

# IRON SHIP.

18735  
Rec 9/1/77  
6th July 1877

No. 4483 Survey held at *Glasgow*  
On the *S. S. "Carfin"*

Date, First Survey 23<sup>rd</sup> Nov 1876 Last Survey 6<sup>th</sup> July 1877

Master *Ewer*

TONNAGE under 1185.98 ONE, OR TWO DECKED, THREE DECKED VESSEL.  
Tonnage Deck

Ditto of Third, Spar, or Awning Deck. HALF BREADTH (moulded) 17.25

Ditto of Poop, or Raised Or. Dh. DEPTH from upper part of Keel to top of Upper Deck Beams 18.41

Ditto of Houses on Deck 4.39 GIRTH of Half Midship Frame (as per Rule) 34.58

Ditto of Forecastle Hatch 0.04 1st NUMBER 6724

Gross Tonnage 1190.41 1st NUMBER, if a THREE DECKED VESSEL

Less Crew Space 48.66 LENGTH 273.5

Less Engine Room 380.93 2nd NUMBER 18390

Register Tonnage as cut on Beam 765.82 PROPORTIONS—Breadths to Length 7.9

Depths to Length—Upper Deck to Keel 14.8

Main Deck ditto

Built at *Glasgow*

When built 1876-77 Launched 22<sup>nd</sup> July 1877

By whom built *The London and Glasgow Engineering & Iron Shipbuilding Co. Limited*

Owners *Wm Dixon, (Limited)*

Port belonging to *Glasgow*

Destined Voyage *Cyde to Spain*

Surveyed while Building, Afloat, or in this Port.

LENGTH on deck as per Rule 273 6 BREADTH—Moulded 34 6 DEPTH top of Floors to Upper Deck Beams 16 8 1/2 Power of Engines 150 N° of Decks with flat laid One N° of Tiers of Beams Two

Dimensions of Ship per Register, length, 275.1 breadth, 34.9 depth, 16.85

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	7 x 3 1/4	7 x 3 1/4
STEM, moulding and thickness	7 x 3 1/4	7 x 3 1/4
STERN-POST for Rudder do. do.	9 x 5	9 x 5
for Propeller	9 x 5	9 x 5
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24
FRAMES, Angle Iron, for 2/3 length amidships	4 x 3	4 x 3
Do. for 1/3 at each end	4 x 3	4 x 3
REVERSED FRAMES, Angle Iron	3 x 3	3 x 3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	20 1/2 x 8	20 1/2 x 8
thickness at the ends of vessel	7	7
depth at 3/4 the half-bdth. as per Rule	10 1/4	10 1/4
height extended at the Bilges	Twice	Twice
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 8	8 x 8
Single or double Angle Iron on Upper edge	3 x 3	3 x 3
Average space	48	48
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 8	8 x 8
Single, or double Angle Iron, on Upper Edge	3 x 3	3 x 3
Average space	48	48
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 1/2 x 8	8 1/2 x 8
Single or double Angle Iron on Upper Edge	3 x 3	3 x 3
Average space	2 <sup>nd</sup> and 4 <sup>th</sup> frames alternately	2 <sup>nd</sup> and 4 <sup>th</sup> frames
KEELSONS Centre line, single or double plate, box, or intercostal, plates	17 x 12	17 x 12
" Rider Plate	10 x 12	10 x 12
" Bulb Plate to intercostal Keelson	5 x 4	5 x 4
" Angle Irons	5 x 4	5 x 4
" Double Angle Iron Side Keelson	5 x 4	5 x 4
" Side intercostal plate	3 x 3	3 x 3
" do. Angle Irons	3 x 3	3 x 3
" Attached to outside plating with angle iron	3 x 3	3 x 3
BILGE Angle Irons	5 x 4	5 x 4
" do. Bulb Iron	8 1/2 x 8	8 1/2 x 8
" do. Intercostal plates riveted to plating for 1/2 length	5 x 4	5 x 4
BILGE STRINGER Angle Irons	5 x 4	5 x 4
Intercostal plates riveted to plating for 1/2 length	5 x 4	5 x 4
SIDE STRINGER Angle Irons	5 x 4	5 x 4

Transoms, material. Knight-heads. Hawse Timbers. *Iron*

Windlass *Napier's Patent* Pall Bitt

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 above Hold Beams and to main deck 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 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/4 ins. from centre to centre.

Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double ~~or treble~~ riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double ~~or treble~~ riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.

Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting —

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double ~~or treble~~ Riveted?

