

# IRON SHIP.

18735  
Recd 9/1/77  
6th July 1877

No. 4483 Survey held at Glasgow

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

On the S. S. "Carfin"

Master Ewer

TONNAGE under Tonnage Deck } 1185.98 ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 Ditto of Third, Spar, or Awning Deck }  
 Ditto of Poop, or Raised Or. Dk. }  
 Ditto of Houses on Deck } Hatch 4.39  
 Ditto of Forecastle } 0.04  
 Gross Tonnage } 1190.41  
 Less Crew Space } 48.66  
 Less Engine Room } 380.93  
 Register Tonnage as out on Beam } 765.82

HALF BREADTH (moulded) ... .. 17.25  
 DEPTH from upper part of Keel to top of Upper Deck Beams ... .. 18.41  
 GIRTH of Half Midship Frame (as per Rule) ... .. 31.68  
 1st NUMBER ... .. 18390  
 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] ... .. 18390  
 LENGTH ... .. 273.5  
 2nd NUMBER ... .. 18390  
 PROPORTIONS—Breadths to Length ... .. 7.9  
 Depths to Length—Upper Deck to Keel ... .. 14.8  
 Main Deck ditto ... .. 14.8

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 Clyde to Spain and  
 Surveyed while Building, Afloat, at the Works.

Official Number 1200 (12,675)

LENGTH on deck as per Rule ... 273 6 Feet. Inches. BREADTH—Moulded... 34 6 Feet. Inches. DEPTH top of Floors to Upper Deck Beams ... 16 8 1/2 Feet. Inches. Power of Engines ... 150 Horse. 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. |  | Inches in Ship. | Inches per Rule. |
|---|-----------------|------------------|--|-----------------|------------------|
| KEEL, depth and thickness ...   | 7 x 3 1/4       | 7 x 3 1/4        | Flat Keel Plates, breadth and thickness ...  | —               | —                |
| STEM, moulding and thickness ...  | 7 x 3 1/4       | 7 x 3 1/4        | PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ... | 36 11           | 36 11            |
| STERN-POST for Rudder do. do. for Propeller ...   | 9 x 5           | 9 x 5            | fm up. part of Bilge to Ir. edge of Sh'rstrake   | —               | —                |
| Distance of Frames from moulding edge to moulding edge, all fore and aft ...  | 24              | 24               | Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.                                   | 40 12           | 40 12            |
| FRAMES, Angle Iron, for 2/3 length amidships Do. for 1/3 at each end ...  | 4 3 7/6         | 4 3 7/6          | Up. or Spar Dk Sh'rstrake, breadth & thickness   | —               | —                |
| REVERSED FRAMES, Angle Iron ...   | 3 3 6           | 3 3 6            | Butt Straps to outside plating, breadth & thickness  | 16 1/2 x 1 1/2  | 13 1/2 x 1 1/2   |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 2/3 the half-bdth. as per Rule height extended at the Bilges ...  | 20 1/2 x 8      | 20 1/2 x 8       | Lengths of Plating ...   | 12 x 0          | 10.0             |
| BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space ...  | 4 3 7/6         | 4 3 7/6          | Shifts of Plating, and Stringers ...   | Two spaces      | Two spaces       |
| BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single, or double Angle Iron, on Upper Edge Average space ...   | 8 x 8           | 8 x 8            | Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ...  | —               | —                |
| BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space ...   | 3 3 6           | 3 3 6            | Angle Iron on ditto ...  | —               | —                |
| KEELSONS Centre line, single or double plate, box, or Intercostal, Plates Rider Plate Bulb Plate to Intercostal Keelson Angle Irons Double Angle Iron Side Keelson Side Intercostal Plate do. Angle Irons Attached to outside plating with angle iron | 17 x 12         | 17 x 12          | Tie Plates fore and aft, outside Hatchways   | —               | —                |
| BILGE Angle Irons do. Bulb Iron do. Intercostal plates riveted to plating for length  | 5 4 9           | 5 4 9            | Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling   | —               | —                |
| BILGE STRINGER Angle Irons Intercostal plates riveted to plating for length   | 5 4 9           | 5 4 9            | Waterways do. do. Flat of Upper Deck do. do. How fastened to Beams   | —               | —                |
| SIDE STRINGER Angle Irons   | —               | —                | Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness   | 39 1/2 10       | 39 1/2 10        |

