

IRON SHIP

No. 3600 Survey held at Glasgow
on the S.S. Glenlyon

Date, first Survey 11th Sept. 1871 Last Survey 6th Decr 1871

Master Auld

Tonnage under Tonnage Deck	2083.17	ONE, OR TWO DECKED VESSELS	THREE DECKED VESSELS.	Built at <u>Glasgow</u>
Ditto of Spar Deck, or Awning Deck	—	Half moulded breadth	Half Moulded Breadth	When built <u>1871-72</u> Launched <u>19th Oct 1872</u>
Ditto of Poop, or Raised Or. Dk.	—	Depth from upper part of Keel to top of Upper Deck Beams	Total Depth if three or more Decks	By whom built <u>London & Glasgow</u>
Ditto of Houses on Deck	34.97	Girth of Half Midship Frame	Total Girth of Half Midship Frame	Owners <u>A. C. Gow & Co.</u>
Ditto of Forecastle	—	1st Number	3rd Number	Port belonging to <u>Glasgow</u>
Gross Tonnage	2118.14	Length	Length	Destined Voyage <u>Glasgow to China</u>
Crew Space, as per Rule	67.32	2nd Number	4th Number	Surveyed while Building, Afloat, or in Dry Dock
Net Tonnage, for Fees on Beam	677.80	Depths to Length	Breadths to Length	
Register Tonnage, as a Shipper's Tonnage (on the Beam)	1373.02			

Length on deck as per Rule	Feet. <u>328</u> Inches. <u>6</u>	Moulded Breadth	Feet. <u>34</u> Inches. <u>—</u>	Depth from top of Keel to Deck Beam, as per Rule	Feet. <u>24</u> Inches. <u>6</u>	Power of Engines	Horse. <u>275</u>	No. of Decks	No. of Tiers of Beams
Dimensions of Ship per Register, length <u>329.0</u> breadth <u>34.3</u> depth, <u>24.8</u>									

Particulars	Inches in Ship		Inches required per Rule		Particulars	Inches in Ship		Inches required per Rule	
	In Ship	In Ship	per Rule	per Rule		In Ship	In Ship	per Rule	per Rule
Keel, if bar iron, depth and thickness	11	2 3/4	11	2 3/4	Flat Keel Plates, breadth and thickness	38	12	36	12
Do. if centre through plate, depth and thickness					Plates in Garboard Strakes, breadth and thickness	38	11	36	11
Stem, if bar iron, moulding and thickness	10	2 3/4	10	2 3/4	Do. from Garboard to upper part of Bilges				
Stern-post do. do. do.	10	5 1/2	10	5 1/2	Do. of doubling at Bilge, or increased thickness, and length applied	13	3	13	3
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24		Do. from upper part of Bilge to lower edge of Sheerstrake	11		11	
Frames, size of Angle Iron, for 2/3 length amidships	4	3	4	3	Do. Sheerstrake, breadth and thickness	38	13	36	13
Do. for 1/3 at each end	4	3	4	3	Do. of doubling at Sheerstrake, and length applied	36	13	36	12
Reversed Frames, size of Angle Iron	3	3	3	3	Upper deck Sheerstrake	36	13	36	12
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	24	x	10	x	Butt Straps to outside plating, breadth and thickness	16 1/2 to 10 1/2	x	16 1/2 to 9 3/4	x
Do. at the ends			9-8		Lengths of Plating	12 feet		12 1/4	
Do. do. do. at Bilge Keelson			10-9-8		Shifts of Plating, and Stringers	6 feet		6 1/4	
Do. height extended at the Bilges	Twice		Twice		Gunwale Plate on ends of <u>Upper</u> Deck Beams, breadth and thickness	82	10	82	10
Beams, Three Decked, Spar, or Awning Decked (No.) <u>single or double</u> Angle Iron, Plate or Tee Bulb Iron	6 1/2	x	6	x	Deck Beams, breadth and thickness	3 1/2 x 3 1/2	x	3 1/2 x 3 1/2	x
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	5	2 1/2	Angle Iron on ditto	27	8	27	8
Average space	48		48		Tie Plates (fore and aft), outside Hatchways	27	8	27	8
Beams, Upper Middle Deck (No.) <u>single or double</u> Angle Iron, Plate or Tee Bulb Iron	8 1/2	x	8	x	Diagonal Tie Plates on Beams (No. of Pairs,)	—	—	—	—
Single or double Angle Iron on Upper Edge	3	3	6	3	Planksheer material and scantling	13 1/2		—	
Average space	48		48		Waterways do. do.	4		4	
Beams, Lower Deck or Orlop (No.) <u>single or double</u> Angle Iron, Plate or Tee Bulb Iron	8 1/2	x	8	x	Flat of Deck do. do.	4		4	
Single or double Angle Iron on Upper Edge	3	3	6	3	How fastened to Beams	Riveted		—	
Average space	2-4		2-4		Stringer Plate on ends of <u>Upper</u> Middle Deck	65	10	65	10
Keelson Centre line, single or double plate, <u>single or double</u> size of Plates	18 1/4	x	14	x	Beams, breadth and thickness	4 x 4 x 9		4 x 4 x 9	
Do. Bulb Plate to Intercostal Keelson	9	x	9	x	Angle Irons on ditto (No. 2)	22	10	22	10
Do. Size of Angle Irons	6 1/2	4	9	6 1/2	Tie Plates, outside Hatchways	None		None	
Do. Side Intercostal Keelson, size of Plates	6	4	9	6	Diagonal Tie Plates on Beams (No. of pairs,)	None		None	
Do. Angle Irons on tops of Floors	6	4	9	6	Waterways materials and scantlings	Gutter		9	3 1/2
Do. Bilge Keelson, Bulb Iron	8 1/2	x	8	x	Flat of Deck do. do.	6		6	
Do. do. Angle Irons	6	4	9	6	How fastened to Beams	Riveted		—	
Do. Side Stringers (No. 1) size of Angle Irons	6	4	9	6	Stringer Plates on ends of Lower Deck or Orlop	39	9	38	9
Do. Intercostal Plates riveted to Plating for 3/5 length			10		Beams attached to outside plating	4 x 4 x 9		4 x 4 x 9	
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.					Angle Irons on ditto (No. 2)	4 x 4 x 9		4 x 4 x 9	

