

IRON SHIPS.

Rec 11/1/72

No. 1439.88 Survey held at Glasgow
On the S. S. Galley of Lorne

Date, First Survey 3rd May 1872
Master Robertson

Page under Tonnage Deck	1439.88	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at	Glasgow
Ratio of Third Space	654.86	Half moulded breadth ... 18.0	Half Moulded Breadth ... 18.0	When built	1871
Ratio of Poop, or Raised Qr. Dk.	2024.71	Depth from upper part of Keel to top of Upper Deck Beams ... 21.2	Total Depth if three or more Decks ... 28.2	Launched	29 th Nov 1871
Ratio of Houses	51.95	Girth of Half Midship Frame (as per Rule) ... 33.4	Total Girth of Half Midship Frame ... 40.4	By whom built	R. Napier & Sons
Ratio of Forecastle	-	1st Number ... 72.6	3rd Number ... 86.6	Owners	Shaw, Maxton & Co.
Gross Tonnage	2146.64	Length ... 318.3	Length ... 318.3	Port belonging to	London
Net Space, as per Rule	Not measured	2nd Number ... 23108	4th Number ... 27564	Destined Voyage	London to China
Net Tonnage	686.92	Depths to Length. 16.84	Breadths to Length ... 8.84	and	
Net Room	1459.72	12.22		Surveyed while Building, Afloat, or in Dry Dock.	

Deck Rule	318	Feet. Inches.	4	Moulded Breadth	36	Feet. Inches.	3	Depths from top of Floors to Upper and Main Deck Beams, as per Rule	26	Feet. Inches.	18	10	Power of Engines	10	Horse.	Nº. of Decks with flat laid	Three	Nº. of Tiers of Beams	Three
Lengths of Ship per Register	length	321.8	breadth	36.4	depth	19.2													
Bar iron, depth and thickness	11 x 2 3/4	Inches in Ship.		11 x 2 3/4	Inches required per Rule.														
Centre through plate, depth and thickness	10 x 2 3/4			10 x 2 3/4															
if bar iron, moulding and thickness	11 x 5			10 x 5 1/2															
Post for Rudder do. do.	24			24															
Post for Propeller																			
Frames from moulding edge to moulding edge, all fore and aft																			
Frames, size of Angle Iron, for 1/2 length amidships	4 1/2 x 3	Inches. In Ship.	8/16	4 1/2 x 3	Inches. In Ship.	8/16													
Do. for 1/2 at each end	4 1/2 x 3		7/16	4 1/2 x 3		7/16													
Reversed Frames, size of Angle Iron	3 x 3		7/16	3 x 3		7/16													
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	25 1/2		10/16	25 1/2		10/16													
Do. at the ends	10		9/8	10		9/8													
Do. do. do. at Bilge Keelson	Twice		Twice	Twice		Twice													
Do. height extended at the Bilges	Twice		Twice	Twice		Twice													
Beams, Upper, Spar, or Awning Deck (No. 1)	7 x 9/16		7 x 7/16	7 x 7/16		7 x 7/16													
Single or double Angle Iron, Plate or Tee Bulb Iron	3 x 2 1/2		5/16	3 x 2 1/2		5/16													
Single or double Angle Iron on Upper edge	48 ins		48 ins	48 ins		48 ins													
Average space	9 x 9/16		9 x 9/16	9 x 9/16		9 x 9/16													
Beams, Main or Middle Deck (No. 1)	3 1/2 x 3		7/16	3 1/2 x 3		7/16													
Single or double Angle Iron, Plate or Tee Bulb Iron	48 ins		48 ins	48 ins		48 ins													
Single or double Angle Iron on Upper Edge	9 x 9/16		9 x 9/16	9 x 9/16		9 x 9/16													
Average space	3 1/2 x 3		7/16	3 1/2 x 3		7/16													
Beams, Lower Deck, Hold or Orlop (No. 1)	48 ins		48 ins	48 ins		48 ins													
Single or double Angle Iron, Plate or Tee Bulb Iron	9 x 9/16		9 x 9/16	9 x 9/16		9 x 9/16													
Single or double Angle Iron on Upper Edge	3 1/2 x 3		7/16	3 1/2 x 3		7/16													
Average space	48 ins		48 ins	48 ins		48 ins													
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	18 x 14		14/16	18 x 14		14/16													
Do. Bulb Plate to Intercoastal Keelson	9 x 10/16		9 x 10/16	9 x 10/16		9 x 10/16													
Do. Size of Angle Irons	6 1/2 x 4		7/16	6 1/2 x 4		7/16													
Do. Side Intercoastal Keelson, size of Plates	6 x 4		9/16	6 x 4		9/16													
Do. Angle Irons on tops of Floors	9 x 9/16		9 x 9/16	9 x 9/16		9 x 9/16													
Do. Bilge Keelson, Bulb Iron	6 x 4		9/16	6 x 4		9/16													
Do. do. Intercoastal plates riveted to plating for 1/2 length	6 x 4		9/16	6 x 4		9/16													
Do. do. Angle Irons	6 x 4		9/16	6 x 4		9/16													
Side Stringers (No. 1) size of Angle Irons	6 x 4		9/16	6 x 4		9/16													
Do. Intercoastal plates riveted to plating for 3/4 length	6 x 4		9/16	6 x 4		9/16													
Transoms, material Iron or, if none, in what manner compensated for.																			
Knight-heads Iron Hawse Timbers Iron																			
Windlass Napier's Patent Pall Bitt																			
The Frames extend in one length from Keel to Upper Deck																			
The Reverse Angle Irons on the floors and frames extend from the middle line to Main Deck and to Upper Deck alternately																			
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 (4 ins.) from centre to centre.																			
Do. Edges from Garboards to upper part of Bilge, worked Clench, double Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.																			
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1 1/2 ins.) 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 Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than their plates.																			
Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece () thick, or clench, double or single riveted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.																			
Do. Edges of Sheerstrake, Main, double Riveted. Upper, double or single Riveted. At upper edge Double 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 or Lower Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for half 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? Rivets 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 Mossend Parkhead																			
We certify that the above is a correct description of the general particulars therein given.																			
Builder's Signature, [Signature]																			
Surveyor's Signature, [Signature]																			

