

IRON SHIPS.

Builders' No. 19

Rec 14/8/66

1866

No. 5109 Survey held at Port Glasgow Date 9th August
 in the Screw Steamer "Itacian" Master Wm R. Burns
 Tonnage under tonnage deck 570.04 Built at Port Glasgow When built 1866 Launched 14th July 1866
 Tons of ~~poop~~ Break or spar deck 72.42 of engine room 205.59 By whom built Robert Duncan & Co. Owners Randysides & Henderson
 Register tonnage 436.87 Gross Tonnage 642.46 Port belonging to Glasgow Destined Voyage India to Mediterranean
 If Surveyed while Building, Afloat, or in Dry Dock While Building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks
200			27			16		8 1/2	70		
Dimensions of Ship per Register, length <u>200</u> , breadth <u>27</u> , depth <u>16.5</u>											
Keel, S bar iron, depth and thickness	Inches in Ship		Inches required per Rule for 600 tons Scale.		Plates in Garboard Strakes, breadth and thickness						
" if plate iron, breadth and thickness	7 x 2 3/4		7 x 2 3/4		32 10/16 30 10/16						
Stem, S bar iron, moulding and thickness	7 x 2 3/4		7 x 2 3/4		Ditto from Garboard to upper part of Bilges						
" if plate iron, breadth and thickness	7 x 2 3/4		7 x 2 3/4		9/16 9/16						
Stern-post, S bar iron, moulding and thickness	8 x 4 7/8 inner		7 x 5 1/2		" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold						
" " S bar iron, breadth and thickness	8 x 4 7/8 outer		7 x 5 1/2		8/16 8/16						
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23		" from 3/4ths depth of Hold to lower edge of Sheerstrake						
Frames, Size of Angle Iron, single or double	4 3 7/8		4 3 7/8		" Sheerstrake, breadth and thickness						
" " Reversed Iron, to every frame	3 2 1/2 6/16		3 2 3/4 6/16		30 4/16 30 4/16						
" " and on every alternate frame to Gunwale	3 2 1/2 6/16		3 2 3/4 6/16		Butt Straps to outside plating, breadth and thickness						
Floors, depth and thickness of Floor Plate at mid line	19 5/16 18 5/16		5/16 5/16		9 1/16 2 1/16 1/16						
" Ditto ditto at Bilge Keelson	9 5/16 8/16		5/16 5/16		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness						
" Size of Reversed Angle Iron, and No. single at top of Floor Plate	3 2 1/2 6/16		3 2 3/4 6/16		30 5/16 28 5/16 8/16						
Beams, Deck (N ^o .) double Angle Iron, Plate, Tee, or Bulb Iron	6 1/2 7/16 6 1/2 7/16		6 1/2 7/16		Angle Iron on ditto						
" " double or single Angle Iron, on upper edge	2 1/2 2 1/2 5/8 2 1/2 2 1/2 5/8		2 1/2 2 1/2 5/8		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways						
" " average space between	3 feet 10 inches 3 feet 10 inches		3 feet 10 inches 3 feet 10 inches		10 5/16 9 3/4 5/16						
" Hold, or Lower Deck (N ^o .) double Angle, Tee, Plate, or Bulb Iron	6 1/2 7/16 6 1/2 7/16		6 1/2 7/16		Diagonal Tie Plates on ditto						
" " double or single Angle Iron, on upper edge	2 1/2 2 1/2 5/8 2 1/2 2 1/2 5/8		2 1/2 2 1/2 5/8		10 5/16 9 3/4 5/16						
" " average space between	3 feet 10 inches + 3 feet 8 inches		3 feet 10 inches + 3 feet 8 inches		Planksheer, materials and scantlings						
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	3 feet 10 inches + 3 feet 8 inches		3 feet 10 inches + 3 feet 8 inches		Waterway ditto ditto						
" Engine	See sketch		See sketch		12 x 7 3 1/2 3 1/2						
Keelson, single or double plate, box, or intercostal	See sketch		See sketch		Flat of Upper Deck, thickness and material						
" Size of Plates	12 1/2 10/16 12 1/2 10/16		12 1/2 10/16		By dove bolts + nuts from above						
" Size of Angle Irons	4 1/2 3 1/2 7/16 4 1/2 3 1/2 7/16		4 1/2 3 1/2 7/16		Ceiling betwixt Decks, and in Hold, thickness and material						
" Side, single or d'ble, plate, box, or intercostal	4 1/2 3 1/2 7/16 4 1/2 3 1/2 7/16		4 1/2 3 1/2 7/16		6 x 2 1/2 2 1/2						
" Bilge (No.) at each Bilge, single, or double, plate, or box	9 5/16 7/16 4 1/2 3 1/2 7/16		4 1/2 3 1/2 7/16		Clamps or Spirketting ditto						
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.	4 1/2 3 1/2 7/16 4 1/2 3 1/2 7/16		4 1/2 3 1/2 7/16		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness						
Knights-heads, and Hawse Timbers <u>Iron</u>	4 1/2 3 1/2 7/16 4 1/2 3 1/2 7/16		4 1/2 3 1/2 7/16		4 1/2 x 3 1/2 x 7/16 4 1/2 x 3 1/2 x 7/16						

The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (6 inches) apart.

