

STEEL IRON SHIP.

No. 890 Survey held at Port Glasgow Date, First Survey 11th Sept 1884 Last Survey 25th May 1885
 On the Barge "John O'Grunt" (to masts)

TONNAGE under Tonnage Deck 1132.5 **ONE, OR TWO DECKED, THREE DECKED VESSEL,** Master Gravelier
 Ditto of Third, Spar, or Awning Deck. 75.7 **SPAR, OR AWNING DECKED VESSEL.** Built at Port Glasgow
 Ditto of Poop, or Raised Quarter. 30.64 **Half Breadth** (moulded) 18.0 When built 1884-85 Launched 2nd May
 Ditto of Houses on Deck. 1238.49 **Depth** from upper part of Keel to top of Upper Deck Beams 23.9 By whom built John Reid & Co.
 Ditto of Forecastle. 41.14 **Girth of Half Midship Frame** (as per Rule) 36.0 Owners Thomas Bell
 Less Engine Room. 1197.35 **1st Number** 77.9 Residence Liverpool
 Register Tonnage as cut on Beam. 1197.35 **1st Number, if a 3-Decked Vessel** deduct 7 feet 16592 Port belonging to Liverpool
Length 213 **2nd Number** 519 **Destined Voyage** Liverpool to Valencia
Proportions— Breadths to Length 8.8 **Depths to Length**— Upper Deck to Keel 8.8
 Main Deck ditto 8.8

