

IRON SHIP, 1803

Survey held at Port Glasgow Date, First Survey 2nd Nov 1876 Last Survey 4th April 1877

The Barque "Earl Granville" Master Reddie

Tonnage under
of Third, Spar,
of Awning Deck, }
of Poop, or
of Deck }
of Forecastle }
Tonnage }
of new Space }
of Engine Room }
Tonnage }
of on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.
HALF BREADTH (moulded)... .. 16.65
DEPTH from upper part of Keel to top of Upper Deck Beam 22.25
GIRTH of Half Midship Frame (as per Rule) 33.6
1st NUMBER 72.5
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
LENGTH 200.25
2nd NUMBER 14.510
PROPORTIONS—Breadths to Length 6.01
Depths to Length—Upper Deck to Keel
Main Deck ditto 9.

Built at Port Glasgow
When built 1877 Launched 14 March 1877
By whom built R. Duncan & Co
Owners John McAlister & Co
Port belonging to Glasgow
Destined Voyage San Francisco
 Surveyed while Building, Afloat, or in Dry Dock.

Feet. Inches. BREADTH—Moulded... .. 33.3
Feet. Inches. DEPTH top of Floors to Upper Deck Beams 20.37
Feet. Inches. Power of Engines 5
Horse. No. of Decks with flat laid Deck
No. of Tiers of Beams Two

Description	Inches in Ship		Inches per Rule		Description	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
	Inches	16ths	Inches	16ths					
Flat Keel Plates, breadth and thickness	44	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	44	11	34	11
depth and thickness	2 3/8		2 3/8		of doubling at Bilge, or increased thickness, and length applied	44	11	34	11
moulding and thickness	1 1/2		1 1/2		fm up. part of Bilge to lr. edge of Sh'rstrake	44	11	34	11
POST for Rudder do. do.	1 1/2		1 1/2		Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	36	11	36	11
for Propeller	1 1/2		1 1/2		Up. or Spar Dk Sh'rstrake, brdth & thickness	36	11	36	11
of Frames from moulding edge to moulding edge, all fore and aft	23		23		Butt Straps to outside plating, breadth & thickness	36	11	36	11
Angle Iron, for 3/4 length amidships at each end	4 1/2		4 1/2		Lengths of Plating	2		2	
FRAMES, Angle Iron	3		3		Shifts of Plating, and Stringers	2		2	
depth and thickness of Floor Plate for half length amidships	2 1/2		2 1/2		Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	2		2	
at the ends of vessel	1 1/2		1 1/2		Angle Iron on ditto	2		2	
at 3/4 the half-bdth. as per Rule	1 1/2		1 1/2		Tie Plates fore and aft, outside Hatchways	2		2	
extended at the Bilges	5 1/2		4 1/2		Diagonal Tie Plates on Beams No. of Pairs	2		2	
Upper, Spar, or Awning Deck	5 1/2		4 1/2		Planksheer material and scantling	2		2	
Angle Iron, Plate or Tee Bulb Iron	5 1/2		4 1/2		Waterways do. do.	2		2	
able Angle Iron on Upper edge	5 1/2		4 1/2		Flat of Upper Deck do. do.	2		2	
Face	5 1/2		4 1/2		How fastened to Beams	2		2	
in, or Middle Deck	5 1/2		4 1/2		Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	40	9	40	9
Angle Iron, Plate or Tee Bulb Iron	5 1/2		4 1/2		Is the Stringer Plate attached to the outside plating?	Yes			
able Angle Iron, on Upper Edge	5 1/2		4 1/2		Angle Irons on ditto, No.	5x3 1/2 x 0		5x3 1/2 x 8	
Face	5 1/2		4 1/2		Tie Plates, outside Hatchways	11	9	11	9
Lower Deck, Hold, or Orlop	5 1/2		4 1/2		Diagonal Tie Plates on Beams, No. of pairs	11	9	11	9
Angle Iron, Plate or Tee Bulb Iron	5 1/2		4 1/2		Waterways materials and scantlings	11	9	11	9
able Angle Iron on Upper Edge	5 1/2		4 1/2		Flat of Middle Deck do. do.	11	9	11	9
Face	5 1/2		4 1/2		How fastened to Beams	11	9	11	9
space	5 1/2		4 1/2		Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	29	0	29	0
Centre line, single or double plate, or Intercostal, Plates	15	11	15	11	Is the Stringer Plate attached to the outside plating?	Yes			
Plate	10 3/4	11	10 3/4	11	Angle Irons on ditto, No.	13 1/2 x 3 1/2 x 0		13 1/2 x 3 1/2 x 0	
Plate to Intercostal Keelson	10 3/4	11	10 3/4	11	Stringer or Tie Plates, outside Hatchways	13 1/2 x 3 1/2 x 0		13 1/2 x 3 1/2 x 0	
able Irons	5	3 1/2	5	3 1/2	Flat of Lower Deck	13 1/2 x 3 1/2 x 0		13 1/2 x 3 1/2 x 0	
able Angle Iron Side Keelson	5	3 1/2	5	3 1/2	Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2		2 1/2	
Intercostal Plate	5	3 1/2	5	3 1/2	Main piece of Rudder, diameter at head do. at heel	3		3	
do. Angle Irons	5	3 1/2	5	3 1/2	Can the Rudder be unshipped afloat?	Yes			
ched to outside plating with angle iron	5	3 1/2	5	3 1/2	Bulkheads No. Thickness of	4	6/16	4	6/16
able Irons	5	3 1/2	5	3 1/2	Height up	Man Deck			
Bulb Iron	5	3 1/2	5	3 1/2	How secured to sides of ship	Double pairs			
Intercostal plates riveted to plating for length	5	3 1/2	5	3 1/2	Size of Vertical Angle Irons and distance apart	3x3x7/16 and distance apart 20 ins.			
FRINGER Angle Irons	5	3 1/2	5	3 1/2	Are the outside Plates doubled two spaces of Frames in length?	Yes			
Intercostal plates riveted to plating for length	5	3 1/2	5	3 1/2					
FRINGER Angle Irons	5	3 1/2	5	3 1/2					

