

IRON SHIPS.

No. 1972 Survey held at Glasgow Date Jan 21 1882
on the "Haribal" Master C. Richardson

Tonnage Gross 1197.89 Engine Room 1197.89 Register 1197.89 Built at Glasgow
When Built 1882 By whom built James Smith & Co. Owners W. H. Dixon

Port belonging to Liverpool Destined Voyage India

Surveyed Afloat or in Dry Dock Under building

Feet. Inches.		Feet. Inches.		Feet. Inches.		Horse No.	
Length aloft		Extreme Breadth		Depth from top of Upper Deck		Power of Engines	
<u>208</u>		<u>34</u>		<u>22</u>			
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft		Inches in ship		Inches required per Rule		Inches. 16ths. required required	
		<u>18</u>		<u>18</u>		<u>3 1/2 3 1/2 3</u>	
Floors, Size of Angle Iron, and No. bottom of Floor Plate		Inches. In Ship. In Ship.		Inches. In Ship. In Ship.		Inches. 16ths. required required	
<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>	
,, depth and thickness of Floor Plate at mid line		<u>23</u> <u>1 1/2</u>		<u>22</u> <u>3/4</u>		<u>23</u> <u>1 1/2</u>	
,, depth and thickness of Floor Plate at Bilge Keelson		<u>6</u> <u>1 1/2</u>		<u>5</u> <u>1 1/2</u>		<u>6</u> <u>1 1/2</u>	
,, Size of Reversed Angle Iron, and No. at top of Floor Plate		<u>3 1/2</u> <u>3</u> <u>4 1/2</u> <u>3 1/2</u> <u>3</u> <u>4 1/2</u>		<u>3 1/2</u> <u>3</u> <u>4 1/2</u> <u>3 1/2</u> <u>3</u> <u>4 1/2</u>		<u>3 1/2</u> <u>3</u> <u>4 1/2</u> <u>3 1/2</u> <u>3</u> <u>4 1/2</u>	
Frames, Size of Angle Iron, single or Reversed Iron, if to every frame or every other frame		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>		<u>5</u> <u>3</u> <u>9 1/2</u> <u>5</u> <u>3</u> <u>9 1/2</u>	
Beams, Deck (No. <u>03</u>) double Angle Iron or Bulb Iron with double Angle Iron on top		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>	
,, depth & thickness of plate amidships		<u>8 1/2</u> <u>9 1/4</u>		<u>8 1/2</u> <u>9 1/4</u>		<u>8 1/2</u> <u>9 1/4</u>	
,, double or single Angle Iron on lower edge		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, average space between		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, if wood (No. <u>08</u>) sided & moulded		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, Hold, or Lower Deck (No. <u>08</u>) double Angle Iron or Bulb Iron with double Angle Iron on top		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>		<u>5 1/2</u> <u>3</u> <u>4 1/2</u> <u>5 1/2</u> <u>3</u> <u>4 1/2</u>	
,, depth & thickness of plate amidships		<u>8 1/2</u> <u>9 1/4</u>		<u>8 1/2</u> <u>9 1/4</u>		<u>8 1/2</u> <u>9 1/4</u>	
,, double or single Angle Iron on lower edge		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, average space between		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, if wood (No. <u>08</u>) sided & moulded		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, Paddle, wood, sided and moulded or if Iron, size of Plate		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>		<u>3</u> <u>feet</u>	
,, Engine		<u>8</u> <u>4 1/2</u> <u>9 1/2</u> <u>8</u> <u>4 1/2</u> <u>9 1/2</u>		<u>8</u> <u>4 1/2</u> <u>9 1/2</u> <u>8</u> <u>4 1/2</u> <u>9 1/2</u>		<u>8</u> <u>4 1/2</u> <u>9 1/2</u> <u>8</u> <u>4 1/2</u> <u>9 1/2</u>	
Keelson, wood, sided & moulded, iron, size of plate, Box, give sketch & dimensions		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>	
,, Side of Bilge		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>		<u>13</u> <u>4 1/2</u> <u>13</u> <u>4 1/2</u>	
,, Number		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Transoms, material <u>Plate</u> or, if none, in what manner compensated for.		<u>5</u> <u>4 1/2</u> <u>9 1/2</u> <u>5</u> <u>4 1/2</u> <u>9 1/2</u>		<u>5</u> <u>4 1/2</u> <u>9 1/2</u> <u>5</u> <u>4 1/2</u> <u>9 1/2</u>		<u>5</u> <u>4 1/2</u> <u>9 1/2</u> <u>5</u> <u>4 1/2</u> <u>9 1/2</u>	
Knight-heads		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Hawse Timbers		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Bulkheads, No. <u>2</u> Thickness of <u>1 1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, how secured to the sides of the ship		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, size of vertical angle iron and their distance apart		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
The Frames or Ribs extend in one length from <u>Keel</u> to <u>Gunwale</u> rivetted through plates with (<u>4</u> pin.) rivets, about (<u>7</u>) apart.		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
The reverse angle irons on the floors extend in one length across the middle line from <u>3</u> to <u>Hold</u> <u>Beam</u> <u>Stringer</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, on the frames ,, ,, from <u>3</u> to <u>Hold</u> <u>Beam</u> <u>Stringer</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Keelson, how are the various lengths of plates or angle irons connected? <u>Rivetted on top of floors</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Plates, Garboard, double <u>single</u> rivetted to keel & at upper edge, with rivets (<u>1/2</u> in.) diameter averaging (<u>1/2</u> in.) from centre to centre of rivet.		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, Edges from Garboards to upper part of bilge, worked <u>carvel</u> with a lining piece (<u>1/2</u> in.) thick, or <u>double</u> <u>single</u> rivetted; rivets (<u>1/2</u> in.) diameter, averaging (<u>3/2</u> ins.) from centre to centre of rivets.		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, Butts from Keel to turn of bilge, worked <u>carvel</u> with a lining piece (<u>1/2</u> in.) thick, <u>double</u> <u>single</u> rivetted; rivets (<u>1/2</u> in.) diameter, averaging (<u>3/2</u> ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>Yes</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, Edges from bilge to planksheer, worked <u>carvel</u> with a lining piece (<u>1/2</u> in.) thick, <u>double</u> <u>single</u> rivetted; rivets (<u>1/2</u> in.) diameter, averaging (<u>3/2</u> in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>Yes</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
,, Butts from bilge to planksheers, worked <u>carvel</u> with a lining piece (<u>1/2</u> in.) thick, or <u>double</u> <u>single</u> rivetted; rivets (<u>1/2</u> in.) diameter averaging (<u>3/2</u> ins.) from centre to centre of rivets. Breadth of laps in double rivetting (<u>3</u> in.) Breadth of laps in single rivetting (<u>3</u> in.)		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Planksheer, how secured to the plating of the sides		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Waterway ,, ,, planksheer and to the Beams		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Side trussing breadth and thickness of plates how secured? <u>Four pairs of diagonal plates 1 1/4 x 4 1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Deck trussing ,, ,, extending from Gunwale plate to side		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Deck Beams, how secured to the side? <u>Pressed knees 3 1/2 rivetted to frames</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Hold or Lower Deck ,,		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Paddle ,,		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
No. of breasthooks <u>Five</u> crutches <u>Five</u> how are pointers compensated? <u>round stern frames complete and all</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
What description of iron is used for the angle iron and plate iron in the vessel? <u>Complete plate</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	
Frames at Head and Stern stamped "Steel" and "Steel"		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>		<u>18</u> <u>1/2</u>	

