

IRON SHIPS.

3685

Rev 1/8/64

Durbiton
 Survey held at *Newcastle* Date *18 March to 21 June 1864*
 on the ship *"Charles Capper"* Master *James Gibson*
 Tonnage Gross *454.14* Engine Room *172.50* Register *581.54* Built at *Newcastle*
 When Built *1854* By whom built *Palmer 13th St* Owners *C. Capper Esq*
 Port belonging to *Madras* Destined Voyage *Madras*
 Surveyed Afloat or in Dry Dock *and while building*

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Power of Engines	Horse No.		
<i>200</i>			<i>28</i>			<i>17</i>		<i>10</i>	<i>90</i>	<i>44 horse</i>		
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	<i>21</i>		<i>21</i>		Stem, if bar iron, moulding and thickness		<i>7 2 3/4 7 1/2 2 3/4</i>		<i>x</i>			
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	<i>4</i>	<i>3</i>	<i>7</i>	<i>4 1/2</i>	<i>3</i>	Stern-post, if bar iron, moulding and thickness		<i>8 5 7 1/2 5</i>		<i>x</i>		
depth and thickness of Floor Plate at mid line	<i>17 1/2</i>		<i>7 1/2</i>		Keel, if bar iron, depth and thickness		<i>7 2 3/4 7 1/2 2 3/4</i>		<i>x</i>			
depth and thickness of Floor Plate at Bilge Keelson	<i>17 1/2</i>		<i>7 1/2</i>		Garboard Plates, thickness		<i>39 1/2</i>		<i>9 1/16 full 10 1/16</i>			
Size of Reversed Angle Iron, and No. at top of Floor Plate	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>2 1/4</i>	From Garboard to upper part of Bilge		<i>8 1/16</i>		<i>9 1/16</i>		
Frames, Size of Angle Iron, single or double	<i>4</i>	<i>3</i>	<i>7</i>	<i>4 1/2</i>	<i>3</i>	From upper part of Bilge to Sheerstrakes		<i>7 1/16</i>		<i>8 1/16</i>		
Reversed Iron to every frame	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>2 1/4</i>	Sheerstrakes		<i>8 1/16</i>		<i>9 1/16</i>		
Beams, Deck (No. 43) double Angle Iron or Bulb Iron with double Angle Iron on top	<i>4</i>	<i>3</i>	<i>7</i>	<i>4 1/2</i>	<i>3</i>	Breadth & thickness of Butt Straps to outside plating		<i>8 1/16</i>		<i>9 1/16</i>		
depth & thickness of plate amidships	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	Planksheers		<i>5 1/16</i>		<i>4 1/16</i>		
double or single Angle Iron, on lower edge	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Gunwale Plate or Stringer on ends of Up. Dk Beams		<i>24</i>		<i>7 1/16</i>		
average space between	<i>3 ft. 6 in.</i>		<i>3 ft. 6 in.</i>		Angle Iron on ditto		<i>4 1/2</i>		<i>3 1/2</i>		<i>7 1/16</i>	
if wood (No.) sided & moulded	<i>3 ft. 6 in.</i>		<i>3 ft. 6 in.</i>		Waterway		<i>12 x 8</i>		<i>12 x 8</i>		<i>3 1/2</i>	
Hold, or Lower Deck (No. 31) double Angle Iron or Bulb Iron with double Angle Iron on top	<i>4</i>	<i>3</i>	<i>7</i>	<i>4 1/2</i>	<i>3</i>	Ceiling in Hold		<i>3 1/2</i>		<i>3 1/2</i>		
depth & thickness of plate amidships	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	<i>2 1/2</i>	Ceiling betwixt Decks		<i>3 1/2</i>		<i>3 1/2</i>		
double or single Angle Iron, on lower edge	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Beam Clamps		<i>3 1/2</i>		<i>3 1/2</i>		
average space between	<i>3 ft. 6 in.</i>		<i>3 ft. 6 in.</i>		Shelf		<i>3 1/2</i>		<i>3 1/2</i>		<i>3 1/2</i>	
if wood (No.) sided & moulded	<i>3 ft. 6 in.</i>		<i>3 ft. 6 in.</i>		Stringer Plates on ends of Hold or Lower Dk Beams		<i>3 1/2</i>		<i>3 1/2</i>		<i>3 1/2</i>	
Paddle, wood, sided and moulded or if Iron, size of Plate	<i>3 ft. 6 in.</i>		<i>3 ft. 6 in.</i>		Ceiling between Decks		<i>3 1/2</i>		<i>3 1/2</i>		<i>3 1/2</i>	
Engine	<i>24</i>		<i>7 1/16</i>		Stringer or Tie Plates outside Hatchways		<i>12</i>		<i>7 1/16</i>		<i>10 1/2</i>	
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3 1/4</i>	Deck Beam Clamps		<i>4 1/2</i>		<i>3 1/4</i>		
Side or Bilge	<i>4 1/2</i>	<i>3 1/4</i>	<i>7 1/16</i>	<i>4 3/4</i>	<i>3 1/4</i>	Shelf		<i>4 1/2</i>		<i>3 1/4</i>		
Number	<i>4 1/2</i>	<i>3 1/4</i>	<i>7 1/16</i>	<i>4 3/4</i>	<i>3 1/4</i>	Stringers in Hold		<i>4 1/2</i>		<i>3 1/4</i>		
Transoms, material <i>Plate</i> or, if none, in what manner compensated for.	<i>4 1/2</i>		<i>3 1/4</i>		Deck, Lower		<i>4 1/2</i>		<i>3 1/4</i>		<i>9 1/16</i>	
Knight-heads	<i>4 1/2</i>		<i>3 1/4</i>		Deck, Upper, how fastened to Beams		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Hawse Timbers	<i>4 1/2</i>		<i>3 1/4</i>		Bulkheads, No. <i>1</i> Thickness of <i>1 1/16 - 1 1/16</i>		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
The Frames or Ribs extend in one length from <i>keel</i> to <i>gunwale</i> rivetted through plates with <i>3/4</i> in. rivets, about <i>2</i> in. apart.	<i>4 1/2</i>		<i>3 1/4</i>		how secured to the sides of the ship <i>3/4</i> in. diameter plates		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
The reverse angle irons on the floors extend in one length across the middle line from <i>keel</i> to <i>gunwale</i>	<i>4 1/2</i>		<i>3 1/4</i>		size of vertical angle iron and their distance apart <i>3/4</i> in. diameter		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Keelson, how are the various lengths of plates or angle irons connected? <i>by bolts</i>	<i>4 1/2</i>		<i>3 1/4</i>		Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets <i>1 1/16</i> in. diameter averaging <i>4 1/2</i> in. from centre to centre of rivet.		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Edges from Garboards to upper part of bilge, worked carvel with a lining piece <i>3/4</i> in. thick, or clencher, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> ins. from centre to centre of rivets.	<i>4 1/2</i>		<i>3 1/4</i>		Edges from Garboards to upper part of bilge, worked carvel with a lining piece <i>3/4</i> in. thick, or clencher, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> ins. from centre to centre of rivets.		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Butts from Keel to turn of bilge, worked carvel with a lining piece <i>3/4</i> in. thick, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> ins. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <i>no</i>	<i>4 1/2</i>		<i>3 1/4</i>		Butts from Keel to turn of bilge, worked carvel with a lining piece <i>3/4</i> in. thick, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> ins. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <i>no</i>		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Edges from bilge to planksheer, worked carvel with a lining piece <i>3/4</i> in. thick, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> in. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <i>no</i>	<i>4 1/2</i>		<i>3 1/4</i>		Edges from bilge to planksheer, worked carvel with a lining piece <i>3/4</i> in. thick, double or single rivetted; rivets <i>3/4</i> in. diameter, averaging <i>3</i> in. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <i>no</i>		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Butts from bilge to planksheers, worked carvel with a lining piece <i>3/4</i> in. thick, or clencher, double or single rivetted; rivets <i>3/4</i> in. diameter averaging <i>3</i> ins. from centre to centre of rivets. Breadth of laps in double rivetting <i>4</i> Breadth of laps in single rivetting <i>2 3/4</i>	<i>4 1/2</i>		<i>3 1/4</i>		Butts from bilge to planksheers, worked carvel with a lining piece <i>3/4</i> in. thick, or clencher, double or single rivetted; rivets <i>3/4</i> in. diameter averaging <i>3</i> ins. from centre to centre of rivets. Breadth of laps in double rivetting <i>4</i> Breadth of laps in single rivetting <i>2 3/4</i>		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Planksheer, how secured to the plating of the sides	<i>4 1/2</i>		<i>3 1/4</i>		Planksheer, how secured to the plating of the sides		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Waterway	<i>4 1/2</i>		<i>3 1/4</i>		Waterway		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Side trussing	<i>4 1/2</i>		<i>3 1/4</i>		Side trussing		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Deck trussing	<i>4 1/2</i>		<i>3 1/4</i>		Deck trussing		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Deck Beams, how secured to the side?	<i>4 1/2</i>		<i>3 1/4</i>		Deck Beams, how secured to the side?		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Hold or Lower Deck	<i>4 1/2</i>		<i>3 1/4</i>		Hold or Lower Deck		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
Side	<i>4 1/2</i>		<i>3 1/4</i>		Side		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
of breasthooks	<i>4 1/2</i>		<i>3 1/4</i>		of breasthooks		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	
at description of iron is used for the angle iron and plate iron in the vessel?	<i>4 1/2</i>		<i>3 1/4</i>		at description of iron is used for the angle iron and plate iron in the vessel?		<i>as per Rule</i>		<i>as per Rule</i>		<i>as per Rule</i>	