material. Knight-heads. Hawse Timbers. Iron
 Patent Pall Bitt
 ES extend in one length from Keel to Gunwale Riveted through plates with 1/2 in. Rivets, about 4 apart.
 RSEED ANGLE IRONS on floors and frames extend from middle line to above Hold beam stringer and to Main Deck alternately
 S. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes
 Garboard, double riveted to Keel, with rivets 1/2 in. diameter, averaging 5 1/2 ins. from centre to centre.
 of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/2 in. diameter, averaging 5 1/2 ins. from centre to centre.
 from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/2 in. diameter averaging 5 1/2 ins. from centre to centre.
 of Three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.
 from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
 from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
 of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
 of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
 of laps of plating in double riveting 1/2 Breadth of laps of plating in single riveting 1/2
 of Keelsons, Stringer and Tie Plates, treble or single Riveted?
 how secured to Beams Iron gutter (Explain by Sketch, if necessary.)
 of 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 name or trade mark, Angle Irons & Plates Messrs
 The above is a correct description.
 Builder's Signature, R. D. Miller Surveyor's Signature, H. J. Wood
 Surveyor to Lloyd's Register of British and Foreign Shipping

IRON 470-0533

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* 18037 Lun

Masts, Bowsprit, Yards, &c., are *Iron & Wood* 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 *Fore Mast 75.3 dia 27 Main 48.10 dia 27 Mizzen 77.4*
Bowsprit 31.5 dia 26 in two plates edges single riveted and butts treble and dovetailed
Fore & Main Mast & Bowsprit 1/16" plates doubled in way of wedging 3 angle Iron in fore & main Mast
Mizzen Mast 5/16" all throughout 4x3x1/16 3 angle Iron in Mizzen Mast and two in Fore
14.600 3x3x1/16 with diaphragm plate whole length of Bowsprit

No.	SAILS.	CABLES, &c. (State Machine where tested, Date, & name of Superintendent)	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght per R.	Test per
	Fore Sails,	Chain	1 1/16	51 1/2	1 3/4	270 per Ton	Bowers	3925	28.0.2	27.4.3.0	27.3.0	9.6
	Fore Top Sails,					146		3921	27.1.27	26.15.0.0	23.2.10	2.2
	Fore Topmast Stay Sails							3923	25.0.0	24.15.0.0		
	Main Sails,	Hemp Strm Cbl	90	17/16	15/16							
	Main Top Sails,	Hawser	90	9	9		Stream	1	10.2.24		11.0.0	
	and	Towlines	90	10	5 1/2		Kedges	1	5.3.22		5.2.0	
		Warp	90	7					2.3.24		2.3.0	

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *one* Long Boat and *4* others
 The Windlass is *Napier's Patent* Capstans *O. W.* and Rudder *Efficient* Pumps *2 Iron*

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? *Ports & Scuppers*

Cargo Hatchways. How formed? *Iron Cornings*

State size Main Hatch *14.0 x 11.0* Forehatch *5.6 x 5.6* Quarter Hatch *5.6 x 5.6*

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. *139* Date *19th Oct 1876*

Order for Ordinary Survey No. _____ Date _____

No. *110* in builder's yard. 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. *Built under S.S. and Surveyed Nov 2, 9, 11, 14, 21, 22, 24, 29, Dec 12, 22, 27, 1877 Jan 4, 15, 23, Feb 5, 12, March 6, 10, 13, 20, 24, 28, April 4*

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conform with the Rules and Midship section herewith appended which was submitted and approved by the Committee letter dated 19th Oct 1876*
The workmanship & materials are good quality.

Fore & Main lower Yards 11 feet dia 16 1/2 in two plates 5/16 edges single riveted but
do Toprail 5 7/8 ft 14 1/2 - lapped & treble riveted plate doubled in
35 feet 34 feet
slings two angle Iron in fore & main lower for whole length.

How are the surfaces preserved from oxidation? Inside *Portland Cement to above big st Red Lead above* Outside *Red Lead & Lead above - Composition*

I am of opinion this Vessel should be Classed *100A1*

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, *H. B. O. O. O.*
 Special ... £ 44: 16: 0 *6 April 1876*
 Certificate ... £ 0: 0: 0
 (Travelling Expenses, if any, £ 52: 16: 0)

Committee's Minute *10 April 1876*

Character assigned *100A1*

