyd's Register of Shipping  
 7/575