

# IRON SHIPS.

No. 7932 Survey held at Sunderland Date October 10th 18 63  
on the Ship "Berar" Master Wm Hall  
Tonnage Gross 902.12 <sup>under Deck 819.17</sup> Engine Room 902.12 Register 902.12 Built at Sunderland  
When Built 1863 By whom built V. Pele Hay & Co Owners G. D. Tyser  
Launched 16th September  
Port belonging to London Destined Voyage Madras.  
If Surveyed Afloat or in Dry Dock Whilst Building

	Feet.		Inches		Feet.		Inches		Feet.		Inches		Horse No.
Length aloft .....	188.5		Extreme Breadth....		32.45		Depth from top of Upper Deck Beam to top of Floor.....		20.3		Power of Engines.....		
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft }	Inches in Ship.		Inches required per Rule.		Inches required per Rule.		Inches required per Rule.		Inches required per Rule.		16ths required per Rule.		
Floors, Size of Angle Iron, and No. / at bottom of Floor Plate.....	4 1/2 3		8		4 1/2 3		8		7 1/2 3		7 1/2 3		
„ depth and thickness of Floor Plate at mid line .....	21 "		10		21 1/2 "		89		9 2 1/2		7 1/2 3		
„ depth and thickness of Floor Plate at Bilge Keelson .....	10 "		10 "		" "		89		" "		" "		
„ Size of Reversed Angle Iron, and No. / at top of Floor Plate..	3 3		7		3 3		7		" "		" "		
Frames, Size of Angle Iron, single or double..	4 1/2 3		8		4 1/2 3		8		" "		" "		
„ „ Reversed Iron, if to every frame	2		2		2		2		" "		" "		
„ „ And to every altern <sup>d</sup> frame.....	2		2		2		2		" "		" "		
Beams, Deck (N <sup>o</sup> 53) double Angle Iron or Bulb Iron with double Angle	8 1/2 3		6		3 3		6		" "		" "		
„ Iron on top .....	8 1/2		" "		8 1/2		" "		" "		" "		
„ „ depth & thickness of plate amidships	3/4		" "		3/6		" "		" "		" "		
„ „ double or single Angle Iron, on lower edge .....	3/4		" "		3/6		" "		" "		" "		
„ „ average space between .....	3/4		" "		3/6		" "		" "		" "		
„ „ if wood (N <sup>o</sup> ) sided & moulded	3		3		6		3 3		" "		" "		
„ „ Hold, or Lower Deck (N <sup>o</sup> 52 ) double Angle Iron or Bulb Iron with double Angle Iron on top	8 1/2		" "		8 1/2		" "		" "		" "		
„ „ depth & thickness of plate amidships	3/4		" "		3/6		" "		" "		" "		
„ „ double or single Angle Iron, on lower edge .....	3/4		" "		3/6		" "		" "		" "		
„ „ average space between .....	3/4		" "		3/6		" "		" "		" "		
„ „ if wood (N <sup>o</sup> ) sided & moulded	3		3		6		3 3		" "		" "		
„ „ Paddle, wood, sided and moulded or if Iron, size of Plate .....	3		3		6		3 3		" "		" "		
„ „ Engine „ „ „ „ .....	3		3		6		3 3		" "		" "		
Keelson, wood, sided & moulded, iron, size of plate, if Box-girt sketch & dimensions	14		12		14 1/2		" 12		" "		" "		
„ „ Side or Bilge .....	5		4		2		5 4		" "		" "		
„ „ Number .....	5		4		2		5 4		" "		" "		
Stem, if bar iron, moulding and thickness ....	9		2 1/2		1 1/2		3		" "		" "		
„ „ if plate iron, breadth and thickness ....	7 1/2		3		7 1/2		3		" "		" "		
Stern-post, if bar iron, moulding and thickness	7 1/2		3		7 1/2		3		" "		" "		
„ „ if plate iron, breadth and thickness	7 1/2		3		7 1/2		3		" "		" "		
Keel, if bar iron, depth and thickness.....	9		2 1/2		1 1/2		3		" "		" "		
„ „ if plate iron, breadth and thickness ....	9		2 1/2		1 1/2		3		" "		" "		
Garboard Plates, thickness... J.B.R. Siding B.	3 1/2		12		30		12		" "		" "		
From Garboard to upper part of Bilge.....	11		" "		11		" "		" "		" "		
From upper part of Bilge to Sheerstrakes.....	10		" "		10		" "		" "		" "		
Sheerstrakes .....	3 1/2		11		30		11		" "		" "		
Breadth & thickness of Butt Straps to outside plating }	9 1/2		10 1/2		12 1/2		10 1/2		" "		" "		
Planksheers .... And ....	30		10		2 1/2		9		" "		" "		
Gunwale Plate or Stringer on ends of Up. Dk Beams }	5x4x8		5x4x8		5x4x8		5x4x8		" "		" "		
Angle Iron on ditto.....	3x2 1/2x6		" "		" "		" "		" "		" "		
Waterway .....	Yellow Pine		3 1/2		3 1/2		" "		" "		" "		
Deck.....	d"		2 1/2		" "		" "		" "		" "		
Ceiling in Hold .....	d"		2		" "		" "		" "		" "		
Ceiling betwixt Decks ....	d"		2		" "		" "		" "		" "		
Beam Clamps .....	Iron		24		10		20 1/2		9		" "		
„ „ Shelf .....	5x4x8		5x4x8		5x4x8		5x4x8		" "		" "		
„ „ Stringer Plates on ends of Hold or Lower Dk Beams }	Yellow Pine		2		" "		" "		" "		" "		
Ceiling between Decks ....	2nd Oregon		12		10		12		9		" "		
Stringer or Tie Plates out- side Hatchways .....	Deck Beam Clamps		" "		" "		" "		" "		" "		
Deck Beam Clamps .....	" "		" "		" "		" "		" "		" "		
„ „ Shelf .....	Stringers in Hold .....		5x4x8		5x4x8		5x4x8		" "		" "		
„ „ „ „ .....	Deck, Lower .....		3		" "		" "		" "		" "		
„ „ „ „ .....	Deck, Upper, how fastened to Beams with 7/16 Nut & Screw Bolt		" "		" "		" "		" "		" "		

