

IRON SHIP.

12/8/81

No. 2041 Survey held at Port Glasgow Date, First Survey 13th Dec^r 1880 Last Survey 10th Aug^t 1881
 On the Ship "Drumburton" (4 masts) Master John Cowell

Official Number Not yet known

TONNAGE under Tonnage Deck	1755.35	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third Spar, or Awning Deck		SPAR, OR AWNING DECKED VESSEL.
Ditto of Poop, or Raised Or. Dk.	87.89	HALF BREADTH (moulded) Feet. 19.95
Ditto of Houses on Deck	29.67	DEPTH from upper part of Keel to top of Upper Deck Beams 26.65
Ditto of Forecastle	18.36	GIRTH of Half Midship Frame (as per Rule) .. . 42.0
Gross Tonnage	1891.24	1st NUMBER 88.6
Less Crew Space	50.94	1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet ✓
Less Engine Room		LENGTH 252.5
Register Tonnage as cut on Beam	1840.30	2nd NUMBER 22371.5
		PROPORTIONS—Breadths to Length 6.3
		Depths to Length—Upper Deck to Keel 9.4
		Main Deck ditto ✓

Built at Port Glasgow.
 When built 1881. Launched 15th July 1881
 By whom built Mess^{rs} Russell & Co
 Owners Mess^{rs} Gillibon & Chadwick.
 Port belonging to Liverpool
 Destined Voyage Melbourne via Liverpool
 If Surveyed while Building, Afloat, or in Dry Dock. While Building and afloat.

LENGTH on deck as per Rule	Feet. 252	Inches. 6	BREADTH—Moulded	Feet. 39	Inches. 10 3/4	DEPTH top of Floors to Upper Deck Beams	Feet. 23	Inches. 11 1/4	Power of Engines	Horse. ✓	No. of Decks with flat laid	2
						Do. do. Main Deck Beams					No. of Tiers of Beams	2

Dimensions of Ship per Register, length, 266.65 breadth, 40.2 depth, 23.8

	Inches in Ship		Inches per Rule		Inches in Ship		Inches per Rule		Inches in Ship		Inches per Rule	
	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship	In Ship
KEEL, depth and thickness	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4
STEM, moulding and thickness	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4
STERN-POST for Rudder do. do.	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4	10	2 3/4
" " for Propeller												
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		3 1/4									
FRAMES, Angle Iron, for 2/3 length amidships	5 1/2	3 1/2	8	5 1/2	3 1/2	8	5 1/2	3 1/2	8	5 1/2	3 1/2	8
Do. for 1/2 at each end	"	"	7	"	"	7	"	"	7	"	"	7
REVERSED FRAMES, Angle Iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8	3 1/2	3 1/2	8	3 1/2	3 1/2	8
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	32 1/2	10	26	10	32 1/2	10	26	10	32 1/2	10	26	10
" thickness at the ends of vessel			9 1/2				9 1/2				9 1/2	
" depth at 2/3 the half-bdth. as per Rule	16		13		16		13		16		13	
" height extended at the Bilges	6 1/4		5 1/2		6 1/4		5 1/2		6 1/4		5 1/2	
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9
Single or double Angle Iron on Upper edge	3 1/2	3 1/2	7	3 1/2	3 1/2	7	3 1/2	3 1/2	7	3 1/2	3 1/2	7
Average space	48		48		48		48		48		48	
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												
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9
Single or double Angle Iron on Upper Edge	3 1/2	3 1/2	7	3 1/2	3 1/2	7	3 1/2	3 1/2	7	3 1/2	3 1/2	7
Average space	48		48		48		48		48		48	
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	19	13	19	13	19	13	19	13	19	13	19	13
" Rider Plate	13	13	13	13	13	13	13	13	13	13	13	13
" Bulb Plate to Intercoastal Keelson												
" Angle Irons	6	4	9	6	4	9	6	4	9	6	4	9
" Double Angle Iron Side Keelson	6	4	9	6	4	9	6	4	9	6	4	9
" Side Intercoastal Plate												
" do. Angle Irons Bulb plate	9 1/2	9		9 1/2	9		9 1/2	9		9 1/2	9	
" Attached to outside plating with angle iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8	3 1/2	3 1/2	8	3 1/2	3 1/2	8
BILGE Angle Irons	6	4	9	6	4	9	6	4	9	6	4	9
" do. Bulb Iron	9 1/2	9		9 1/2	9		9 1/2	9		9 1/2	9	
" do. Intercoastal plates riveted to plating for length												
BILGE STRINGER Angle Irons	6	4	9	6	4	9	6	4	9	6	4	9
Intercoastal plates riveted to plating for length	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9
SIDE STRINGER Angle Irons	6	4	9	6	4	9	6	4	9	6	4	9
all fore & aft. Bulb plate	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9	9 1/2	9
Transoms, material. Knight-heads. Hawse Timbers.												
Windlass												