LENGTH on deck as per Rule 213 **BREADTH**— Moulded 36 **DEPTH** top of Floors to Upper Deck Beams 21 **Power of Engines** 100 **Horse** 100 **N^o. of Decks with flat laid** 2
 Dimensions of Ship per Register, length 222.4 breadth 36.2 depth 21.7 **moulded depth** 23.3
KEEL, depth and thickness 8 1/2 x 3 1/2 **PLATES** in Garboard Strakes, br'dth & thickness 34 18 34 18
STEM, moulding and thickness 8 x 2 1/2 **"** From Garboard to upper part of Bilges 15 1/2 16 15 1/2
STERN-POST for Rudder do. do. 8 x 2 1/2 **"** Of d'bling at Bilge, or increased thickness, and length applied 3 Shakes
" for Propeller 23 **"** From up. prt of Bilge to l.r. edge of Sh'rstrake 15 1/2 16 15 1/2
 Distance of Frames from moulding edge to moulding edge, all fore and aft 23 **"** Main Sheerstrake, breadth and thickness 36 19 36 19
FRAMES, Angle Iron, for 1/2 length amidships 5 3 13 3 13 **"** Of d'bling at Sh'stk. & lng. applied 17 1/2 18 17 1/2
 Do. for 1/4 at each end 5 3 12 5 3 12 **"** From M'n. to Up. or Spar Dk. Sh'rstrake 17 1/2 18 17 1/2
REVERSED FRAMES, Angle Iron 3 1/2 3 13 3 1/2 3 13 **"** Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss 17 1/2 18 17 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 24 15 24 15 **Butt Straps** to outside plating, breadth & thickness 17 1/2 18 17 1/2
 thickness at the ends of vessel 12 12 12 12 **Lengths of Plating** 12 3 1 4 12 3 1 4
 depth at 1/2 the half-bdth. as per Rule 5 1/2 5 1/2 5 1/2 5 1/2 **Shifts of Plating, and Stringers** 2 3 1 4 2 3 1 4
 height extended at the Bilges 5 1/2 5 1/2 5 1/2 5 1/2 **Gunwale Plate** on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 4 2 16 4 2 16
BEAMS, Upper, Spar, or Awning Deck 9 15 9 15 **Angle Iron** on ditto 5 x 3 1/2 x 5 5 x 3 1/2 x 5
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 9 15 9 15 **Tie Plates** fore and aft, outside Hatchways 12 16 12 16
 Single or double Angle Iron on Upper edge 4 6 4 6 4 6 4 6 **Diagonal Tie Plates** on Beams No. of Pairs 5 12 16 5 12 16
 Average space 4 6 4 6 4 6 4 6 **Flat of Up., Spar, or Awning Dk.** 4 4 4 4
BEAMS, Main, or Middle Deck 9 15 9 15 **How fastened to Beams** 20 20 20 20
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 9 15 9 15 **Stringer Plate** on ends of Main or Middle Deck Beams, breadth and thickness 31 15 31 15
 Single or double Angle Iron on Upper Edge 4 6 4 6 4 6 4 6 **Is the Stringer Plate attached to the outside plating?** Yes
 Average space 4 6 4 6 4 6 4 6 **Angle Irons** on ditto, No. two
BEAMS, Hold, or Orlop 9 15 9 15 **Tie Plates**, outside Hatchways 12 16 12 16
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 9 15 9 15 **Diagonal Tie Plates** on Beams, No. of pairs 5 12 16 5 12 16
 Single or double Angle Iron on Upper Edge 4 6 4 6 4 6 4 6 **Flat of Middle Deck** do. do. 4 4 4 4
 Average space 4 6 4 6 4 6 4 6 **How fastened to Beams** 20 20 20 20
KEELSONS Centre line, single or double plate, 16 19 16 19 **Stringer Plates** on ends of Lower Deck, Hold or Orlop Beams 31 15 31 15
 do. or Intercoastal, Plates on Floor 10 1/4 19 10 1/4 19 **Is the Stringer Plate attached to the outside plating?** Yes
 Rider Plate 5 3 1/2 15 5 3 1/2 15 **Angle Irons** on ditto, No. two
 Bulb Plate to Intercoastal Keelson 5 3 1/2 15 5 3 1/2 15 **Tie Plates**, outside Hatchways 12 16 12 16
 Angles Irons 5 3 1/2 15 5 3 1/2 15 **Diagonal Tie Plates** on Beams, No. of pairs 5 12 16 5 12 16
 Double Angle Iron Side Keelson 5 3 1/2 15 5 3 1/2 15 **Flat of Lower Deck** 3 1/2 3 1/2 3 1/2 3 1/2
 Side Intercoastal Plate 5 3 1/2 15 5 3 1/2 15 **How fastened to Beams** 20 20 20 20
 do. Angle Irons 5 3 1/2 15 5 3 1/2 15 **Stringer or Tie Plates**, outside Hatchways 12 16 12 16
 Attached to outside plating with angle iron 5 3 1/2 15 5 3 1/2 15 **Flat of Lower Deck** 3 1/2 3 1/2 3 1/2 3 1/2
BILGE Angle Irons 5 3 1/2 15 5 3 1/2 15 **Ceiling** betwixt Decks, thickness and material 2 1/2 in. Pine
 do. Bulb Iron 5 3 1/2 15 5 3 1/2 15 **"** in hold do. do. 2 1/2 in. Pine
 do. Intercoastal plates riveted to plating for length 5 3 1/2 15 5 3 1/2 15 **Main piece of Rudder**, diameter at head 5 1/2
BILGE STRINGER Angle Irons 5 3 1/2 15 5 3 1/2 15 **do.** at heel 5 1/2
 Intercoastal plates riveted to plating for length 5 3 1/2 15 5 3 1/2 15 **Can the Rudder be unshipped afloat?** Yes
SIDE STRINGER Angle Irons 5 3 1/2 15 5 3 1/2 15 **Bulkheads** No. One No. per Rule 12 1/2 10
 Thickness of 3 1/2
 Height up Upper deck
 How secured to sides of ship Double frames
 Size of Vertical Angle Irons 3 1/2 x 3 1/2 x 13 and distance apart 30 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

The **FRAMES** extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to gunwale at each frame 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 1/2 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 5 1/2 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 all 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 7/8 in. diameter, averaging 5 1/2 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 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.
 Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.
 Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting 5 1/4
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double No. of Breasthooks, Six Crutches, Four
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Steel
 Manufacturer's name or trade mark, Angels & Bulbs, Messrs. Dalzell & Steel Coy. Ltd. Glasgow. Plates, Dalzell & Steel Coy. Ltd. Glasgow.
 The above is a correct description. Yes
 Builder's Signature, John Reid & Co. Surveyor's Signature, J. J. Currie
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise 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?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are of *best iron* 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

