

IRON SHIP.

No. 4381 Survey held at Port Glasgow Date, First Survey 9th June 1877 Last Survey 8th Feb 1878
 On the Barque Cadrow Forest Master John Pollock
 Tonnage under Tonnage Deck 995.48 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Spar, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 16.95 Feet
 DEPTH from upper part of Keel to top of Upper Deck Beams 23.45 Feet
 GIRTH of Half Midship Frame (as per Rule) 35.3 Feet
 1st NUMBER 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 8.69
 Built at Port Glasgow
 When built 1877:70 Launched 22 Jan 1878
 By whom built Russell & Co
 Owners John Pollock & Sons
 Port belonging to Glasgow
 Destined Voyage Melbourne
 Surveyed while Building, Afloat, or in Dry Dock.

Official Number 204
 LENGTH on deck as per Rule 204 Feet. Inches. 0 0
 BREADTH Moulded 33.9 Feet. Inches. 0 0
 DEPTH top of Floors to Upper Deck Beams 21.2 Feet. Inches. 0 0
 Do. do. Main Deck Beams 21.2 Feet. Inches. 0 0
 Power of Engines 2 Horse.
 N^o. of Decks with flat laid Two
 N^o. of Tiers of Beams Two
 Dimensions of Ship per Register, length 207.7 breadth 34 depth 21.05
 KEEL, depth and thickness 8 x 2 3/4 Inches in Ship. Inches per Rule. 8 x 2 3/4
 STEM, moulding and thickness 1 1/2 x 2 3/4 Inches in Ship. Inches per Rule. 1 1/2 x 2 3/4
 STERN-POST for Rudder do. do. 1 1/2 x 2 3/4 Inches in Ship. Inches per Rule. 1 1/2 x 2 3/4
 for Propeller 1 1/2 x 2 3/4 Inches in Ship. Inches per Rule. 1 1/2 x 2 3/4
 Distance of Frames from moulding edge to moulding edge, all fore and aft 23 (Class 100A)
 FRAMES, Angle Iron, for 3/4 length amidships 5 3 0 5 3 0
 Do. for 1/4 at each end 5 3 7 5 3 7
 REVERSED FRAMES, Angle Iron 3 3 7 3 3 7
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 27 0 23 1/2 0 9
 thickness at the ends of vessel 13 1/2 0 11 3/4 0 8
 depth at 3/4 the half-bdth. as per Rule 5 1/2 0 4 1/2 0 7
 height extended at the Bilges 5 1/2 0 4 1/2 0 7
 BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 0 0 0 0 0 0
 Single or double Angle Iron on Upper edge 3 3 6 3 3 6
 Average space 46 0 46 0 0
 BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 0 0 0 0 0 0
 Single or double Angle Iron, on Upper Edge 3 3 6 3 3 6
 Average space 46 0 46 0 0
 BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 0 0 0 0 0 0
 Single or double Angle Iron on Upper Edge 3 3 6 3 3 6
 Average space 46 0 46 0 0
 KEELSONS Centre line, single or double plate, box, or intercostal, Plates 15 11 15 11 11
 " Rider Plate 11 11 10 1/2 11 11
 " Bulb Plate to Intercostal Keelson 5 3 1/2 8 5 3 1/2 8
 " Angle Irons 5 3 1/2 8 5 3 1/2 8
 " Double Angle Iron Side Keelson 5 3 1/2 8 5 3 1/2 8
 " Side Intercostal Plate (wash) 5 3 1/2 8 5 3 1/2 8
 " do. Angle Irons 5 3 1/2 8 5 3 1/2 8
 " Attached to outside plating with angle iron 5 3 1/2 8 5 3 1/2 8
 BILGE Angle Irons 5 3 1/2 8 5 3 1/2 8
 " do. Bulb Iron 5 3 1/2 8 5 3 1/2 8
 " do. Intercostal plates riveted to plating for length 5 3 1/2 8 5 3 1/2 8
 BILGE STRINGER Angle Irons 5 3 1/2 8 5 3 1/2 8
 Intercostal plates riveted to plating for length 5 3 1/2 8 5 3 1/2 8
 SIDE STRINGER Angle Irons 5 3 1/2 8 5 3 1/2 8
 Transoms, material. Knight-heads. Hawse Timbers. New
 Windlass Sam Patent Pall Bitt New
 The FRAMES extend in one length from Keel to Gun wall
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main Deck on every frame
 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 10 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 7 1/4 in. diameter, averaging 3 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7 1/4 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 1/2 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 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7 1/4 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1 length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1 length.
 Breadth of laps of plating in double riveting 3 1/2 Breadth of laps of plating in single riveting 3 1/2
 Butt Straps of Keelsons, Stringer and Tie Plates, treble double or single Riveted?
 Waterway, how secured to Beams Sam Gutty (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 Iron Mossend. Plates Carruth
 The above is a correct description.
 Builder's Signature, Russell & Co Surveyor's Signature, H. H. Russell
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 476-0114