	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
Flat Keel Plates, breadth and thickness	36 1/2	12	36	12
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	11 1/2		11	
" of doubling at Bilge, or increased thickness, and length applied	11		11	
" fm up. part of Bilge to lr. edge of Sh'rstrake.	40	14	40	13
" 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	16 3/4	13	17 1/2	16 3/4
Lengths of Plating	7	frame spaces = 14 feet	5	fr spaces
Shifts of Plating, and Stringers	at least 2 ft spaces		2	ft spaces
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	39	10	39	10
Angle Iron on ditto	1- 3 1/2 x 3 1/2 x 6 1/4 and 1- 6 x 4 x 9 1/2		6	4
Tie Plates fore and aft, outside Hatchways	15	10	15	10
Diagonal Tie Plates on Beams No. of Pairs	13	15	10	15
Planksheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.	4	8	4	8
How fastened to Beams	By galls? Saw bolts 9/16		8	
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No.				
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	39	9	38	9
Is the Stringer Plate attached to the outside plating?	Yes.			
Angle Irons on ditto, No. 1- 3 x 3 x 6 1/4 and 2- 4 x 4 x 9 1/2	4	4	9 1/2	4
Stringer or Tie Plates, outside Hatchways	15	10	15	10
Flat of Lower Deck	2	W. P. Sparring	3	ft. P.
Ceiling betwixt Decks, thickness and material	3	ft. P.	2 1/2	
" in hold do. do.				
Main piece of Rudder, diameter at head	6 3/4		6 3/4	
do. at heel	3 1/2		3 1/2	
Can the Rudder be unshipped afloat?	Yes.			
Bulkheads No. one Thickness of			7	
" Height up to upper deck.				
" How secured to sides of ship	between double frames			
" Size of Vertical Angle Irons	3 1/2 x 3 1/2 x 8 1/2		30	ins.
" Are the outside Plates doubled two spaces of Frames in length?	Yes.			

The FRAMES extend in one length from Keel to Forecastle stringer Riveted through plates with 7/8 in. Rivets, about 7 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper deck stringer plate 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 1/8 in. diameter, averaging 5 7/8 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.

" Butts of 3 Strakes at Bilge for 1/2 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 7/8 in. diameter, averaging 3 3/8 ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 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.

" Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted ✓ length amidships.

" Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for ✓ length.

" Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting 2 3/4 poop & fore-castle.

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? As required by rules.

Waterway, how secured to Beams Buttlers. (Explain by Sketch, if necessary.) and beams to prevent painting

Beams of the various Decks, how secured to the sides? By solid welded knees. No. of Breasthooks, 3 Crutches, 4

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

Manufacturer's name or trade mark, Angles from Messend & Dorman Long 78: Plates from Coussett Irons

The above is a correct description.

