

I R O N S H I P . 1 6 . 8 9 2

Rev 21/1/76
1876

No. 4068 Survey held at Port Glasgow Date, First Survey 25th Jun 76 Last Survey 19th Sep 76

On the Ship "Drumlaire" Master James Morris
Built at Port Glasgow

When built 1876 Launched 23 Aug 1876
By whom built Russell & Co

Owners Gibson & Chadwick
Port belonging to Liverpool

Destined Voyage Rio de Janeiro
Surveyed while Building, Afloat, or in Dry Dock

TONNAGE under 1361.29
~~Throng Deck~~
 Ditto of Third, Spar, or Awning Deck. 4.54
 Ditto of Poop, or Raised Or. Dk. 54.61
 Ditto of Houses on Deck 21.48
 Ditto of Forecastle 39.77
 Gross Tonnage 1481.69
 Less Crew Space 57.10
 Less Engine Room 1424.59
 Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
~~SPAR, OR AWNING DECKED VESSEL.~~
HALF BREADTH (moulded)... .. 10.75 Feet.
DEPTH from upper part of Keel to top of Upper Deck Beam: 25.
GIRTH of Half Midship Frame (as per Rule) 30.5
1st NUMBER 82.25
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
LENGTH 235.
2nd NUMBER 1932.875
PROPORTIONS—Breadths to Length 6.26
 Depths to Length—Upper Deck to Keel
 Main Deck ditto 9.4

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
 fm 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. Y. Pine 4 4
 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
 Ceiling betwixt Decks, thickness and material
 in hold do. do. 3 1/2 Pine
 Main piece of Rudder, diameter at head
 do. at heel
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. one Thickness of 1 1/2 1 1/2
 Height up Main Deck
 How secured to sides of ship Double frames
 Size of Vertical Angle Irons 3 1/2 x 3 1/2 x 4 1/2 and distance apart 20 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

LENGTH on deck as per Rule 235 Feet. **BREADTH**—Moulded... .. 37.5 Feet. **DEPTH** top of Floors to Upper Deck Beams 22.95 Feet. **Power of Engines** 2 Horse. **Nº. of Decks with flat laid** Two **Nº. of Tiers of Beams** Two

	Inches in Ship.		Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.	
	In Ship.	In Ship.	Inches	Inches		In Ship.	Inches		Inches	In Ship.
KEEL , depth and thickness	9 1/2	2 1/2	4 1/2	2 1/2	9 1/2	2 1/2	4 1/2	2 1/2	9 1/2	2 1/2
STEM , moulding and thickness... ..	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2
STERN-POST for Rudder do. do.	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2
for Propeller	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2	9	2 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24		24		24		24	
FRAMES , Angle Iron, for 3/4 length amidships	5	3 1/2	5	3 1/2	5	3 1/2	5	3 1/2	5	3 1/2
Do. for 1/2 at each end	5	3 1/2	5	3 1/2	5	3 1/2	5	3 1/2	5	3 1/2
REVERSED FRAMES , Angle Iron	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	24 1/2	10	24 1/2	10	24 1/2	10	24 1/2	10	24 1/2	10
thickness at the ends of vessel	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2
depth at 3/4 the half-bdth. as per Rule	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2	12 1/2	9 1/2
height extended at the Bilges... ..	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	9	9	9	9	9	9	9	9	9
Single or double Angle Iron on Upper edge	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3
Average space... ..	40	7	40	7	40	7	40	7	40	7
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	9	9	9	9	9	9	9	9	9
Single or double Angle Iron, on Upper Edge	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3
Average space... ..	40	7	40	7	40	7	40	7	40	7
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	9	9	9	9	9	9	9	9	9
Single or double Angle Iron on Upper Edge	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3
Average space... ..	40	7	40	7	40	7	40	7	40	7
KEELSONS Centre line, single or double plate, box, or intercostal Plates	10	13	10	13	10	13	10	13	10	13
" Rider Plate	12	13	11 1/2	13	12	13	11 1/2	13	12	13
" Bulb Plate to Intercostal Keelson	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" Angle Irons	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" Double Angle Iron Side Keelson	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" Side Intercostal Plate	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" do. Angle Irons	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" Attached to outside plating with angle iron	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
BILGE Angle Irons	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" do. Bulb Iron... ..	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
" do. Intercostal plates riveted to plating for length	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
BILGE STRINGER Angle Irons	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
Intercostal plates riveted to plating for length.	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
SIDE STRINGER Angle Irons	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
Transoms, material. Knight-heads. Hawse Timbers. <u>Iron</u>										
Windlass <u>Iron Patent</u> Pall Bitt										

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 1/2 in. Rivets, about 1 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Main Deck on every frame and to 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 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 or single riveted; with rivets 1/2 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/2 in. diameter, averaging 3 3/4 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

Butts of Main Stringer Plate, treble riveted for half 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 5 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes

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 Irons Messrs. Plates. Consett

The above is a correct description.