IRON 450-0144.1

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 9696 In
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
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? One Piece
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivets 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, ~~Masts~~, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the Scanlings 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 Oregon Masts Schooner Rigged

Tested at Newcastle 2 nd Oct. 1871 by Robert Burrell					Tested at Newcastle 2 nd Nov 7 by Robert Burrell				
N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, N ^o .	Weight. Ex. Stock.
			150	1 13/16	59.2.0	1 13/16	59 1/10	&c.	9974 32.2.20
			150	1 13/16				Bowers ...	9975 32.0.7
			90	1 1/8	22.15.0	1 1/8		(State Machine where Tested, and name of Superintendent).	27.1.4
			90	11		11		Stream	9976 13.0.26
			90	7		7		Kedges	9977 6.2.18
			120	7					9978 3.0.22

Her Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has Two Life Boat and Four other

The present state of the Windlass is good Capstans 2 good and Rudder good Pumps good and efficient

Engine Room Skylights.—How constructed? Plate & Angle Irons How secured in ordinary weather? By Bails

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 Slot How high above deck? 5 ft

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

Cargo Hatchways.—How formed? Plate and Angle Irons State size 12 x 9 Feet

If of extraordinary size, state how framed and secured? —

What arrangement for shifting beams? A shifting Beam at each Hatch

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 16 x 10 Feet

Order for Special Survey No. 472 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Under Spec
Date June 6/71 Surveys held 2nd. On the plating during the progress of riveting Survey from
Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid 3rd May 1871
Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented to 8th Decr 1872
No. 311 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks,

Has been built in conformity with the Rules for 1870-71 and with the appended approved midship section

One strake of Bilge Plating has been doubled for 100 feet amidships each side as compensation for thinness of plating in compliance with Committee's approval as per Secretary's Letter dated 18th Sept. 1871

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

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

I am of opinion this Vessel should be Classed 100 A. 1. Three Deck

The amount of the Entry Fee£ 5 : 4 : 0 is received by me,

Special£ 11 : 11 : 6
Certificate

(Travelling Expenses)
(if any) £

Committee's Minute 15th January 1872

Character assigned 100 A. 1

Sam. Laphorn

I concur in the opinion that this vessel should be classed as recommended
100 A. 1. Three Deck

Registered
12/1/72
Foundation