Builder's Signature, Russell W. Surveyor's Signature, J. H. Lloyd

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

BRKAL-0266

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed and hand fitted*
 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? *In a few cases at the butts.*

Masts, Bowsprit, Yards, &c., are *Wood & 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. *Yes*

State also Length and Diameter of Lower Masts and Bowsprit *Butt Straps increased 1/16 and 1/8 where reqd., all edges D. R.*
 Fore mast *84-6 at deck 30x7/16 at Head 24x6/16 at Head 19 1/2 x 6/16 at Head 22x6-7/16 3 plates and 3 angles.*
 Main *85-0*
 Mizzen *84-6*
 Jigger *74-10*
 Bowsprit outside bed *22-9 at partners 28x7/16* *18 1/2 x 6/16* *23x6-7/16*

No.	NUMBER for EQUIPMENT	Fathoms.	Inches.	Test per Certificate.	Inches per Rule	Machine where Tested & Supplied.	ANCHORS. No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule	Machine wht Tested & Suppl	
												SAILS.
	23862				240 6/16	Wilton	Bower Anchors 11032	38.0	18 3/4	13.0	38.0	
Fore Sails,	Chain 5.148	240.5	2	100%	2	Wilton	11018	34.2	25	34.6	1.0	
Fore Top Sails,	Iron Str 8843	45	1 1/8	22 1/2	3 1/2	Wetherston	11068	32.2	24	30.13	3.0	
Fore Topmast and Stay Sails,	Ditto do.					D. G. Lewis		108.2	11		108.1	
Main Sails,	Hmpn Strm Cbl						Stream	10583	11.3	12	13 1/2	11.2
Main Top Sails, and	Hawser ...	90	9 1/2		90	11	Kedge	10434	5.2	4	4.8	1.2
	Towlines ...	90	13		90	12	Ditto	11002	2.3	5	5.4	2.0
	Warp ...	90	8		90	7						
	quality <i>good</i>	100	5									

Standing and Running Rigging *Wire & Hempen* sufficient in size and *good* in quality. She has *four* long Boats and *1* as Life boat
 The Windlass is *efficient* Capstan *efficient* and Rudder *efficient* Pumps *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? *Five pairs of freeing ports and five pairs of scuppers, also 3 pairs large mooring*

Cargo Hatchways. How formed? *plate Comings riveted to beams and Carlings.*

State size Main Hatch *15.11 x 10.0* Forehatch *8.0 x 5.10* Quarterhatch *9.11 x 5.11*

If of extraordinary size, state how framed and secured? *Shifting beam and strong fore & aft in main hatchway.*

What arrangement for shifting beams? *double angle lugs on Comings*

Hatches, If strong and efficient? *Yes. 4" solid for the main and 2 3/4 fore & quarter hatches.*

Order for Special Survey No. *988* Date *6 November 1880*

Order for Ordinary Survey No. *36* in builder's yard. Date _____

General Remarks (State quality of workmanship, &c.) *Workmanship and Materials good*

This four masted iron sailing ship has been constructed in accordance with the Rules and the accompanying tracings 4 1/2 which were submitted and approved please see Sect 2 letters dated 15th, 19th Novr 1880 and 25th Jan 3/81.

It will be observed that the floors are deeper, the sheer-strake is 1/16 thicker and that a bulb plate is fitted to the side keelson in excess of the Rule requirements.

The collision bulkhead is fitted 2 frame spaces further aft as suggested by the Committee.

Rigging screws fitted (in lieu of lanyards) of the size & arrangements as approved in similar cases.

State if one, two, or three decked vessel, or if span, or awning decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom. *36 ft to post 38 ft*

How are the surfaces preserved from oxidation? Inside *Cemented to upper part of bulges and coated with paint above.* Outside *Coated with paint*

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, *J. L. Smart*
 Special ... £ *41:0:0* *10 August 1881*
 Certificate ... £ *0:0:0*

(Travelling Expenses, if any, £) *596:0:0*
 Committee's Minute *Friday, August, 12th 1881.*

Character assigned *100 A.1*

The Surveyors are requested not to write on or below the space for Committee's Minute.

