

IRON SHIPS.

No. 744 Survey held at Newcastle Date Decr 31st 1858
on the Screw Steamer "Samuel Laing" Master John Bradley
Tonnage Gross 438 $\frac{2}{70}$ Engine Room 106 $\frac{3}{10}$ Register 331 $\frac{7}{10}$ Built at Newcastle
When Built 1854 By whom built Palmer Bros. & Co. Owners Hugh Taylor
Port belonging to London Destined Voyage London
~~If~~ Surveyed Afloat or in Dry Dock Afloat.

Length aloft		Feet. Inches.		Extreme Breadth		Feet. Inches.		Depth from top of Upper Deck Beam to top of Floor		Feet. Inches.		Power of Engines		Horse No.	
164		8/10		26		6/10		15		8/10					
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft				Inches in Ship.		Inches required per Rule.		By Rule		Stem, if bar iron, moulding and thickness				Inches. 16ths required per Rule.	
1-3 amidships;				1-8 at ends		1-6						7		2 1/4 6 1/2 2 1/2	
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate				Inches. In Ship.		Inches. 16ths required per Rule.		Inches. 16ths required per Rule.		Stern-post, if bar iron, moulding and thickness				8 3 1/2 6 1/2 5	
,, depth and thickness of Floor Plate at mid line				15 1/2		15 5/16						,, if plate iron, breadth and thickness			
,, depth and thickness of Floor Plate at Bilge Keelson												Keel, if bar iron, depth and thickness			
,, Size of Reversed Angle Iron, and No. 1 at top of Floor Plate				3 3		3/8 2 1/2 2 7/16						,, if plate iron, breadth and thickness			
Frames, Size of Angle Iron, single or double				4 3		7/16 3 1/2 2 1/2 7/8						Garboard Plates, thickness			
,, Reversed Iron, if to every frame above Bilge or every frame				3 3		3/8 2 1/2 2 7/16						Description of Iron.			
Beams, Deck (N°) double Angle Iron or Bulb Iron with double Angle Iron on top				5 3		7/16 with 6 1/2 5/16						From Garboard to upper part of Bilge			
,, depth & thickness of plate amidships												From upper part of Bilge to Sheerstrakes			
,, double or single Angle Iron, on lower edge				3 3		3/8 3/8						Sheerstrakes			
,, average space between				Every third frame		3/8 3/8						Breadth & thickness of Butt Straps to outside plating			
,, if wood (N°) sided & moulded												Planksheers			
Hold, or Lower Deck (N°) double Angle Iron or Bulb Iron with double Angle Iron on top				5 3		1/2 6 1/2 5/16						Gunwale Plate or Stringer on ends of Up. Dk Beams			
,, depth & thickness of plate amidships												Angle Iron on ditto			
,, double or single Angle Iron, on lower edge				7/16 6 1/2		3 1/2 6 1/2						Waterway			
,, average space between												Deck			
,, if wood (N°) sided & moulded												Ceiling in Hold			
Paddle, wood, sided and moulded or if Iron, size of Plate												Ceiling betwixt Decks			
Engine												Beam Clamps			
Keelson, wood, sided & moulded, iron, side of plate, if Box, give sketch & dimensions												,, Shelf			
,, Side or Bilge												,, Stringer Plates on ends of Hold or Lower Dk Beams			
Number				2								Ceiling between Decks			
												Stringer or Tie Plates outside Hatchways			
												Deck Beam Clamps			
												,, Shelf			
												Stringers in Hold			
												Deck, Lower			
												Deck, Upper, how fastened to Beams			

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

Knight-heads „ ✓ } are they free from defects? Bulkheads, N^o. 2 Thickness of 3/16
Hawse Timbers „ ✓ } „ how secured to the sides of the ship to the frames

The Frames or Ribs extend in one length from ✓ to ✓ rivetted through plates with ($\frac{1}{4}$ in.) rivets, about ($2\frac{1}{2}$) apart.

The reverse angle irons on the floors extend in one length across the middle line from Kelson to above Bilge
 „ „ „ on the frames „ „ „ from ✓ to ✓

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

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (3 ins.) diameter averaging (✓ in.) from centre to centre of rivet.

