

IRON 477-0452

IRON SHIP.

Rev 20808
7/5/78

No. 4436 Survey held at Port Glasgow Date, First Survey 21st May 1877 Last Survey 6th May 1878

On the Barque "Deanfield" Master J. Irvine

TONNAGE under Tonnage Deck 1002.77
Ditto of Third, Spar, or Awning Deck. 40.46
Ditto of Poop, or Raised Or. Dk. 18.11
Ditto of Houses on Deck 30.05
Ditto of Forecastle 1121.69
Gross Tonnage 1492.57
Less Deck Space 1072.12
Less Engine Room
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 Beams 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 8.69
Main Deck ditto

Built at Port Glasgow
When built 1877: 8 Launched 4th 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.

LENGTH on deck as per Rule 204. Breadth Moulded 33.9 DEPTH top of Floors to Upper Deck Beams 21.2 Power of Engines 2 Horse. N° of Decks with flat laid Two N° of Tiers of Beams Two

	Inches in Ship.			Inches per Rule.		
KEEL, depth and thickness	8	2 3/4	3	8	2 3/4	3
STEM, moulding and thickness	4 1/2	2 3/4	3	4 1/2	2 3/4	3
STERN-POST for Rudder do. do.	4 1/2	2 3/4	3	4 1/2	2 3/4	3
for Propeller	23			23		
Distance of Frames from moulding edge to moulding edge, all fore and aft	23			23		
	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	Inches. per Rule.	16ths. per Rule.
FRAMES, Angle Iron, for 3/4 length amidships	5	3	0	5	3	0
Do. for 1/2 at each end	5	3	0	5	3	0
REVERSED FRAMES, Angle Iron	3	3	4	3	3	4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	27		0	23 1/2		0
thickness at the ends of vessel	12 1/2		1	11 3/4		1
depth at 3/4 the half-bdth. as per Rule	54			47		
height extended at the Bilges						
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						
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8		8	8		8
Single or double Angle Iron, on Upper Edge	3	3	6	3	3	6
Average space	46			46		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8		8	8		8
Single or double Angle Iron on Upper Edge	3	3	6	3	3	6
Average space	46			46		
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	15		11	15		11
" Rider Plate	11		11	10 1/2		11
" Bulb Plate to Intercostal Keelson	5	3 1/2	0	5	3 1/2	0
" Angle Irons	5	3 1/2	0	5	3 1/2	0
" Double Angle Iron Side Keelson	5	3 1/2	0	5	3 1/2	0
" Side Intercostal Plate (Wash)						
" do. Angle Irons						
" Attached to outside plating with angle iron						
BILGE Angle Irons	5	3 1/2	0	5	3 1/2	0
" do. Bulb Iron						
" do. Intercostal plates riveted to plating for length						
BILGE STRINGER Angle Irons	5	3 1/2	0	5	3 1/2	0
Intercostal plates riveted to plating for length						
SIDE STRINGER Angle Irons						
Transoms, material. Knight-heads. Hawse Timbers.	Iron					
Windlass Iron Patent Pall Bitt						

Flat Keel Plates, breadth and thickness	34	11	34	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	10x9		9x10	
fm up. part of Bilge to lr. edge of Sh'rstrake	10x9		9x10	
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	36	11	36	11
Up. or Spar Dk Sh'rstrake, brdth & thickness				
Butt Straps to outside plating, breadth & thickness	23	9x10	10x11	3 9x10
Lengths of Plating	15x16	16x16	16x16	16x16
Shifts of Plating, and Stringers	16x16	16x16	16x16	16x16
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	2	11	2	11
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	42	9	42	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. one	5x3 1/2	0	5x3 1/2	0
Tie Plates, outside Hatchways	12	9	12	9
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.	11	9	11	9
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	30	0	30	0
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	3 1/2 x 3 1/2	0	3 1/2 x 3 1/2	0
Stringer or Tie Plates, outside Hatchways	1 1/2	9	12	9
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material				
in hold do. do.	2 1/2	9	2 1/2	9
Main piece of Rudder, diameter at head	5 1/2		5 1/2	
do. at heel	3		3	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. one Thickness of	4 1/2	6 1/2		
Height up	Main	Beams		
How secured to sides of ship	Double	frames		
Size of Vertical Angle Irons	2x3x7/16			
and distance apart	30			
ins. Are the outside Plates doubled two spaces of Frames in length?	Yes			

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 Up. 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 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? Yes
Angle Irons on ditto, No. 2 ...
Stringer or Tie Plates, outside Hatchways ...
Flat of Lower Deck do. do. ...
Ceiling between 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 ...
Height up Main Deck
How secured to sides of ship Double frames
Size of Vertical Angle Irons 2 x 3 x 7/16 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 apart.
The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main Deck and to frames 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 1/2 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/2 in. diameter averaging 3 1/2 ins. from centre to centre.
Butts of Three 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 amidships.
Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 4
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, Anglo Iron Works, Plate Co. & Co.
The above is a correct description.
Builder's Signature, Russell & Co. Surveyor's Signature, H. J. Russell
Surveyor to Lloyd's Register of British and Foreign Shipping.

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 76ft dia 27 Main 77ft dia 27 Mizen 76 1/2 ft dia 22 Bowsprit 30ft*

The Main Mast & Bowsprit plates 6 5/16 dia 27 all in three plates edges single riveted, butts straps outside 1/16 thicker
Mizen Mast — " 5 5/16 } than plates and double & triple riveted with 3 angle Irons in each all

15500

throughout 4 x 3 x 7/16 except Mizen which are 3 x 3 x 7/16

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight. Stock.	Test per Certificate.	W't req'd per Rule.	Test req'd per Rule.
No.	SAILES.	CABLES, &c.										
	Fore Sails,	Chain										
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,	Hump Strm Cbl										
	Main Top Sails,	Hawser ...										
	and	Towlines ...										
		Warp										
		quality										

Standing and Running Riggings *Wire & Hempen* sufficient in size and *good* in quality. She has *2* *Long* *Boats* and *3* *Other*

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? *Iron Cornings*

State size *Main Hatch 15' 4" x 10' 0"* *Fore hatch 7' 0" x 6' 0"* *Quarter hatch 7' 0" 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. <i>256</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.D. and surveyed 1877</i>
Date <i>26 March 1877</i>	2nd. On the plating during the process of riveting	<i>May 21, 31, June 9, 10, July 13, 31 August</i>
Order for Ordinary Survey No. <i>13</i>	3rd. When the beams were in and fastened, and before the decks were laid....	<i>Y. 14, 24, Sept 5, 14, Oct 3, 5, 17, 23,</i>
Date <i>✓</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>November 5, 10, Dec 25, 1878, Jan 10, 17, 24, 31</i>
No. <i>13</i> in builder's yard.	5th. After the ship was launched and equipped	<i>Feb 7, 8, 16, 26, March 1, 10, 22, 25 April 2, 6, 1879</i>
		<i>May 1, 6.</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 - "Coadyow 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,
80 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 1/4 those in topsail yards are 2 x 2 x 1/6.

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 *Pottland Cement & alum & Bile* Outside *Red lead & Paint & Comp 2 -*

I am of opinion this Vessel should be Classed *100 A.1.* *- on bottom -*

The amount of the Entry Fee ... £ *5: 0: 0* is received by me, *May 1878*

Special ... £ *51: 16: 0* Certificate ... £ *0: 0: 0*

(Travelling Expenses, if any, £ ...)

Committee's Minute *7th May 1878*

Character assigned *100 A.1.*

DBW - Arch

This vessel appears eligible to be classed as recommended 100 A.1. Lloyd's Register