

IRON SHIP

No. *4062* Survey held at *Port Glasgow* Date, First Survey *29th Apr.* Last Survey *13th Sept.* 18*76*
 On the *Screw Steamer "Douglas"* Master *H. Brown*

TONNAGE under 83.95
 Tonnage Deck
 Ditto of Third, Spar, or Awaiting Deck 2.31
 Ditto of Poop, draft 12.43
 Raised Or. Dk. }
 Ditto of Houses } 2.42
 on Deck }
 Ditto of Forecastle }
 Gross Tonnage 101.11
 Less Crew Space 5.3
 95.81
 Less Engine Room 43.50
 Register Tonnage 52.23
 as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded)... 8.5
 DEPTH from upper part of Keel to top of Upper Deck Beam 8.9
 GIRTH of Half Midship Frame (as per Rule) 15.
 1st NUMBER 32.4
 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
 LENGTH 95.75
 2nd NUMBER 3102.
 PROPORTIONS—Breadths to Length 5.0
 Depths to Length—Upper Deck to Keel 10.76
 Main Deck ditto

Built at *Port Glasgow*
 When built *1876* Launched *17th Aug 76*
 By whom built *Murdoch & Murray*
 Owners *Brown & Minnie*
 Port belonging to *Glasgow*
 Destined Voyage *Coasting*
 # Surveyed while Building, Afloat, or in Dry Dock

LENGTH on deck as per Rule 95.75 Feet. Inches. BREADTH—Moulded... 17. Feet. Inches. DEPTH top of Floors to Upper Deck Beams 8.1 Feet. Inches. Power of Engines ... 30 Horse. N° of Decks with flat laid one N° of Tiers of Beams one

Dimensions of Ship per Register, length, 101.25 breadth, 17.2 depth, 7.95

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	6 x 1 1/2	6 x 1 1/2
STEM, moulding and thickness	5 1/2 x 1 1/2	5 1/2 x 1 1/2
STERN-POST for Rudder do. do.	5 1/2 x 2 1/4	5 1/2 x 2 1/4
for Propeller	5 1/2 x 2 1/4	5 1/2 x 2 1/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	20	(Class 90A)
FRAMES, Angle Iron, for 1/2 length amidships	2 1/2 x 2 1/2	2 1/2 x 2 1/2
Do. for 1/4 at each end	2 1/2 x 2 1/2	2 1/2 x 2 1/2
REVERSED FRAMES, Angle Iron	2 1/2 x 2 1/2	2 1/2 x 2 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	9 1/2	9 1/2
thickness at the ends of vessel	4 1/2	4 1/2
depth at 3/4 the half-bdth. as per Rule	4 3/4	4 3/4
height extended at the Bilges	19	19
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2
Single or double Angle Iron on Upper edge	40	40
Average space	40	40
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2
Single or double Angle Iron, on Upper Edge	40	40
Average space	40	40
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2
Single or double Angle Iron on Upper Edge	40	40
Average space	40	40
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	12 1/2	12 1/2
" Rider Plate	6	6
" Bulb Plate to Intercoastal Keelson	6	6
" Angle Irons	3	3
" Double Angle Iron Side Keelson	3	3
" Side Intercoastal Plate (10.0 x 1/2)	4	4
" do. Angle Irons	4	4
" Attached to outside plating with angle iron	3	3
BILGE Angle Irons	3	3
" do. Bulb Iron	3	3
" do. Intercoastal plates riveted to plating for length	3	3
BILGE STRINGER Angle Irons	3	3
Intercoastal plates riveted to plating for length	3	3
SIDE STRINGER Angle Irons	3	3

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	30	6	30	6
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	5	5	5	5
fm up. part of Bilge to l. edge of Sh'rstrake	5	5	5	5
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk, Sh'rstrake.	30	6	30	6
Up. or Spar Dk Sh'rstrake, brdth & thickns	30	6	30	6
Butt Straps to outside plating, breadth & thickness	8 x 5.6 x 1/2	8 x 5.6 x 1/2	8 x 5.6 x 1/2	8 x 5.6 x 1/2
Lengths of Plating	6 ft	6 ft	6 ft	6 ft
Shifts of Plating, and Stringers	2	2	2	2
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	2	2	2	2
Angle Iron on ditto	2	2	2	2
Tie Plates fore and aft, outside Hatchways	2	2	2	2
Diagonal Tie Plates on Beams No. of Pairs	2	2	2	2
Planksheer material and scantling	2	2	2	2
Waterways do. do.	2	2	2	2
Flat of Upper Deck do. do.	2	2	2	2
How fastened to Beams	2	2	2	2
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	22	6	22	6
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6	3 x 3 x 6
Tie Plates, outside Hatchways	7	6	7 x 6	7 x 6
Diagonal Tie Plates on Beams, No. of pairs	2	2	2	2
Waterways materials and scantlings	2	2	2	2
Flat of Middle Deck do. do.	2	2	2	2
How fastened to Beams	2	2	2	2
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	2	2	2	2
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	2	2	2	2
Stringer or Tie Plates, outside Hatchways	2	2	2	2
Flat of Lower Deck	2	2	2	2
Ceiling between Decks, thickness and material in hold do. do.	2	2	2	2
Main piece of Rudder, diameter at head do. at heel	3	3	3	3
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 4 Thickness of	4/16	4/16	4/16	4/16
Height up Main Deck	4/16	4/16	4/16	4/16
How secured to sides of ship	Double frames			
Size of Vertical Angle Irons	2 1/2 x 2 1/2 x 1/2			
and distance apart	30 ins.			
Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight-heads. Hawse Timbers. *Iron*
 Windlass *Iron* Pall Bitt *Iron*