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 20170 Iron
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making & 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 good*

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 Bowsprit. *Fore Mast 76 ft dia 2 1/2" Main 77 ft dia 2 1/2" Mizzen 76 1/2 ft dia 2 1/2" Bowsprit*

Fore Main Mast & Bowsprit plates 6 1/2" 20 ft dia 2 1/2" all in three plates, edges single riveted, but straps outside
Mizzen Mast 5 1/2" 16 thicker and double & treble riveted, with 3 angle Irons in each
all throughout 4 x 3 x 1/6" depth in Mizzen Mast which are 3 x 3 x 1/6"

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per 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.
N ^o .	SAILS.	CABLES, &c.					Bowers					
	Fore Sails,	Chain 134.2	3 1/2	59 1/2	3 1/2	59 1/2		5101	31.0	12.9	1.10	20.0
	Fore Top Sails,	Shutter Pulley House 30						51277	50.5	18.1	9	27.5
	Fore Topmast Stay Sails,	Shutter Pulley House 130						5103	27.1	0	26.7	2.0
	Main Sails,	Ham Strm Cbl 90	15				Stream	1	12.0	14		12.0
	Main Top Sails,	Hawser 90	9 1/2				Kedges	1	5.3	24		3.0
	Warp	Towlines 90	5 1/2									
	and	quality good										

Standing and Running Rigging *Wool Hempen* sufficient in size and *good* in quality. She has *two* Long Boats and *3* others
The Windlass *Emmerson Walker Patent* 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? *Ports & Scuppers*

Cargo Hatchways. How formed? *Iron Casings*

State size Main Hatch *15' 4" x 10' 0"* Fore hatch *7' 6" x 6' 0"* Quarter hatch *6' 6" x 6' 0"*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *one shifting beam*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>861</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.S. and surveyed 1877</i>
Date <i>6 Apr 1877</i>	2nd. On the plating during the process of riveting	<i>June 9, 10, July 13, 31, August 7, 14, 24, Sep 5</i>
Order for Ordinary Survey No. <i>4</i>	3rd. When the beams were in and fastened, and before the decks were laid	<i>7, 14, Oct 3, 5, 8, 17, 23, Nov 2, 5, 8, Dec 2</i>
Date <i>✓</i>	4th. When the ship was complete, and before the plating was finally coated or cemented	<i>5, 8, 1878 Jan 7, 10, 17, 24, 31, Feb 7</i>
No. <i>14</i> in builder's yard	5th. After the ship was launched and equipped	<i>Oct 2</i>

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conformity with the rules and Midship Section & Longitudinal Plans herewith appended which were submitted and approved by the Committee in letter dated 31st March 1877. Bow Ports have been fitted as shown in accompanying sketch and sanctioned by the Committee in letter of 10th Oct 1877*

Attached is submitted sketch of new lanyards for the lower rigging to each Mast. The workmanship & materials are of good quality.

Fore & Main lower Yards 74 ft dia 18" plates 4 1/2" in two plates edges single riveted
Q. lower Lopsail 64 ft dia 16" plates 4 1/2" with lapped & treble riveted. 2 angle
Iron in each all throughout 2 1/2 x 2 1/2 x 1/6" there
in Lopsail Yards are 2 x 2 x 1/6" -
39 ft 25 ft

State if one, two, or three, decked vessel, or if open, or running decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Pattand Cement to above bilge* Outside *Red Lead & Paint*

I am of opinion this Vessel should be Classed *100 A.1* Red Lead above Comp^d on bottom

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

Special ... £ 51: 13: 6 *Feb 1878*

Certificate ... £ 0: 0: 0

(Travelling Expenses, if any, £ ...)

Committee's Minute *12th February, 1878.*

Character assigned *100 A.1*