

IRON SHIPS.

Request for S.S. No. 291

Reg. 15/60

Survey held at Glasgow Date April 22nd 1881
 the Ship "Hartfell" now Pioneer Master Houston
 Tonnage Gross Engine Room Register 1224 Built at Glasgow
 when Built 1864 Launched 10th March 1864 By whom built Messrs Barclay Curle & Co
 owners W. Rose Port belonging to Liverpool Destined Voyage India
 Surveyed Afloat or in Dry Dock whilst building

Length aloft	Fect.	Inches.	Extreme Breadth	Fect.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Fect.	Inches.	Power of Engines	Horse.
215			35		45	22				
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	20		21							
Frames, Size of Angle Iron, and No. at bottom of Floor Plate	5	3	9/16	5	3	9/16				
depth and thickness of Floor Plate at mid line	2 1/2	1/16		23						
depth and thickness of Floor Plate at Bilge Keelson	11	1/16								
Size of Reversed Angle Iron, and No. at top of Floor Plate	3 1/2	3	9/16	3 1/2	3	9/16				
Frames, Size of Angle Iron, single or double	5	3	9/16	5	3	9/16				
Reversed Iron, if to every frame	to the upper part									
Reversed Iron, if to every other frame	to the lower part									
Beams, Deck (N ^o . 60) double Angle Iron, Plates, or Bulb Iron	3 1/2	3	9/16	3 1/2	3	9/16				
double or single Angle Iron on upper edge	3	3	7/16	3 1/2	3 1/2	9/16				
average space between	3 feet 4 3/4									
if wood (N ^o .) sided & moulded										
Hold, or Lower Deck (N ^o . 56) double Angle Iron, Plates, or Bulb Iron	3 1/2	3	9/16	3 1/2	3	9/16				
double or single Angle Iron on upper edge	3	3	7/16	3 1/2	3 1/2	9/16				
average space between	3 feet 4 3/4									
if wood (N ^o .) sided & moulded										
Paddle, wood, sided and moulded, or if Iron, size of Plate										
Engine										
Keelson, single plate, cross or intercostal	30	1/16		28						
Size of Plates	as per sketch									
Size of Angle Irons	5	4 1/2	9/16	5	4 1/2	9/16				
Ditto Bilge (No. 10)	5	4 1/2	9/16	5	4 1/2	9/16				
Transoms, material, if none, in what manner compensated for										
Stanchions, and Hawse Timbers	Iron Frames									
Do the Frames or Ribs extend in one length from middle line to keelson rivetted through plates with (7/16 in.) rivets, about (7) apart.	Yes									
Do the reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to keelson	Yes									
Do the reverse angle irons on the frames extend in one length across the middle line from keelson to bilge	Yes									
Keelson, how are the various lengths of plates or angle irons connected?	by lacing pieces									
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (1/2 in.) from centre to centre of rivet.	Yes									
Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (7/16 in.) diameter, averaging (1/2 in.) from centre to centre of rivets.	Yes									
Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (7/16 in.) diameter, averaging (1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?	Yes									
Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; rivets (7/16 in.) diameter, averaging (1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?	Yes									
Edge of Sheerstrake, double or single rivetted?	Yes									
Butts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (7/16 in.) diameter averaging (1/2 in.) from centre to centre of rivets. Breadth of laps in double rivetting (1/2 in.) Breadth of laps in single rivetting ()	Yes									
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	Throughout									
Planksheer, how secured to the plating of the sides	Gutter									
Waterway, planksheer and to the Beams	Gutter Waterway and Iron Bulwarks									
Deck Beams, how secured to the side?	Welded boxes rivetted to beams									
Hold or Lower Deck	Ditto									
Middle	Ditto									
of breasthooks	Five crutches									
how are pointers compensated?	round stem and all stringers and beams									
description of iron is used for the angle iron and plate iron in the vessel	Mossend Angle									
Builder's Signature	Bar and Boiler Plate Barclay Curle & Co									

102N437-0232

3561 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? Yes
 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 in corners of B

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 W ^t	
<u>A Double</u> <u>Suit of</u> <u>Sails</u>	Fore Sails,	<u>Tested to 59 1/2 Tons</u>	<u>300</u>	<u>1 1/2</u>	<u>Rodgers Patent</u>	<u>30</u>
	Fore Top Sails,				<u>Bower</u>	<u>3 1/2</u>
	Fore Topmast Stay Sails,				<u>Tested to 22 1/2 Tons</u>	<u>4 1/2</u>
	Main Sails,				<u>Rodgers Patent</u>	<u>1 1/2</u>
	Main Top Sails,				<u>Kedge</u>	<u>2 6.0</u>
All of <u>Good</u> quality.						<u>3 3.2</u>

Her Standing and Running Rigging Good and sufficient in size and Good in quality.
 She has a 25 feet Long Boat and 25 feet Life Boat, 22 feet Cabin and a 25 feet C^o
 The present state of the Windlass is True Capstan True and Rudder True Pumps True and efficient

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 Built under spec
 - 2nd. On the plating during the progress of rivetting Survey and seen on the following
 - 3rd. When the beams were in and fastened, and before the decks were laid Dates Oct. 6. 21. 29. Sep. 9. 16. 29. Oct.
 - 4th. When the ship was complete, and before the plating was finally coated 14. 28. Feb. 2. 11. 17. 25. Dec. 3. 10. 17.
 - 5th. After the ship was launched 22. 1863. Jan. 11. 21. Feb. 3. 9. 25. Mar. 2. 29. Apr. 4. 21. 27.

Middle Line Keelson fitted intercostal with a Foundation Plate on each side of Middle Line 12 x 1/2 and four Angle Bars 5 x 1/2 x 9/16. An Intermediate Intercostal Keelson fitted midway between Middle Line and Bilge Keelson 1 1/2 x 1/2 with double Angl Bars riveted to Copper parts of Flens 5 x 1/2 x 9/16. Stinger above Bilge formed with two Angle Bars 5 x 1/2 x 9/16 and a Built Plate 9 x 9/16. Ceiling in flat of Bottom fitted in Hatches for lifting

In what manner are the surfaces preserved from oxidation Flat of Bottom with Portland Cement, rim with Patent Paint

I am of opinion this Vessel should be classed 12 A. 1

The amount of the Fee £ 5 : 0 : 0 is received by me,
 Special £ 61 : 4 : 0
 Certificate (if required) £ Party:

Committee's Minute 10th Mar. 1864

Character assigned A 1 for 12 Years

[Handwritten signature: J. B. Parkhurst]
 I concur in the above recommendation
 8th May 1864 *[Handwritten signature]*
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