The FRAMES extend in one length from *Keel* to *Gunwale* Riveted through plates with *5/8* in. Rivets, about *15* apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to *upper part of bilge* and to *Gunwale* 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 *7/8* in. diameter, averaging *4 1/4* ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *5/8* in. diameter, averaging *2 3/4* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *5/8* in. diameter averaging *2 3/4* ins. from centre to centre.
 Butts of *one* Strakes at Bilge for *half* length, treble riveted with Butt Straps *7/16* thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *5/8* in. diameter, averaging *2 3/4* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *5/8* in. diameter, averaging *2 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 *whole* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.
 Butts of Main Stringer Plate, treble riveted for *whole* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.
 Breadth of laps of plating in double riveting *2 1/4* Breadth of laps of plating in single riveting *2 1/4*

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, *two* Crutches, *two*
 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 Phoenix. Plates - Parkhead*

The above is a correct description.
 Builder's Signature *Murdoch & Murray* Surveyor's Signature, *H. Brown*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 48-0024

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? *A few*

Masts, Bowsprit, Yards, &c., are *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 *eight Pole Masts*

NUMBER for EQUIPMENT *3412*

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W't req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chains	58-5	11	8 1/2 x 12 3/4	120 fms 8 5/8 x 12 3/4		Bowens	2818	3.3.7	6.5.1.7	3.2.0	5.10
	Fore Top Sails,	Septa Paving House	60.3 1/2	16					2817	3.1.10	5.16.2		
	Fore Topmast Stay Sails	Samuel Thompson Superintendent											
	Main Sails,	Hmpn Strm Cbl	60	4		5-2		Stream	1	1.0.10		1.0.0	
	Main Top Sails,	Hawser ...	60	3		3		Kedges	1	0.2.3		0.2.0	
		Towlines ...	60	2 1/2									
		Warp ...											
	and	quality <i>good</i>											

Standing and Running Rigging *Wid Hempen* sufficient in size and *good* quality. She has *one* Long Boat and

The Windlass is *Efficient* Capstan *Steam Wind* and Rudder *Efficient* Pumps *in each compartment.*

Engine Room Skylights.—How constructed *Iron Curving*? *Quicker above* How secured in ordinary weather? *Wire Gratings*

What arrangements for deadlights in bad weather? *Sisal line* *Quarter Deck*

Coal Bunker Openings.—How constructed *Cast iron* *against lids* How are lids secured? *Bay Bars* Height above deck? *Flush*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports & Scuppers*

Cargo Hatchways.—How formed? *Iron Curving*

State size Main Hatch *11' 4" x 6' 0"* Forehatch *Quarterhatch*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *209*

Date *24th Apr 1876*

Order for Ordinary Survey No. *1*

Date *19*

No. *19* 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
- 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

Quinty under J. J. and Surveyed 1876 Apr. 29. May 10. 22. 29. June 15. 26. July 10. 20. 31. Aug. 10. 15. 18. Sept. 0. 13.

General Remarks (State quality of workmanship, &c.)

This Vessel is properly rigged and has been built in conformity with the Rules, and Midship Section and Longitudinal plan herewith appended which were submitted and approved by the Committee in letter dated 11th Apr 1876.

Additional strength has been fitted in way of Raised Quarter Deck as required by the Rules in consideration of it being over 1/4 th the length of the Vessel.

The Workmanship and Materials are of good quality.

State if one, two, or three, decked vessel, or if open, 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 *Portland Cement to above keel, Red Lead* Outside *Red Lead & Paint*

I am of opinion this Vessel should be Classed *90 A.1.*

The amount of the Entry Fee ... £ 1 : 0 : 0 is received by me, *H. J. B. 1876*

Special ... £ 4 : 15 : 0 *13 Sept. 1876*

Certificate ... £ 0 : 0 : 0

(Travelling Expenses, if any, £ ...)

Committee's Minute *13th Sept 1876*

Character assigned *90 A.1*

W. J. B. 1876

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