Steel plates & angles manufactured at Mossend, properly tested as reqd by the Committee's Circulars & these masts & bowsprit constructed in conformity with the approved sketch

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supratd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Supratd.
SAILS.		CABLES, &c.										
N ^o .		Chain	128-1/2	135	1 1/2	8 1/2 x 5 1/2 x 3/4	Bower Anchors					
Fore Sails,		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	135	75	1	27 x 18	19097 32-1-2 30-8-0-14 32-0-0					
Fore Top Sails,		Iron Stream Chain or Steel Wire	135	75	1	27 x 18	19096 32-0-26 30-6-1-0 32-0-0					
Fore Topmast Stay Sails,		or Hempen Strm Cable	135	75	1	27 x 18	19095 27-2-17 26-18-1-0 27-1-0					
Main Sails,		Towline, Hemp.	90	11		90-11	Total 920-17 Total 91-1-0					
Main Top Sails,		or Steel Wire	90	11		90-11	Stream Anchor 19087 10-3-2 12-5-1-10 1-0-0					
and others		Hawser	90	9 1/2		90-9 1/2	Kedge 19088 5-0-24 7-11-3-14 5-1-0					
		Warp	90	6		90-6	2nd Kedge 19089 2-1-22 5-0-0-0 2-2-0					
		quality	good & others.									

Standing and Running Rigging *4 1/2 inch Manila* sufficient in size and *good* in quality. She has *Four Long Boat* and *good*.

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*.

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? *Four Scuppers & four*

Cargo Hatchways. How formed? *Coming plates 16 thick & 20 above deck*

State size Main Hatch *15-4 x 11-0* Forehatch *17-8 x 6-6* Quarterhatch *7-8 x 6-6*

If of extraordinary size, state how framed and secured? *Ordinary size*

What arrangement for shifting beams? *A deep web plate strong fore & afters in the main*

Hatches. If strong and efficient? *Yes 3 1/2 thick*

Order for Special Survey No. <i>1230</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1884: Sep. 11-16-17-18-22-29: Oct. 8-17-25: Nov. 7-11-17-19-21-26-27-28:
Date <i>1st Sept 84</i>	2nd. On the plating during the process of riveting	Dec. 1-2-5-9-10-11-12-23-29-30:
Order for Ordinary Survey No. <i>1230</i>	3rd. When the beams were in and fastened, and before the decks were laid....	1885: Jan. 8-16-19-21-26: Feb. 3-5-10-11-14-17-24-26: Mch. 3-6-10-13-16-31:
Date <i>7/2</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	Apr. 2-3-6-8-10-14-18-21-27: May 6-18-19 and 25 (60 visits)
No. <i>7/2</i> in builder's yard.	5th. After the ship was launched and equipped	
State dates of letters respecting this case		<i>22nd 28th Aug 84. 14th Oct 84. 6th Jan. 7th Jan. 15th Jan 85</i>

General Remarks (State quality of workmanship, &c.) *Quality of workmanship good. This vessel has been constructed in accordance with the accompanying approved sketch and in all other respects with the rules & the Committee's Circulars on Steel &c*

Poop *34 ft 4 in.* Open Forecastle *28 ft.*

State if one, two, or three decked vessel, or if span, or running decked, and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Paint & Cement* Outside *Paint*

I am of opinion this Vessel should be Classed *100 A 1 Steel*

The amount of the Entry Fee£ *4 : 0 : 0* is received by me, *ju.*

Special£ *54 : 18 : 6* 29th May 1885

(to be sent as per margin). Certificate ... *gratis*

(Travelling Expenses, if any, £ *Nil*.)

Committee's Minute

Character assigned

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

It is submitted that the vessel appears eligible to be classed

100 A 1 Steel as recommended

4/6/85

Lloyd's Register

Foundation