Waterway, how secured to Beams *(Iron Deck)* (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? *By knees turned down* No. of Breasthooks, *Five* Crutches, *Four*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Govan Best*

Manufacturer's name or trade mark, *Wm Dixon (Limited)*

The above is a correct description.

Builder's Signature, *John Simpson* Surveyor's Signature, *Saml. Laphroo*

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

IRON 472-0434



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*

18735 Jan

Masts, ~~Yards~~, Yards, &c., are *all* 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 *Two masts, Schooner Rigged*

*Govan Best* Fore Mast 67.0 - 21 - 16 - 14 } 2 plates in circle 5/16 double riveted edges  
Iron, Not and Main Mast 61.6 - 19 - 17 - 13 } Strake riveted Butts.  
*Cord tested*

NUMBER for EQUIPMENT 18390		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
One suit	SAILS.	270		43 9/10	270-1 9/16	43 9/10	Bowers	1	23.3.14	23.15.2.14	23 1/2	23 10/20
	Fore Sails,	31 1/2		61 1/4		61 1/4	Stalk	1	4.2.14		23 1/2	23 10/20
	Fore Top Sails,	15 faths					Stalk	1	23.2.0	23 1/2	23 1/2	23 10/20
	Fore Topmast Stay Sails	90			90-1 iron		Stalk	1	4.3.0		20	20 14/20
	Main Sails,	60			90-1 iron		Stalk	1	20.3.0	21.8.10.14	20	20 14/20
	Towlines	75			90-9 1/2		Stream	1	4.0.14		10	
	Main Top Sails,	90			90-6		Kedges	1	10.2.18	11.4.2.21	5	
	Warp	90			90-6				5.0.2	6 1/4	2 1/2	
	quality	90							2.1.27	4 7/8		
	and	90										

Standing and Running Rigging *Wore 10 Hump* sufficient in size and *good* in quality. She has *Four* ~~Boats~~ *Boats* (2 with buoyancy)

The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good* and efficient

Engine Room Skylights.—How constructed? *2 part framing over* How secured in ordinary weather? *Quadrants*

What arrangements for deadlights in bad weather? *Thick Glass*

Coal Bunker Openings.—How constructed? *Circular castings* How are lids secured? *Locked* Height above deck? *Flush*

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

Cargo Hatchways.—How formed? *Plate and angle iron*

State size Main Hatch *20' x 10'* Forehatch *16' x 10'* Quarterhatch *12' x 10'*

If of extraordinary size, state how framed and secured? *Divisional web plate in Main Hatchway and strong*

What arrangement for shifting beams? *portable beam in Forehatchway*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>122</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1876. Nov-23. 28. 29. Dec-6. 12. 18. 20. 28
Date <i>Sept 27/77</i>	2nd. On the plating during the process of riveting	1877. Jan-9. 18. 23. 26. Feb-4. 1. 2. 9. 16. 23. 26. 28
Order for Ordinary Survey No. <i>1</i>	3rd. When the beams were in and fastened, and before the decks were laid...	March 6. 9. 13. 15. 19. 21. 26
Date <i>✓</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	April 2. 6. 9. 13. 17. 20. 24. 27. 30 May 3. 8. 11
No. <i>199</i> in builder's yard.	5th. After the ship was launched and equipped	May 17. 25. 28. 30. June 4. 7. 13. 20. 25. 29
		July 6 <sup>th</sup>

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

*The Workmanship is of good quality—Built in accordance with the sketches of midship and longitudinal sections herewith approved per Committee's Letter dated 25<sup>th</sup> Nov<sup>r</sup> 1876 and in general conformity with the Rules with a view to the grade contemplated*

*Fitted with part double bottom (as per approval, properly tested) for 182 Feet namely, 102 Feet in fore hold, and, 74 Feet in after hold*

*Erection on Deck—Iron Casing over Engine and Boiler Spaces Donkey Boiler, and Galley midships 61' x 11.6"*

*Anchor Deck—21 feet long.*

State if *one, two, or three*, decked vessel, or if *spar, or arming* 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 *Cement and Paint* Outside *Paint*

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

The amount of the Entry Fee ... £ 5 : : : is received by me, *Saml. Laphorn*

Special ... £ 54 : 13 : July 1877

Certificate ... *Limit*

(Travelling Expenses, if any, £ *✓*).

Committee's Minute *10th July 1877.*

Character assigned *100 A 1*

*done by Lloyd's Register*

This vessel appears eligible to be classed as recommended viz 100 A 1 Lloyd's Register Foundation