

Requisition No 266.

IRON SHIPS.

329

Rev 14/7/63

No. 4683 Survey held at Port Glasgow Date 8th September 1863

in the Ship "Ophelia" Master W. Williams

Tonnage Gross 484 ³⁵/₁₆ Engine Room _____ Register _____ Built at Port Glasgow

When Built 1863 By whom built John Reid & Co Owners C. T. Bowring & Co

Port belonging to Liverpool Destined Voyage Glyde to Madras

Surveyed Afloat or in Dry Dock While Building

Length aloft 210 ⁷/₈ Feet. Inches. Extreme Breadth.... 35 ⁷/₈ Feet. Inches. Depth from top of Upper Deck } Feet. Inches. Beam to top of Floor..... } 22 ⁷/₈ Power of Engines.... Horse No.

Distance of Frames or Ribs from moulding } edge to moulding edge, all fore and aft }	Inches in Ship.		Inches required per Rule.		Description of Iron.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths. required per Rule.
	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths. required per Rule.					
Floors, Size of Angle Iron, and No. <u>single</u> at bottom of Floor Plate.....	<u>5</u>	<u>3 ¹/₂</u>	<u>5</u>	<u>3</u>	Stem, <u>3</u> bar iron, moulding and thickness	<u>9</u>	<u>3</u>	<u>8 ¹/₂</u>	<u>3</u>
„ depth and thickness of Floor Plate at mid line	<u>23</u>	<u>4 ¹/₈</u>	<u>23</u>	<u>4 ¹/₈</u>	„ if plate iron, breadth and thickness				
„ depth and thickness of Floor Plate at Bilge Keelson	<u>7</u>	<u>4 ¹/₈</u>		<u>4 ¹/₈</u>	Stern-post, <u>3</u> bar iron, moulding and thickness	<u>9</u>	<u>3</u>	<u>8 ¹/₂</u>	<u>3</u>
„ Size of Reversed Angle Iron, and No. <u>single</u> at top of Floor Plate..	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	„ „ if plate iron, breadth and thickness				
Frames, Size of Angle Iron, single or double..	<u>5</u>	<u>3 ¹/₂</u>	<u>5</u>	<u>3</u>	Keel, <u>3</u> bar iron, depth and thickness.....	<u>9</u>	<u>3</u>	<u>8 ¹/₂</u>	<u>3</u>
„ „ Reversed Iron, <u>to every frame</u>	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	„ if plate iron, breadth and thickness				
„ „ and on every alternate frame <u>to every</u>	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	Garboard Plates, thickness..			<u>1 ¹/₈</u>	<u>1 ¹/₈</u>
Beams, Deck (N ^o .) <u>double</u> Angle Iron	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	From Garboard to upper part of Bilge.....			<u>1 ¹/₈</u>	<u>1 ¹/₈</u>
„ „ or Bulb Iron with double Angle Iron on top	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	From upper part of Bilge to Sheerstrakes.....			<u>1 ¹/₈</u>	<u>1 ¹/₈</u>
„ „ depth & thickness of plate amidships	<u>8 ¹/₂</u>	<u>9 ¹/₈</u>	<u>8 ¹/₂</u>	<u>9 ¹/₈</u>	Sheerstrakes			<u>1 ¹/₈</u>	<u>1 ¹/₈</u>
„ „ double or single Angle Iron, on lower edge					Breadth & thickness of Butt Straps to outside plating)	<u>9</u>	<u>1 ¹/₈</u>	<u>1 ¹/₈</u>	<u>1 ¹/₈</u>
„ „ average space between	<u>3 feet</u>		<u>3 feet</u>		Planksheers				
„ „ if wood (N ^o .) sided & moulded					Gunwale Plate or Stringer on ends of Up. Dk Beams)	<u>36</u>	<u>4 ¹/₈</u>	<u>26 ¹/₂</u>	<u>4 ¹/₈</u>
Hold, or Lower Deck (N ^o .)					Angle Iron on ditto.....	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>
„ „ double Angle Iron or Bulb Iron with double Angle Iron on top	<u>3 ¹/₂</u>	<u>3</u>	<u>3 ¹/₂</u>	<u>3</u>	Waterway				
„ „ depth & thickness of plate amidships	<u>9</u>	<u>9 ¹/₈</u>	<u>8 ¹/₂</u>	<u>9 ¹/₈</u>	Deck			<u>4</u>	<u>4</u>
„ „ double or single Angle Iron, on lower edge					Ceiling in Hold			<u>3</u>	
„ „ average space between	<u>3 feet</u>				Ceiling betwixt Decks			<u>7</u>	<u>2</u>
„ „ if wood (N ^o .) sided & moulded					Beam Clamps				
Paddle, wood, sided and moulded or if Iron, size of Plate					„ Shelf				
„ „ Engine					„ Stringer Plates on ends of Hold or Lower Dk Beams)	<u>30</u>	<u>4 ¹/₈</u>	<u>26 ¹/₂</u>	<u>4 ¹/₈</u>
Keelson, <u>double</u> sided & moulded, iron, size of plate, if <u>double</u> , give sketch & dimensions	<u>28 ¹/₂</u>	<u>4 ¹/₈</u>	<u>28 ¹/₂</u>	<u>4 ¹/₈</u>	Ceiling between Decks			<u>7</u>	<u>2</u>
„ „ Side or Bilge	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>	Stringer or Tie Plates outside Hatchways			<u>13 ¹/₂</u>	<u>4 ¹/₈</u>
„ „ Number	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>	<u>5 ¹/₂</u>	<u>4 ¹/₈</u>	Deck Beam Clamps			<u>5 ¹/₂</u>	<u>4 ¹/₈</u>
					„ „ Shelf			<u>5 ¹/₂</u>	<u>4 ¹/₈</u>
					Stringers in Hold			<u>5 ¹/₂</u>	<u>4 ¹/₈</u>
					Deck, Lower			<u>3 ¹/₂</u>	
					Deck, Upper, how fastened to Beams				<u>with screw bolts from above</u>

