

IRON SHIPS.

Rec 25/2/65

1924 Survey held at Chester & Liverpool Date Dec 4/82 to July 8/83 (Dec 24 1864)
 the Ship North East Master Copeland
 Tonnage Gross 1 Engine Room 1 Register 997-5 Built at Chester Lancashire July 4/63
 when Built 1863 By whom built Rondee Iron Ship Builders Owners Cotterrough & Boyd
 now belonging to Liverpool Destined Voyage Calcutta
 Surveyed Afloat or in Dry Dock Whilst Building

Length aloft	Feet. Inches.		Extreme Breadth	Feet. Inches.		Depth from top of Upper Deck		Feet. Inches.		Power of Engines	Horse No.
Length aloft	198	2	Extreme Breadth	32	9	Depth from top of Upper Deck	21	9	Beam to top of Floor		

Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship		Inches required per Rule		Stem, if bar iron, moulding and thickness	Inches In Ship		16ths required per Rule		
	18		18		8	3	8	3		
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	5	3	9/16	4 3/4	3	8/16				
depth and thickness of Floor Plate at mid line	22		1/16	21	1/16					
depth and thickness of Floor Plate at Bilge Keelson	16		1/16							
Size of Reversed Angle Iron, and No. at top of Floor Plate	3 1/2	3	7/16	3 1/2	3	7/16				
Frames, Size of Angle Iron, single or double Reversed Iron, to every frame	5	3	9/16	4 3/4	3	8/16				
Beams, Deck (N ^o . 63) Double Angle Iron with double Angle Iron on top	3 1/2	3	7/16	3 1/2	3	7/16				
depth & thickness of plate amidships	8	9/16		8	8/16					
double or single angle iron on lower edge	3	3	7/16	3	3	6/16				
average space between	3 1/2			3 1/2						
Hold, or Lower Deck (N ^o . 63) Double Angle Iron with double Angle Iron on top	8	9/16		8	8/16					
depth & thickness of plate amidships	3	3	7/16	3	3	6/16				
double or single angle iron on lower edge										
average space between	3 1/2			3 1/2						
Riddle, wood, sides and moulded, iron, size of plate										
Engine	None									
Side or Bilge	None									
Number	None									

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

Knight-heads W Bulkheads, N^o. 2 to Upper Stk Thickness of 7/16

Hawse Timbers W are they free from defects? W how secured to the sides of the ship Double Ribs

The Frames or Ribs extend in one length from Keel to Gunnwale rivetted through plates with 1/8 in. rivets, about (7) apart.

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

Keelson, how are the various lengths of plates or angle irons connected? Butt Straps

Plates, Garboard, double W rivetted to keel & at upper edge, with rivets (7/8 ins.) diameter averaging (3 1/2 in.) from centre to centre of rivet.

Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/4 in.) thick, or clencher, double W rivetted; rivets (7/8 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 (1/4 in.) thick, double W rivetted; rivets (7/8 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? Yes & above also

Edges from bilge to planksheer, worked carvel with a lining piece (1/4 in.) thick, double W rivetted; rivets (7/8 in.) diameter, averaging (3 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 & above also

Butts from bilge to planksheers, worked carvel with a lining piece (1/4 in.) thick, or clencher, double W rivetted; rivets (7/8 in.) diameter averaging (3 1/2 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (5 in) Breadth of laps in single rivetting (5 in)

Planksheer, how secured to the plating of the sides } Explain by sketch, } See sketch on the other side.

Waterway W planksheer and to the Beams } if necessary.