Builder's Signature, Russell & Co Surveyor's Signature, H. J. 1800

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

7200-8932021

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*

Masts, Bowsprit, Yards, &c., are *Iron* 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 Bowsprits *Fore Mast 83 dia 30 Main 83.10 dia 30 Mizzen 76 dia 28 Bowsprit 23 feet dia 30*
Fore Mast & Mizzen Mast plates 6/16 to 5/16 } All in three plates edges single rivet
Bowsprit plates 7/16 to 5/16 } full straps outside 1/16 thicker than
Three angle Irons in each all throughout 4 1/2 x 3 x 1/16 except Mizzen Mast 4 x 3 x 1/16 } plates & table & double riveted plates
doubled in way of wedging and

45887

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS. No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
No.	SAILS.	CABLES, &c.		13 5/8	1 1/8	63 1/2 x 100 1/2	Bowers	3271	34.1.16	31.15.1.0	34.0.0
	Fore Sails,	Chain		13 5/8		270		3270	32.3.16	30.16.2.0	31.2.0
	Fore Top Sails,	Public Test 16th Augt 1876				63 1/2 x 88 1/2		3272	29.7.25	28.8.3.0	28.3.17 27 1/2
	Fore Topmast Stay Sails	O. G. Lewis pro Superintendent									
	Main Sails,	Hemp Strm Cbl		90	1 1/2		Stream	1	13.2.16		13.2.0
	Main Top Sails,	Hawser ...		90	1 1/2						6.3.0
	and	Towlines ...		90	1 1/2		Kedges	1	6.3.21		3.1.0
		Warp ...		90	1 1/2						
		quality good		90	1 1/2						

Standing and Running Rigging *Wit Kuppen* sufficient in size and *good* in quality. She has *Two* Long Boat Sails and *2* other.
 The Windlass is *American Walker Patent* Capstan *8* Winches and Rudder *Efficient* Pumps *2* Iron 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? *Parts of Scuppers*

Cargo Hatchways.—How formed? *Iron Curving*

State size Main Hatch *16'0" x 10'0"* Forehatch *8'0" x 6'0"* Quarterhatch *8'0" x 7'0"*

If of extraordinary size, state how framed and secured? _____

What arrangement for shifting beams? *One Shifting Beam in Main Hatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *704*
 Date *20th Juny 1876*
 Order for Ordinary Survey No. _____
 Date _____
 No. *7* in builder's yard.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
 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...
 5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conformity with the Rules and Midship's section longitudinal plan herewith appended which were submitted and approved by the Committee in letter dated 5th Feby 1876. The materials & workmanship are of good quality. It will be observed that the collective weight of the Bower Anchors is slightly under the requirements of the Rules*

Fore & main lower Yards 80 dia 20 plates 6 to 4 } All in two plates edges
02 00 Spoil 0? 70 - " 17 - " - 5 to 3 } single riveted butts
Cross Jack Yard 60 - " 16 - " - 5 to 3 } over lapped & table
Mizzen lower Spoil Yard 53 1/2 - " 14 - " - 5 to 3 } riveted, 1/16 plates double
in way of
slings &c

State if one, two, or three, decked vessel, or if spar, or awning 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 *Puttand Cement to above keel & Red Lead* Outside *Red Lead & Paint*

I am of opinion this Vessel should be Classed *100 A. 1.* Subject to the Committee's approval as regards the figures for the clearance of the hull.

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, *[Signature]*
 Special ... £ 60: 12: 0 19 Sept. 1876
 Certificate ... £ 0: 0: 0
 (Travelling Expenses, if any, £ ...)

Committee's Minute *22nd September 1876*

Character assigned *100 A 1*

