

STEEL IRON SHIP.

(Received at London) TUESDAY 2 JUNE 1885

No. 890 Survey held at Port Glasgow Date, First Survey 11th Sep 84 Last Survey 25th May 1885
On the Barge "John O'Grunt" (60 masts)

Tonnage under Tonnage Deck 1132.5
Ditto of Third, Spar, or Awning Deck. 75.7
Ditto of Poop, or Raised Quarter Deck. 30.64
Ditto of Houses on Deck 1238.49
Ditto of Forecastle 41.14
Less Engine Room 1197.35
Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAN, OR AWNING DECKED VESSEL.
Half Breadth (moulded) 18.0
Depth from upper part of Keel to top of Upper Deck Beams 23.9
Girth of Half Midship Frame (as per Rule) 36.0
1st Number 77.9
1st Number, if a 3-Decked Vessel .. deduct 7 feet
Length 213
2nd Number 16592
Proportions— Breadths to Length 5.9
Depths to Length— Upper Deck to Keel 8.8
Main Deck ditto

Master Gravelier
Built at Port Glasgow
When built 1874-85 Launched 2nd May
By whom built John Reid & Co
Owners Thomas Bell
Residence Liverpool
Port belonging to Liverpool
Destined Voyage Liverpool to Valencia
If Surveyed while Building, Afloat, or in Dry Dock.
Shitell Building under special license

LENGTH on deck as per Rule 213 Breadth Moulded 36 DEPTH top of Floors to Upper Deck Beams 21 Power of Engines 103 Horse 103 N^o. of Decks with flat laid 2 N^o. of Tiers of Beams 2

Dimensions of Ship per Register, length	breadth	depth	moulded depth	Inches in Ship	Inches per Rule								
KEEL, depth and thickness				8 1/2 x 3/2	8 1/2 x 3/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2				
STEM, moulding and thickness				8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2				
STERN-POST for Rudder do. do.				8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2				
" " for Propeller				23	23								
Distance of Frames from moulding edge to moulding edge, all fore and aft				23	23								
FRAMES, Angle Iron, for 1/2 length amidships				5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2				
Do. for 1/4 at each end				5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2				
REVERSED FRAMES, Angle Iron				3 1/2 x 3 1/2	3 1/2 x 3 1/2	3 1/2 x 3 1/2	3 1/2 x 3 1/2	3 1/2 x 3 1/2	3 1/2 x 3 1/2				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships				24	24	15	15	24	24				
" thickness at the ends of vessel				12	12	12	12	12	12				
" depth at 1/2 the half-bdth. as per Rule				12	12	12	12	12	12				
" height extended at the Bilges				5 1/2	5 1/2	4 1/2	4 1/2	5 1/2	5 1/2				
BEAMS, Upper, Spar, or Awning Deck				9	9	15	15	9	9				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				9	9	15	15	9	9				
Single or double Angle Iron on Upper edge				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
Average space				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
BEAMS, Main, or Middle Deck				9	9	15	15	9	9				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				9	9	15	15	9	9				
Single or double Angle Iron on Upper Edge				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
Average space				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
BEAMS, Hold, or Orlop				9	9	15	15	9	9				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron				9	9	15	15	9	9				
Single or double Angle Iron on Upper Edge				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
Average space				4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2				
KEELSONS Centre line, single or double plate, bon, or intercostal, Plates on floor				16	16	19	19	16	16				
" Rider Plate				10 3/4	10 3/4	19	19	10 3/4	10 3/4				
" Bulb Plate to Intercostal Keelson				5	5	3 1/2	3 1/2	5	5				
" Angles Iron				5	5	3 1/2	3 1/2	5	5				
" Double Angle Iron Side Keelson				5	5	3 1/2	3 1/2	5	5				
" Side Intercostal Plate				13	13	13	13	13	13				
" do. Angle Irons				3	3	3	3	3	3				
" Attached to outside plating with angle iron				3	3	3	3	3	3				
BILGE Angle Irons				5	5	3 1/2	3 1/2	5	5				
" do. Bulb Iron				5	5	3 1/2	3 1/2	5	5				
" do. Intercostal plates riveted to plating for length				5	5	3 1/2	3 1/2	5	5				
BILGE STRINGER Angle Irons				5	5	3 1/2	3 1/2	5	5				
" Intercostal plates riveted to plating for length				5	5	3 1/2	3 1/2	5	5				
SIDE STRINGER Angle Irons				5	5	3 1/2	3 1/2	5	5				

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 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 1/8 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 1/2 length amidships. Butts of Upper Spar Sheerstrake, treble riveted half length amidships.
- Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper 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. Scotland. Plates, Dalzell & Steel Coy. Scotland

The above is a correct description. John Reid & Co. Surveyor's Signature, J. J. Curk Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed & 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? *Yes a few in the butts*

Masts, Bowsprit, Yards, &c., are of *Steel* 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.										
Chain	128-1/2	1 3/8	87-1/2	27-1/2	D. G. Lewis	Bower Anchors	32-1/2	30-8-0	32-0-0	D. G. Lewis
Fore Sails,	135	"	85-05	27-1/2	D. G. Lewis	19097	32-1/2	30-8-0	32-0-0	D. G. Lewis
Fore Top Sails,	135	"	85-05	27-1/2	D. G. Lewis	19096	32-0-0	30-6-1-0	32-0-0	D. G. Lewis
Fore Topmast Stay Sails,	75	1	27-1/8		D. G. Lewis	19095	27-2-17	26-18-1-0	27-1-0	D. G. Lewis
Main Sails,	90-11			90-11		Total	920-17	Total	91-1-0	
Main Top Sails,	90-9 1/2			90-9 1/2		Stream Anchor	19087	10-3-2	12-15-1-7	10-2-0
and others	90-6			90-6		Kedge	19088	5-0-2	7-11-3-14	5-1-0
						2nd Kedge	19089	2-1-2	5-0-0-0	2-2-0

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

Cargo Hatchways.—How formed? *Coming plates 16 thick & 20 above deck*
 State size Main Hatch *15-4 x 11-0* Forehatch *37-8 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 & aft on 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>7th Jan 85</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 th 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 *27-28th Aug 84, 14th Oct 84, 6th Jan, 7th Jan, 15th Jan 85*

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 spanning decked, and the lengths of poop, bridge, fore-castle, or canvas quarter deck. (If available state any particulars on separate form.)

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

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, } *sw.*
 Special£ 54 : 18 : 6 29th May 1885

(to be sent as per margin). Certificate ... *gratis* Surveyor to Lloyd's Register of British and Foreign Shipping.

(Travelling Expenses, if any, £ *Nil*.) *FRIDAY 5 JUNE 1885* 18

Committee's Minute *It is submitted that this vessel appears eligible to be classed 100 A 1 Steel as recommended*

Character assigned *LARGE STEEL* Lloyd's Register Foundation

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