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 riveted 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? *Yes. a few in corners of Butts*

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

She has **SAILS.**

CABLES, &c.

ANCHORS, and their weights.

No.		Fathoms.	Inches.	No.	Weight.
	Fore Sails,	<i>Tested to 55 1/2 fms</i>		<i>J.S. Rodgers patent</i>	<i>41.0.15</i>
	Fore Top Sails,	Chain	<i>300</i>	Bower,	<i>34.0.23</i>
	Fore Topmast Stay Sails,	Hempen Stream Cable	<i>90</i>	Stream,	<i>32.2.12</i>
	Main Sails,	Hawser <i>Cham</i>	<i>80</i>		<i>14.2.7</i>
	Main Top Sails,	Towlines	<i>90</i>	Kedge,	<i>25.3.10</i>
		Warp	<i>90</i>		<i>3.0.7</i>
		All of <i>good</i> quality.			

Her Standing and Running Rigging *good* sufficient in size and *good* in quality.

She has *one launch 20 ft Long Boat and Pinnace 24 ft. launch 22 ft and Gig 22 ft*

The present state of the Windlass is *new* Capstan *new* and Rudder *new* Pumps *new 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 Special Survey and seen on the following dates*
 - 2nd. On the plating during the progress of rivetting *Apr 5. 19 May 1. 12. 1901*
 - 3rd. When the beams were in and fastened, and before the decks were laid *June 3. 13. 17 July 14. Aug 5. 1901*
 - 4th. When the ship was complete, and before the plating was finally coated *21. 29. Sept. 10. 15. 20. 26 Oct. 2. 9. 11. 21 Nov. 11. 1901*
 - 5th. After the ship was launched *21. 29. Sept. 10. 15. 20. 26 Oct. 2. 9. 11. 21 Nov. 11. 1901*

Up to my last visit on this vessel, the 17 June materials and workmanship were satisfactory and the scantlings in accordance with the 12 years plan, under the 1000 ton scale

M. D. Smith

This vessel is fitted with a full (Poop) and Forecastle. Box Nelson as per Secretary's letter of the 23rd May 1902; between the Stantuns on the Upper Deck red pine is fitted flush with the upper part of Sheustrake; the vessel in every other respect as per accompanying Midship Section

In what manner are the surfaces preserved from oxidation? *red lead and patent paint, inside flat of bottom with Portland Cement*

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

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

Special£ 59: 18: :

Certificate (if required)£ 5: .. :

Committee's Minute *28th November 1901*

Character assigned *A 1 for 12 Years*

A. Darling

I concur in the above recommendation