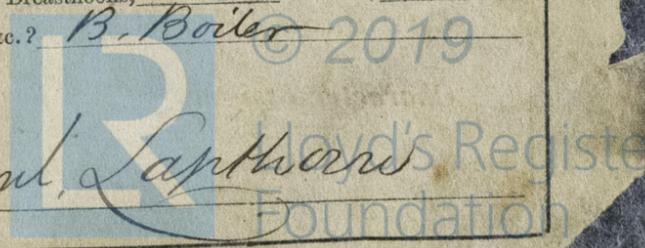
Knight-heads Iron Hawse Timbers Iron
Windlass Patent Pall Bitt Iron

The Frames extend in one length from Middle line to Upper Deck
The Reverse Angle Irons on the floors extend across the middle line to Main and to Upper Deck alternately on all the Frames and

Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes
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. Edges from Garboards to upper part of Bilge, worked Clencher, double # Riveted; with Rivets (7/8 in.) diameter, averaging (3 5/8 ins.) from centre to centre.
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps (1 1/2 in.) thick, treble, double # Riveted; with Rivets (7/8 in.) diameter averaging (3 5/8 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No.
Do. Edges of Sheerstrake, double # Riveted. At upper edge Single At lower edge Double
Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps (1 1/4 in.) thick, double # Riveted; with Rivets (7/8 in.) diameter, averaging (3 5/8 ins.) from centre to centre. Breadth of laps in double Riveting (6 times) Breadth of laps 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, { Explain by Sketch, }
Waterway " " planksheer and to the Beams, { if necessary. }
Beams of the various Decks, how secured to the sides? Riveted to Frames No. of Breasthooks, Five Crutches, Five
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? B. Boiler
Manufacturer's name or trade mark, Consett & Blochairn

We certify that the above is a correct description of the several particulars therein given.
Builder's Signature, James Mack Surveyor's Signature, Saml. Lanthorn



IRON 452-0517

Workmanship. Are the butts of plating or otherwise fitted? Yes
 Do the edges of the carvel work and of the plating lay close together throughout their length without requiring any making good of deficiencies? Yes
 Do the fillings between the ribs and plates solid with single pieces? or are they in short lengths of various thicknesses? Solid pieces
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes
 Are there any rivets which either break into or have been put through the seams or butts of the plating? A few

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. If they are 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, show 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 Masts of Iron, rigged as a three masted Schooner - Topmasts of Plate Pine
10862 Iron

Tested at Newcastle by Robt. Burnett
 25th June 1872

Tested at Newcastle by Robt. Burnett
 22nd July 1872

No.	Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	SAILS.											
	CABLES, &c.	300	13/4	55.2.0	13/4	55 1/10	Bowers	1	31.0.13	29.9.1.14	30	28 6/10
	Chain						(State Machine where Tested, and name of Superintendent).	1	30.2.27	29.3.3.4	30	28 6/10
	Fore Sails,						Stream	1	25.2.0	25.3.3.4	25 1/2	25 1/2
	Fore Top Sails,											
	Fore Topmast Stay Sails	90	1 1/8		1 1/8							
	Main Sails,	180	11		11							
	Main Top Sails,	90	7		7							
	and Spare						Kedges	1	6.2.0	7.11.3.14	6	
	All of good quality.								2.3.20	5.0.0.0	3	

Her Standing and Running Rigging Wires & Hemp sufficient in size and good in quality. She has Two Life Boats and Four others.

The present state of the Windlass is good Capstan good and Rudder good Pumps good and efficient

Engine Room Skylights.—How constructed? Plate and Angle Iron How secured in ordinary weather? By Bolts

What arrangements are there for deadlights in such for bad weather? Thick Glass and Wire Guards

Coal Bunker Openings.—How constructed? Iron castings How are lids secured? By Stots How high above deck? Flush

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Flush Deck

Cargo Hatchways.—How formed? Plate and Angle Iron State size 12' x 10' and 16' x 10'

If of extraordinary size, state how framed and secured? One shifting Beam to Fore and after Hatch

What arrangement for shifting beams? and two shifting Beams to main Hatch properly secured

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 20' x 10'

Order for Special Survey No. 791 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under

Date 11th Sept 1871 Surveys held 2nd. On the plating during the progress of riveting Special Survey from 11th Sept 1871

Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid to 6th Decr 1872

Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented

No. 163 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks,

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 1870-71, with a view to the 100 A Class, except that the Main Deck of this vessel is of Iron and nearly the whole of the Upper Deck is Plated with Iron under the Wood Deck. The Butts of Topside Plating are also triple riveted for 2/3rd length amidships with Butt straps 1/6 thicker than the plates they connect, the upper chinestrake and topside plating are also increased 1/6 in thickness.

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

I am of opinion this Vessel should be Classed 100 A 1 - Three decks

The amount of the Entry Fee£ 5 : 0 : 0 is received by me,

Travelling Expenses (if any)£ — : — : —

Special£ 74 : 1 : 6

Certificate Grates

Committee's Minute 14th Decr 1872

Character assigned 100 A 1

Saml. Laphorn
 This vessel appears to be double bottomed as recommended in Lloyd's Reg. Rules 70-71
 Lloyd's Register Foundation