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

Butts from Keel to turn of bilge, worked carvel with a lining piece () thick, double or single rivetted; rivets (in.) diameter, averaging (ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Edges from bilge to planksheer, ~~worked carvel with a lining piece () thick, double or single rivetted~~; rivets ($\frac{1}{4}$ in.) diameter, averaging ($2\frac{1}{2}$ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Butts from bilge to planksheers, worked carvel with a lining piece ($\frac{1}{4}$ in.) thick, or clencher, double ~~or~~ single rivetted; rivets ($\frac{1}{4}$ in.) diameter averaging ($2\frac{1}{4}$ ins.) from centre to centre of rivets. Breadth of laps in double rivetting ($\frac{1}{2}$ in.) Breadth of laps in single rivetting ($5\frac{1}{2}$ in.)

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

Side trussing ✓ breadth and thickness of plates ✓ how secured?

Deck Beams, how secured to the side? With plate knees riveted to ribs

Hold or Lower Deck „ _____

Paddle „ „ _____

No. of breasthooks crutches how are pointers compensated?

What description of iron is used for the angle iron and plate iron in the vessel? _____

Builder's Signature

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Lloyd's Register

IRON 433-0481

1896 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? ☒
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? ☒
Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Long lengths
Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? ☒ and are the rivet holes well and sufficiently countersunk in the outer plate? ☒
Are there any rivets which either break into or have been put through the seams or butts of the plating? ☒

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

She has SAILS.

CABLES, &c.

ANCHORS, and their weights.

N ^o .		Fathoms.	Inches.	N ^o .	Weight.
	Fore Sails,	Chain			Bower,
	Fore Top Sails,	Hempen Stream Cable			Stream,
	Fore Topmast Stay Sails,	Hawser			Kedge,
	Main Sails,	Towlines			
	Main Top Sails,	Warp			
and		All of _____ quality.			

Her Standing and Running Rigging _____ sufficient in size and _____ in quality.

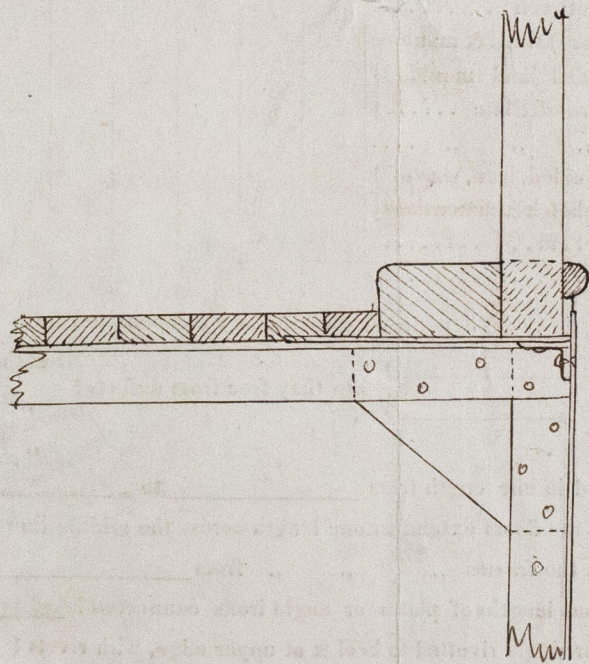
She has _____ Long Boat and _____

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

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 _____

The sixes mentioned in this Report as being required by Rule are taken from Table "G" dated Dec^r 6th 1855, the vessel being built previous to that time.



In what manner are the surfaces preserved from oxidation?

I am of opinion this Vessel should be classed _____

The amount of the Fee£ : : is received by me, *John Maxwell*

Special£ : :

Certificate (if required)£ : :

Committee's Minute 13th May 1859

Character assigned _____

As the frame and plating of the vessel (as stated above) are equal to the 6A grade on the increased tonnage after lengthening I am of opinion that if lengthened 25 feet and strengthened as proposed in Mr Maxwell's letter of the 22^d Dec^r 1858 she might be eligible for the 6A grade in 1854
J.M.