Transoms, material iron or, if none, in what manner compensated for.

Knight-heads „ 5/16 Iron Bulkhead Bulkheads, N<sup>o</sup>. 2 Thickness of 6/16

Hawse Timbers „ Chocks } are they free from defects? „ how secured to the sides of the ship On the frames

The Frames or Ribs extend in one length from Keel to Summit rivetted through plates with 1/2 in. rivets, about ( 3 ) apart.

The reverse angle irons on the floors extend in one length across the middle line from Platz to Lower Deck

" " " on the frames " " " from Flat to gunwale on alternate frames

Keelson, how are the various lengths of plates or angle irons connected? *Built straps also a flat plate on top 10x9/16*

Plates, Garboard, double ~~or single~~ rivetted to keel & at upper edge, with rivets ( $1\frac{1}{8}$  ins.) diameter averaging  $\frac{1}{2}$  in. from centre to centre of rivet.

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

„ Butts from Keel to turn of bilge, worked carvel with a lining piece ( $\frac{1\frac{1}{2}}{11/16}$ ) thick, double ~~or single~~ rivetted; rivets ( $\frac{3}{8}$  in.) diameter, averaging ( $3\frac{1}{2}$  ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below *at intervals*.

Edges from bilge to planksheer, worked ~~carvel~~ <sup>clencher</sup> with a lining piece (—) thick, ~~double or single~~ rivetted; rivets ( $\frac{3}{4}$  in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? *at alternate strakes.*

„ Butts from bilge to planksheers, worked carvel with a lining piece ( $\frac{11}{16}$ ) thick, ~~or clench~~, double ~~or single~~ rivetted; rivets ( $\frac{3}{4}$  in.) diameter averaging ( 3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting ( 5 ) Breadth of laps in single rivetting ( )

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

~~side trussing~~ ~~breadth and thickness of plates~~ ~~how secured?~~

Deck trussing	"	"	"	"	"	Diagonal plates 12 inches wide x $\frac{1}{16}$ thick
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Deck Beams, how secured to the side? Bracket ends forged on beams.

Hold or Lower Deck,, Bracket ends fitted to beams

~~Public~~ 22 23

No. of breasthooks five crutches five how are pointers compensated? 70

What description of iron is used for the angle iron and plate iron in the vessel? *Hopkins & Co*

& Shotley Bridge Iron & Steel Manufacturers

*Builder's Signature*

LOVE'S REAR

1921-61

120N437-0005



3335 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-riveted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? They are

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They do

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Wide joints

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? They do and are the rivet holes well and sufficiently countersunk in the outer plate? They are

Are there any rivets which either break into or have been put through the seams or butts of the plating? a few in the butts

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

She has SAILS.

CABLES, &c.

ANCHORS, and their weights.

N <sup>o</sup> .		Certificate of Admiralty test produced	Fathoms.	Inches.	Certificate of Admiralty test produced	N <sup>o</sup> .	Weight.
2	Fore Sails,	51 3/4 lbs	300	1 7/8	Bower, .....	3	37.3.26
2	Fore Top Sails,		90	7/8	32		37.1.0
2	Fore Topmast Stay Sails,		90	9	30		35.2.0
2	Main Sails,		90	9	Stream, .....	1	11.1.2
2	Main Top Sails,		90	6	Kedge, .....	2	5.1.1
	and others to complete double suit	All of <u>good</u> quality.			4 1/2		2.2.1

Her Standing and Running Rigging Wire, Hemp & Manilla sufficient in size and Good in quality.

She has One Long Boat and three others

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good

**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  
2nd. On the plating during the progress of rivetting Special Survey between  
3rd. When the beams were in and fastened, and before the decks were laid the 20<sup>th</sup> of May the 10<sup>th</sup> of  
4th. When the ship was complete, and before the plating was finally coated October  
5th. After the ship was launched

*The recommendations of Mr. Martin have been attended to as requested.*

In what manner are the surfaces preserved from oxidation? Portland Cement to turn of Bilge, Paint Oil of Iron & White Lead internally; Externally oxide of Iron, & Mc. Jones paste on bottom.

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

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

Order No. 1888 Special .....£ 45: 2: "

Certificate (if required) .....£ : :

Committee's Minute 16<sup>th</sup> October 1863

Character assigned A 1

*W. Martin*  
*J. W. Miles*

*This Iron Sailing Ship is not in my recent Report to the Committee of Ships then building at Sunderland. It appears eligible for Classification as here recommended.*  
*Oct 13/63*