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 1/8 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 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 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 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, J. J. Bell, Surveyor's Signature, J. J. Bell  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

1200 (12,675)

**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  
 Main Mast 61.6 - 19 - 17 - 13 } Strake riveted Butts.  
*Iron, Not aub*  
*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. |          |          |
|----------------------------|--------|------------------|-------------------------|-----------------------|------------------------------|----------------------|-----------------------|------------------|--------------------|----------------------|-----------------------|----------------------|----------|----------|
| No.                        | SAILS. | CABLES &c. Chain | 270                     | 1 9/16                | 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 1/2                        | 61 4/10              |                       | 61 4/10          | Stalk              | 1                    | 4.2.14                |                      |          |          |
|                            |        |                  | Fore Top Sails,         | 15                    | 1 1/2                        |                      |                       |                  | Stalk              | 1                    | 23.2.0                | 23 1/2               | 23 1/2   | 23 10/20 |
|                            |        |                  | Fore Topmast Stay Sails | 90                    | 1                            |                      |                       |                  | Stalk              | 1                    | 4.3.0                 |                      |          |          |
|                            |        |                  | Main Sails,             | 90                    | 1                            |                      | 90-1 iron or 10" Hemp |                  | Stalk              | 1                    | 20.3.0                | 21.8.10.14           | 20       | 20 14/20 |
|                            |        |                  | Main Top Sails,         | 60                    | 15                           |                      |                       |                  | Total              | 68.0.14              | Total                 | 67                   |          |          |
|                            |        |                  | Towlines                | 75                    | 11                           |                      | 90-9 1/2              |                  | Stream             | 1                    | 10.2.18               | 11.4.2.21            | 10       |          |
|                            |        |                  | Warp                    | 90                    | 5 1/2                        | 90-9 1/2             | 90-6                  |                  | Kedges             | 1                    | 5.0.2                 | 6 1/4                | 5        |          |
|                            |        |                  | quality                 | 90                    | 5 1/2                        | 90-6                 | 90-6                  |                  |                    |                      | 2.1.27                | 4 7/8                | 2 1/2    |          |
|                            |        |                  | and                     |                       | 90                           | 4                    |                       |                  |                    |                      |                       |                      |          |          |

Standing and Running Rigging *Wore 10" Hemp* sufficient in size and *good* in quality. She has *Four* Boats (2 with buoyancy)  
 The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good and efficient*

Engine Room Skylights.—How constructed? *Iron framing over* How secured in ordinary weather? *Quadrants*  
 What arrangements for deadlights in bad weather? *Sheet 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 portable beam in Forehatchway*

What arrangement for shifting beams? *Yes*

| Order for Special Survey No. | Date        | Order for Ordinary Survey No. | Date       | No. | in builder's yard. | DATES of Surveys held while building as per Section 18. | 1st.   | 2nd.  | 3rd.   | 4th.  | 5th.                                     |
|------------------------------|-------------|-------------------------------|------------|-----|--------------------|---|--|---|--|---|--|
| 12                           | 1876 Nov 23 | 13                            | 1877 Jan 9 | 199 |                    | 1876. Nov 23, 28, 29, Dec 6, 12, 18, 20, 28             | On the several parts of the frame, when in place, and before the plating was wrought | On the plating during the process of riveting | When the beams were in and fastened, and before the decks were laid... | When the ship was complete, and before the plating was finally coated or cemented.. | After the ship was launched and equipped |

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, 108 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. Laphro*  
 Special ... £ 54 : 13 : July 1877  
 Certificate ... *Saml. Laphro*

(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