Builder's Signature
For Palmer 73rd St
Milwaukee

3685 from

Workmanship. Are the lands or laps of the clenctwork 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? Long pieces

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Generally 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? None

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.
<u>Me</u>	Fore Sails,	Chain	?		
<u>Complete</u>	Fore Top Sails,	Hempen Stream Cable	90 7/8		
<u>Sub-</u>	Fore Topmast Stay Sails,	Hawser	90 8		
	Main Sails,	Towlines	90 6		
	Main Top Sails,	Warp	90 5		
	All of <u>best</u> quality.				

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

She has the life 22 ft Long Boat and a Gig 20 ft and the 14 ft

The present state of the Windlass is Complete Capstan Me and Rudder Complete pumps of all kinds per order no 452

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
- Built per order
Special price
per order no 452

This vessel measures 14 tons more than the "S. R. Hindle" classed as Tonnage 9347.

The Sheer stake is doubled for 3/4 the length of vessel, and bottom double rivetted to upper part of bilges.

Chain cables and anchors have been sanctioned here to London where this has been lying, and when they are in London they will improve the London surveyors of the same. The Certificate of class. I herewith enclose

In what manner are the surfaces preserved from oxidation? None lead & asphalt in both

I am of opinion this Vessel should be classed A

The amount of the Fee£ 5 - - is received by me

July 11/84 Special£ 34. 14 -

Certificate (if required) gratis £ - - -

Committee's Minute 2nd August 1884

Character assigned A

[Handwritten signature]

[Handwritten notes]

2000 1064 © 2019

X: Mc Charles & Co. 9 Mining Lane, E.C.

