

IRON SHIPS.

No. 8130 Survey held at Sunderland Date 3rd October 63 to 27th May 1864
 on the Barge Rosa River Wear Master Alcock
 Tonnage Gross 500.33 Engine Room Under Deck 470.92 Register Alcock Built at Pallwin
 When Built 1863/4 Launched 7th May 64 By whom built W. Doxford
 Owners Hargreaves & Port belonging to Liverpool Destined Voyage St. Caldera
 If Surveyed Afloat or in Dry Dock Whilst building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.
162.9			26.3			17.4							
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	21		Inches in Ships.	21		Inches required per Rule.							
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	3 1/2		Inches in Ship.	3 1/2		Inches required per Rule.	16ths required per Rule.						
depth and thickness of Floor Plate at mid line	10		Inches in Ship.	8 1/2		Inches required per Rule.	16ths required per Rule.						
depth and thickness of Floor Plate at Bilge Keelson	8 1/2		Inches in Ship.	8 1/2		Inches required per Rule.	16ths required per Rule.						
Size of Reversed Angle Iron, and No. at top of Floor Plate	2 1/2		Inches in Ship.	6 1/2		Inches required per Rule.	16ths required per Rule.						
Frames, Size of Angle Iron, single or double	3 1/2		Inches in Ship.	3 1/2		Inches required per Rule.	16ths required per Rule.						
Reversed Iron, 1/2 to every frame	4		Inches in Ship.	4		Inches required per Rule.	16ths required per Rule.						
Beams, Deck (No. 45) double Angle Iron	7		Inches in Ship.	6 1/2		Inches required per Rule.	16ths required per Rule.						
double or single Angle Iron on top edge	2 1/2		Inches in Ship.	5		Inches required per Rule.	16ths required per Rule.						
average space between	3 1/2		Inches in Ship.	3 1/2		Inches required per Rule.	16ths required per Rule.						
if wood (No.) sided & moulded			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
Hold, Lower Deck (No. 20) double Angle Iron, Plate or Bulb Iron	7		Inches in Ship.	7 1/2		Inches required per Rule.	16ths required per Rule.						
double or single Angle Iron on top edge	2 1/2		Inches in Ship.	7		Inches required per Rule.	16ths required per Rule.						
average space between	8 1/2		Inches in Ship.	8 1/2		Inches required per Rule.	16ths required per Rule.						
if wood (No.) sided & moulded			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
Paddle, wood, sided and moulded, or if Iron, size of Plate			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
Engine			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
Keelson, single plate, box, or intercostal	15		Inches in Ship.	13		Inches required per Rule.	16ths required per Rule.						
Size of Plates	15		Inches in Ship.	13		Inches required per Rule.	16ths required per Rule.						
Size of Angle Irons	3		Inches in Ship.	6 1/2		Inches required per Rule.	16ths required per Rule.						
Ditto Bilge (No. 1) double	6		Inches in Ship.	4 1/2		Inches required per Rule.	16ths required per Rule.						
Transoms, material			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
Knight-heads, and Hawse Timbers			Inches in Ship.			Inches required per Rule.	16ths required per Rule.						
The Frames or Ribs extend in one length from	Keel		to		Gunnwale	rivetted through plates with (3/4 in.) rivets, about (6) apart.							
The reverse angle irons on the floors extend in one length across the middle line from	Flat		to		the upper part of bilge on every frame								
on the frames					from Flat	to Deck stringer on alternate frames							
Keelson, how are the various lengths of plates or angle irons connected?					Double rivetted butt straps								
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/2 in.) diameter averaging (2 1/2 in.) from centre to centre of rivet.													
Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 3/4 in.) from centre to centre of rivets.													
Butts from Keel to turn of bilge, worked carvel with a lining piece (1 1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 3/4 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?					Yes by being brought over								
Edges from bilge to sheerstrake, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 3/4 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?					Yes as above								
Edge of Sheerstrake, double or single rivetted?					butt straps from frame to frame								
Butts from bilge to planksheers, worked carvel with a lining piece (1 1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (—)													
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?													
Planksheer, how secured to the plating of the sides					Explain by sketch								
Waterway					if necessary.								
Deck Beams, how secured to the side?					Laid bracket plates								
Hold or Lower Deck													
No. of breasthooks					crutches								
how are pointers compensated?					iron transom								
What description of iron is used for the angle iron and plate iron in the vessel?					Iron Whitins, Hedges								

Plates Whitins Park & Bolton

William Doxford

IRON 437A - 0041

3611 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? 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? Single pieces

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 at corners of some 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 ^o .		Certified Judgment of	Fathoms.	Inches.	Certified Judgment of	N ^o .	Weight.
	Fore Sails,	Chain	90	13	Bower,	3	19.1.14
	Fore Top Sails,	Stream Cable	90	1			19.1.6
	Fore Topmast Stay Sails,	Hawser	90	6	Stream,	11	6.3.19
	Main Sails,	Towlines	90	8			
	Main Top Sails,	Warp	90	5	Kedge,	2	3.1.24
	and others as usual	All of <u>Good</u> quality.	90	4			1.3.12

Her Standing and Running Rigging Worthen's sufficient in size and Good in quality.

She has one Long Boat and two others

The present state of the Windlass is Good Capstan 2 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	<u>Built under</u>
	2nd.	On the plating during the progress of rivetting	<u>Special Survey</u>
	3rd.	When the beams were in and fastened, and before the decks were laid	<u>Between the</u>
	4th.	When the ship was complete, and before the plating was finally coated	<u>3rd October 1863</u>
	5th.	After the ship was launched	<u>and 2nd May 1864</u>

The stem being tapered at the head, to $5\frac{1}{2} \times 2\frac{3}{4}$, additional keelstrakes have been fitted in compensation -

The Bowport, Gun and Main Masts are of iron, 22 inches diameter at the partners, formed of two plates in the circumference, edges single rivetted butts double rivetted the plates are 3/8 thick, with three angle irons 2×3 . Fore & Main Yards of steel, formed of two plates in the circumference $\frac{1}{4}$ to $\frac{3}{16}$ thick with two angle irons $2\frac{1}{2} \times 2\frac{1}{2} \times \frac{5}{16}$.

The tonnage of this vessel exceeds that of the scale ^(400 tons A) on which she was built, which causes the deficiencies marked in red it will be seen that there ^{are} some parts in excess of the rules.

The chains and Anchors are supplied in accordance with the 450 tons scale, respecting which, and the probability of the vessel's excess of tonnage I am informed that Mr. Dwyer had written to the Committee some time since, which I now respectfully draw attention to.

In what manner are the surfaces preserved from oxidation?

Portland cement inside & apper
Paint of hulls - 10 lines composition outside.

I am of opinion this Vessel should be classed A1 if the Committee feel satisfied

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

Order No 147 Special £ 25 : : :

Certificate (if required) £ : : :

Committee's Minute 31st May 1864

Character assigned A1

I am of opinion this vessel is eligible for the A1 class - 20th 30th May
The rules now require that all vessels live box keelson should have a longitudinal plate - and as the Mark L for angle iron is not generally understood in New York should be