Side trussing W breadth and thickness of plates W how secured? None

Deck trussing 13 W 4/16 W W Diagonal Plates

Deck Beams, how secured to the side? Rivetted to Ribs and Stringer Plates

Hold or Lower Deck W Rivetted to Ribs and Stringer Plates

Paddle W None

No. of breasthooks W crutches W how are pointers compensated? Keelsons, Stringers & Rib feet connected

What description of iron is used for the angle iron and plate iron in the vessel? Best Staffordshire Builder's Signature W. & C. Copeland

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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 riveting is adopted?~~ 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? Well for

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Solid 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? A few only

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

The owners have promised to have the anchors at a Public Machine

Annually found

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N ^o .			Inches.	No.	Weight
	Fore Sails,	Mersey 5th Brand Swedish		Blenheim Patent anchors	
	Fore Top Sails,	Swedish 59 tons	300	& three barbed	
	Fore Topmast Stay Sails,	Chain	1 1/2	See Report No. 19244	
	Main Sails,	Hempen Stream Cable	90	dated 2nd July/65	
	Main Top Sails,	Hawser	75	Stream,	1 13-0
	and	Towlines	50	Kedge,	2 16-1
		Warp	50		13-1
		All of <u>Good</u> quality.	6 1/2		

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

She has one Long Boat and three others.

The present state of the Windlass is Good (2 Capstans) Good and Rudder Good Pumps 2 in Main Hold & 1 in each end.

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

Mild steel building

This vessel was built by Specification before the new Rules were out, the Builders having no contract with respect to plating, and the Owners did not give a written Order for survey, but being built in the District I examined her during her construction taking all the sizes of scantlings &c. some defects being removed at my recommendation.

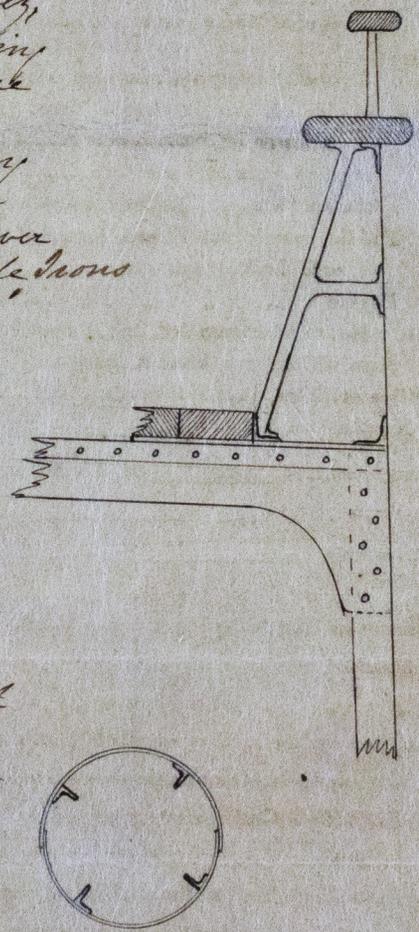
In many respects she is beyond the Rules, having an Intercostal Keelson fitted between the Middle line and Bilge Keelson. A very strong stringer in the lower hold formed with a plate 12 by 1 1/2 having double angle iron at both edges, the Rules only requiring double angle iron.

The Upper Deck Stringer plate is 12 inches in excess. The butts of the 7th Strake of outside plating from the keel (at bilges) are treble rivetted in the Midship body for a distance of about 150 feet. Butts of Upper Deck Stringer are treble rivetted, also the Butts of Sheerstrake cutts in the Midship body of the vessel. The Butts Straps 14 inches broad in the outside plating at bilge, Sheerstrake Plate & Upper Deck Stringer. There are 4 Pairs of Diagonal Tie Plate on the Upper Deck Beams & 3 Pairs on Lower ditto.

The 3 Lower Masts & Bowsprit are Iron, plates 7/16 & 1/2 with 4 angle iron - 4x3 - 3/16. Butts double rivetted edges single.

Lower & Sparrow Yard of steel - 1/2 & 3/16 at ends. Butts double rivetted edges single, 3 angle steel (Iron) 2 1/2 x 2 1/2 - 1/16. I respectfully submit to the Committee whether she should not be classed as stated below, the owners having now given an order for plating.

In what manner are the surfaces preserved from oxidation? Cement & Repaint
(The Intercostal Keelson is in excess of Rule)



I am of opinion this Vessel should be classed A 1

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

Special£ 21 : : "

Certificate (if required)£ : : "

Senhouse Martindale

Committee's Minute Good 24th January 1865

Character assigned A 1 - (C.P.)

GRCP