

# IRON SHIPS.

No. 3413 Survey held at Glasgow Date, First Survey 2<sup>nd</sup> Feby Last Survey 6<sup>th</sup> Decr 18 71  
On the S. S. Glenroy Master H. W. Auld

Tonnage under Tonnage Deck } 2085.43  
Ditto of Third Spar, or Awning Deck. }  
Ditto of Poop, or Raised Qr. Dk. }  
Ditto of Houses on Deck. } 36.50  
Ditto of Forecastle }  
Gross Tonnage 2121.93  
Crew Space, } 72.74  
Engine Room } 2122.00  
Register Tonnage, as a } 1370.17  
Steamer, cut on Beam }

ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.

Half moulded breadth .... 17.0  
Depth from upper part of Keel to top of Upper Deck Beams ..... 19.5  
Girth of Half Midship Frame (as per Rule) ... 31.2  
1st Number ..... 67.7  
Length ..... 328.5

THREE DECKED VESSELS.  
Half Moulded Breadth.... 17.0  
Total Depth if three or more Decks ..... 26.5  
Total Girth of Half Midship Frame ..... 38.2  
3rd Number..... 81.7  
Length..... 328.5

Built at Glasgow  
When built 1871 Launched 14<sup>th</sup> Oct 1871  
By whom built London & Glasgow Engineering & Shipbuilding Co.  
Owners A. C. Gow & Co.  
Port belonging to Glasgow  
Destined Voyage Glasgow to China  
and  
Surveyed while Building, Afloat, or in Dry Dock

Length on deck as per Rule, 328 Feet. 6 Inches. Moulded Breadth, 34 Feet. 6 Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule ..... 24 Feet. 6 Inches. Power of Engines, 250 Horse. No. of Decks with flat laid 2 No. of Tiers of Beams 3