Transoms, material Iron or, if none, in what manner compensated for.
Knight-heads „ Iron Bulkheads, N^o. Two Thickness of 7 ¹/₈
Hawse Timbers „ Ditto are they free from defects? „ how secured to the sides of the ship Between double frames

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (7 in.) rivets, about (7 inches) apart.

The reverse angle irons on the floors extend in one length across the middle line from lower deck to Gunwale alternately

Keelson, how are the various lengths of plates or angle irons connected? With angle iron butt straps

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 + 1 ins.) diameter averaging (4 ¹/₂ ins.) from centre to centre of rivet.

„ Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (7 in.) diameter, averaging (3 ¹/₂ ins.) from centre to centre of rivets.

Butts from Keel to turn of bilge, worked carvel with a lining piece (1 ¹/₈) thick, double or single rivetted; rivets (7 in.) diameter, averaging (3 ¹/₂ ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

„ bilge to planksheer, worked carvel with a lining piece (1 in.) thick, double or single rivetted; rivets (7 in.) diameter, averaging (3 ¹/₂ ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

„ worked carvel with a lining piece (1 ¹/₈) thick, or clencher, double or single rivetted; rivets (7 in.) diameter, averaging (3 ¹/₂ ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 ¹/₂) Breadth of laps in single rivetting ()

„ sides { Explain by sketch, }
to the Beams { if necessary. }

„ of plates how secured? with screw bolts from above

„ and aft each side of stretcherways 13 ¹/₂ in. and diagonal plates where practicable

„ Beam ends turned down Ditto

„ how are pointers compensated? _____

„ and how is the iron and plate iron in the vessel? Consolidated boiler plate Builder's Signature

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IRON 436 - 0438
The Reid & Co Foundation

3291 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three 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? Solid

Do the holes for rivetting plate to frames, lining pieces, 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

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.		
N ^o .		Fathoms.	Inches.	N ^o .	Weight.	
	Fore Sails,	Chain <u>Proved to 55 tons 29 ft</u>	300	1 1/2	Bower, <u>Manufactured proved to 31. 8. 3.</u>	1 33. 3.
	Fore Top Sails,	" <u>Stream do 9 " 4 " 2.</u>	90	8	Common do <u>31. 12. 2.</u>	1 34. --
<u>One</u>	Fore Topmast Stay Sails,	Hempen Stream Cable	90	10	Stream, do	1 13. 3.
<u>Two</u>	Main Sails,	Hawser	90	9	Kedge, do	1 6. --
<u>Two</u>	Main Top Sails,	Towlines	90	5 1/2	do	1 3. 2.
	and Spare Sails	Warp				
		All of <u>Good</u> quality.				

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

She has One Long Boat and One Life Boat and two others

The present state of the Windlass is Good 3 Capstans Good and Rudder Good Pumps One pair Wilkin's patent iron, & three lead bidge

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the progress of rivetting
- 3rd. When the beams were in and fastened, and before the decks were laid
- 4th. When the ship was complete, and before the plating was finally coated
- 5th. After the ship was launched

Special survey while building from November 1862 to 8th Sept: 1863 in all 34 visits.

This vessel has been built under Special Survey as per Order N^o 266; is fitted with gutter waterways and Iron Stanchions. The butt straps to Sheerstrakes extend from the frame afore the butt to the frame abaft it; also an extra Stringer, of Angle Iron, fitted midway in the 'twist decks between the upper and lower decks, back to back 5 1/2 x 4 1/2 x 1/2 for 150 feet amidships on each side.

Chains and Anchors tested by Mersey Docks and Harbour Board.

In what manner are the surfaces preserved from oxidation? Inside with three coats of Derby Red and Portland Cement, up to the two bilges; and outside three coats of Derby Red, and bottom coated with Bell's composition.

I am of opinion this Vessel should be classed 12 A1

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

Special £ 59 : 4 : 0

Certificate (required) £ : : 0

Committee's Minute 15th September 1863

Character assigned A 1 for 12 Years

(A.C.P.)