The reverse angle irons on the floors extend in one length across the middle line from upper part of bilge to Gunwale alternately

Keelson, how are the various lengths of plates or angle irons connected? By plate and Angle Iron butt straps

Plates, Garboard, double or single rivetted to keel, double or single at upper edge, with rivets (1 1/2 + 3/4 ins.) diameter, averaging (4 1/2 ins) apart.

" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart.

" Butts from Keel to turn of bilge, worked carvel with butt straps (1/8 + 9/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

" Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

" Edges of Sheerstrake, double or single rivetted? At upper edge to Gunwale Angle Iron double or single At lower edge double

" Butts from bilge to planksheers, worked carvel with butt straps (5/16 + 1/4) thick, double or single rivetted; with rivets (3/4 + 1/2 in.) diameter, averaging (ins.) apart. Breadth of laps in double rivetting (4 1/2 ins) Breadth of laps in single rivetting (2 1/2 ins)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?

Planksheer, how secured to the plating of the sides { Explain by sketch }
 Waterway " " planksheer and to the Beams { if necessary. }

Deck Beams, how secured to the side? Beam ends turned down

Hold or Lower Deck ditto Beam ends turned down

Paddle " " No. of breasthooks Four crutches Four

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Messend's Angle Iron & Blackhair's Bulb plate

Manufacturer's name or trade mark Messend's Iron Co. & Blackhair's Iron Co.

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Robt Duncan & Co Surveyor's Signature H. J. ...



5018 Iron

Workmanship. Are the lands or laps of the clenwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? Yes
 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? Single lengths
 Do the holes for rivetting 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 outer plate? Yes
 Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.

She has SAILS.		CABLES, &c., tested at <u>Lloyd's Tipton Proving House</u>			ANCHORS, tested at <u>Lloyd's Tipton Proving House</u>						
No.		No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to. Tons.	No.	No. on Anchor seen by me.	No. and date on Certificate	Weight. Ex. stock.	Tested to. Tons.
<u>One</u>	Fore Sails,	Chain	2531-18/5/66	120	1 3/4	31	Bowers	1	2109-24/5/66	15.3.7	17.5.1.7
<u>Suit</u>	Fore Top Sails,	Hemp	2532-18/5/66	120	1 3/4	31 1/2		1	2112		
<u>of</u>	Fore Topmast	Stream Cable		90	7			1	2308-25/5/66	14.3.10	16.7.3.7
<u>Sails.</u>	Stay Sails,	Hawser		90	5		Stream	1	2082		
	Main Sails,	Towlines		90	4			1	2287-19/5/66	13.2.9	15.5.3.21
	Main Top Sails,	Warp		90	4		Kedges	1	2082	with stock	
		All of <u>Good</u> quality.						1		8.2.16	
	and Spare Sails									3.1.0	
	rigging is <u>Wid</u>									1.3.17	

Her Standing and Running Rigging Hemp sufficient in size and Good in quality.

She has Two life Long Boats and two Cutters

The present state of the Windlass is Good, two Capstans Good and Rudder Good Pumps Good Lead Good

Order for Special Survey	DATES of	1st.	2nd.	3rd.	4th.	5th.
No. <u>372</u>	Surveys held	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the progress of rivetting	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	After the ship was launched
Date <u>18th Oct. 1865</u>	while building	} <u>Specially Surveyed</u> <u>while Building from</u> <u>18th Oct. 1865 to</u> <u>9th August 1866</u> <u>in all 26 visits.</u>				
Order for Ordinary Survey	as per					
No. _____	Section 18.					
Date _____						

State if she has a Spar Deck Yes Poop Raised Quarter deck or Forecastle Monkey fore-castle

General Remarks, This vessel has been built under Special Survey as per Order N^o. 372; has a raised quarter deck and monkey fore-castle; and is rigged as a three masted Schooner.

We have not marked the 1 hereon in consequence of one of the Bower Anchors being rather light, which we beg respectfully to leave for the consideration of the Committee, with a letter from the Builders guaranteeing an Anchor of the proper weight to be put on board on her return from her present intended voyage should the one on board be considered not sufficient.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement between floors to upper parts of bulges, and three coats of Red lead
 Ditto ditto Outside Three coats of Red lead paint

It is the opinion this Vessel should be Classed A

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

Special£ 32 : 2 : :

× Certificate (if required)£ " : : :

Committee's Minute 17th August 1866

Character assigned B

[Handwritten signatures and stamps]
 H. B. Goldy
 J. S. L. R.