Dimensions of Ship per Register, length, 331.2 breadth, 34.4 depth, 24.45

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	11 x 2 3/4	11 x 2 3/4	Flat Keel Plates, breadth and thickness	38	12 1/6
Do. if centre through plate, depth and thickness	10 x 2 3/4	10 x 2 3/4	Plates in Garboard Strakes, breadth and thickness	38	12 1/6
Stem, if bar iron, moulding and thickness	10 x 2 3/4	10 x 2 3/4	Do. from Garboard to upper part of Bilges	38	12 1/6
Stern-post for Rudder do. do.	10 x 5 1/2	10 x 5 1/2	Do. of doubling at Bilge, or increased thickness, and length applied	38	12 1/6
Stern-post for Propeller	24	(Class 100 A)	Do. fm up. part of Bilge to Ir. edge of Sh'rstrake	38	12 1/6
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	(Class 100 A)	Do. Main Sheerstrake, breadth and thickness	38	12 1/6
Frames, size of Angle Iron, for 1/2 length amidships	4 3 7/16	4 3 7/16	Do. of d'bling at Sh'rstrake, & length applied	38	12 1/6
Do. for 1/2 at each end	4 3 7/16	4 3 7/16	Do. from Mn. to Upr. or Spar Dk. Sh'rstrake.	38	12 1/6
Reversed Frames, size of Angle Iron	3 3 7/16	3 3 7/16	Do. Up. or Spar Dk Sh'rstrake, brdth & thickns	38	12 1/6
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	24 10/16	24 10/16	Butt Straps to outside plating, breadth & thickness	16 1/2 x 10 1/2 x 1/2	12 1/6
Do. at the ends	24 10/16	24 10/16	Lengths of Plating	12 feet	12 feet
Do. do. do. at Bilge Keelson	10 1/6 9/16 8/16	10 1/6 9/16 8/16	Shifts of Plating, and Stringers	6 feet	6 feet
Do. height extended at the Bilges	Twice depth	Twice depth	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	82 10/16	82 10/16
Beams, Upper, Spar, or Awning Deck (No. 1)	6 1/2 6/16	6 1/2 6/16	Angle Iron on ditto	3 1/2 x 3 1/2 x 7/16	3 1/2 x 3 1/2 x 7/16
Single or double Angle Iron, Plate or Tee Bulb Iron	6 1/2 6/16	6 1/2 6/16	Tie Plates (fore and aft), outside Hatchways	27 8/16	27 8/16
Single or double Angle Iron on Upper edge	2 1/2 2 1/2 5/16	2 1/2 2 1/2 5/16	Diagonal Tie Plates on Beams (No. of Pairs)	None	None
Average space	48	48	Planksheer material and scantling	Waterways do. do.	Waterways of Deck
Beams, Main or Middle Deck (No. 2)	8 1/2 8/16	8 1/2 8/16	Flat of Upper Deck do. do.	Yellow Pine	4
Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2 8/16	8 1/2 8/16	How fastened to Beams	Nut & Screw	Bolts
Single or double Angle Iron, on Upper Edge	3 3 6/16	3 3 6/16	Stringer Plate on ends of Main or Middle Deck	65 10/16	65 10/16
Average space	48	48	Beams, breadth and thickness	65 10/16	65 10/16
Beams, Lower Deck, Hold or Orlop (No. 3)	8 1/2 8/16	8 1/2 8/16	(Is the Stringer Plate attached to the outside plating?)	Yes	Yes
Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2 8/16	8 1/2 8/16	Angle Irons on ditto (No. 2)	4 x 4 x 9/16	4 x 4 x 9/16
Single or double Angle Iron on Upper Edge	3 3 6/16	3 3 6/16	Tie Plates, outside Hatchways	22 10/16	22 10/16
Average space	22 4 3/4	22 4 3/4	Diagonal Tie Plates on Beams (No. of pairs)	None	None
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	18 1/4 14/16	18 1/4 14/16	Waterways materials and scantlings	4 gutter	Wood Joist
Do. Bulb Plate to Intercoastal Keelson	6 1/2 4 9/16	6 1/2 4 9/16	Flat of Middle Deck do. do.	Iron	3 1/2 x 5/16
Do. Size of Angle Irons	6 1/2 4 9/16	6 1/2 4 9/16	How fastened to Beams	Nut & Screw	Bolts
Do. Side Intercoastal Keelson, size of Plates	9 1/2 10/16	9 1/2 10/16	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	39 9/16	38 9/16
Do. Angle Irons on tops of Floors	6 4 9/16	6 4 9/16	(Is the Stringer Plate attached to the outside plating?)	Yes	Yes
Do. Bilge Keelson, Bulb Iron	8 1/2 9/16	8 1/2 9/16	Angle Irons on ditto (No. 2)	4 x 4 x 9/16	4 x 4 x 9/16
Do. do. Intercoastal plates riveted to plating for length	6 4 9/16	6 4 9/16	Stringer or Tie Plates, outside Hatchways	4 x 4 x 9/16	8 double angles
Do. do. Angle Irons	6 4 9/16	6 4 9/16	Flat of Lower Deck	4 x 4 x 9/16	4 x 4 x 9/16
Side Stringers (No. 1) size of Angle Irons	6 4 9/16	6 4 9/16	Ceiling betwixt Decks, thickness and material	Sparring	2 1/2
Do. Intercoastal plates riveted to plating for 3/4 length	10 1/2 9/16	10 1/2 9/16	Do. in hold do. American do.	2 1/2	2 1/2
Transoms, material Iron or, if none, in what manner compensated for.			Main piece of Rudder, diameter at head	33 1/4	7 1/4
Knight-heads Iron Hawse Timbers Iron			Do. do. at heel	33 1/4	3 3/4
Windlass Patent Pall Bitt Iron			(Can the Rudder be unshipped afloat?)	Yes	
The Frames extend in one length from Middle line to Upper Deck			Bulkheads No. 6 Thickness of 7/16 x 6/16		6/16
The Reverse Angle Irons on the floors and frames extend from the middle line to Main and to Upper Deck alternately			Do. Height up To deck		
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes			Do. How secured to the sides of the ship Riveted to Frame		
Plates, Garboard, double Riveted to Keel, double at upper edge, with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.			Do. Size of Vertical Angle Irons, 3 x 3 x 7/16 and their distance apart, 30 ins		
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.			Do. Are the outside Plates doubled two spaces of Frames in length? Yes		
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1/16 thick, double Riveted; with Rivets (7/8 in.) diameter averaging (3 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No					
Do. of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than their plates.					
Do. Edges from bilge to Main Sheerstrake, worked carvel with clencher, double Riveted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.					
Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge Single At lower edge Double					
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (1/16 thick, double Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.					
Do. Butts of Main Sheerstrake, double Riveted. Butts of Upper Sheerstrake, and Upper Deck Stringer Plate, double Riveted for 1/2 length amidships. Breadth of laps of plating in double Riveting (6 times) Breadth of laps of plating in single Riveting (3 1/2 times)					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble and Double					
Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)					
Beams of the various Decks, how secured to the sides? Riveted to Frames No. of Breasthooks, 5 Crutches, 5					
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? B. Boiler					
Manufacturer's name Conssett and Blochearn					

Portion of the several particulars therein given.

Surveyor's Signature, Saml. Laphroan

IRON 450-0074



Planned

Yes

Single Prices.

Yes

a few

Good

Topmasts of Pitch Pine

Tested at Newcastle by R. Burrell 30<sup>th</sup> June 1871

Tested at Newcastle by  
R. Burrell 7<sup>th</sup> July 1871

One  
full  
Suit  
and  
spare

Wine & Hemp

Good

Take a angle from axis

Thank Sky lights  
n such for bad weather? \_

Iron Castings

hat arrangements are there  
Flush Deck

Plate and angle iron

2) Core shipping Beans

Yes

Main Hatchways — State size 20 x 10

Order for Special Survey No. 22

DATEs of

1st. On

2nd. On

3rd. Wh

4th. Wh

4th. Wh  
5th. A ft.

( 5th. After

This vessel is a Sister Ship to the Rydal Hall Glasgow Report No 3380 built in accordance with approved Midship Section appended to that Report and Rules for 1870 with a view to the 100 A Clasp excepting that the main Deck of this vessel is of Iron

In what manner are the surfaces preserved from oxidation? Inside Cement and Paint Outside Red lead & Paint

\* 100. A. 1 Three Decs

Dec-18-1886

Special .....£ *28* : *1* :

ling Expenses  
ny) £

15 December 1871

100  $\Delta$  1

I concur in the opinion  
that this vessel is eligible  
to be Classed 100-A-1.

Lloyd's Register  
Foundation