

IRON SHIPS.

Rec 4/1/18

No. 7447 Survey held at Newcastle Date Decr 31st 1858
 on the Screw Steamer "Samuel Laing" Master John Bradley
 Tonnage Gross 438 $\frac{2}{10}$ Engine Room 106 $\frac{3}{10}$ Register 331 $\frac{4}{10}$ Built at Newcastle
 When Built 1854 By whom built Palmer Bros & Co. Owners Hugh Taylor
 Port belonging to London Destined Voyage London
 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. | | | | | |
|--|---|-----------------|--|--|-------------------------------------|------------------|---|---|---|---|--|--------------|
| | <u>164 $\frac{8}{10}$</u> | | <u>26 $\frac{6}{10}$</u> | | <u>15 $\frac{8}{10}$</u> | | | | | | | |
| Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft | Inches in Ship. <u>1-3 amidships;</u> | | Inches required per Rule. <u>1-8 at ends</u> | | By Rule. <u>1-6</u> | | Stem, if bar iron, moulding and thickness | Inches. In Ship. <u>7</u> | 16ths. In Ship. <u>2 1/4</u> | Inches. required per Rule. <u>6 1/2</u> | 16ths. required per Rule. <u>2 1/2</u> | |
| Floors, Size of Angle Iron, and No. at bottom of Floor Plate | <u>4</u> | <u>3</u> | <u>7/16</u> | <u>3 1/2</u> | <u>2 1/2</u> | <u>3/8</u> | Stern-post, if bar iron, moulding and thickness | <u>8</u> | <u>3 1/2</u> | <u>6 1/2</u> | <u>5</u> | |
| " depth and thickness of Floor Plate at mid line | <u>15</u> | <u>1/2</u> | | <u>15</u> | <u>5/16</u> | | " if plate iron, breadth and thickness | | | | | |
| " depth and thickness of Floor Plate at Bilge Keelson | | | | | | | Keel, if bar iron, depth and thickness | <u>7</u> | <u>2 1/4</u> | <u>6 1/2</u> | <u>2 1/2</u> | |
| " Size of Reversed Angle Iron, and No. at top of Floor Plate | <u>3</u> | <u>3</u> | <u>3/8</u> | <u>2 1/2</u> | <u>2</u> | <u>5/16</u> | " if plate iron, breadth and thickness | | | | | |
| Frames, Size of Angle Iron, single or double | <u>4</u> | <u>3</u> | <u>7/16</u> | <u>3 1/2</u> | <u>2 1/2</u> | <u>3/8</u> | Garboard Plates, thickness.. | Description of Iron. | | | | |
| " Reversed Iron, if to every frame above Bilge or every frame | <u>3</u> | <u>3</u> | <u>3/8</u> | <u>2 1/2</u> | <u>2</u> | <u>5/16</u> | From Garboard to upper part of Bilge | <u>9/16</u> | | <u>7/16</u> | | |
| Beams, Deck (No. double Angle Iron or Bulb Iron with double Angle Iron on top) | <u>5</u> | <u>3</u> | <u>7/16 with 6/16</u> | <u>3 1/2</u> | <u>2 1/2</u> | <u>5/16</u> | From upper part of Bilge to Sheerstrakes | <u>8/16</u> | | <u>6/16</u> | | |
| " depth & thickness of plate amidships | | | | | | | Sheerstrakes | <u>8/16</u> | | <u>6/16</u> | | |
| " double or single Angle Iron, on lower edge | <u>3</u> | <u>3</u> | <u>3/8</u> | | | | Breadth & thickness of Butt Straps to outside plating | <u>5</u> | | <u>4 1/2</u> | | |
| " average space between | <u>Every third frame</u> | | | <u>3/8</u> | | | Planksheers | Material. | | | | |
| " if wood (No. sided & moulded) | | | | | | | Gunwale Plate or Stringer on ends of Up. Dk Beams | <u>Plate</u> | <u>24</u> | <u>7/16</u> | <u>14</u> | <u>5/16</u> |
| " Hold or Lower Deck (No. double Angle Iron or Bulb Iron with double Angle Iron on top) | <u>5</u> | <u>3</u> | <u>1/2</u> | <u>6 1/2</u> | <u>5/16</u> | | Angle Iron on ditto | | <u>3</u> | <u>3</u> | <u>3/8</u> | <u>4 x 3</u> |
| " depth & thickness of plate amidships | | | | | | | Waterway | <u>Red Pine</u> | <u>10</u> | <u>8</u> | | |
| " double or single Angle Iron, on lower edge | <u>7/8</u> | <u>6</u> | | <u>3 1/2</u> | <u>6/16</u> | | Deck | <u>Yellow</u> | <u>3</u> | | <u>2</u> | |
| " average space between | | | | | | | Ceiling in Hold | <u>Platform</u> | | | | |
| " if wood (No. sided & moulded) | | | | | | | Ceiling betwixt Decks | | | | | |
| " Paddle, wood, sided and moulded or if Iron, size of Plate | | | | | | | Beam Clamps | | | | | |
| " Engine | | | | | | | " Shelf | | | | | |
| Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions | <u>Intercoastal angle iron</u> | | | | | | | " Stringer Plates on ends of Hold or Lower Dk Beams | <u>12 x 2 plate with angles</u> | <u>11 x 5/16</u> | | |
| " Side or Bilge | <u>Intercoastal plates</u> | | | | | | | Ceiling between Decks | <u>Iron 15 x 3</u> | <u>secured to the frames</u> | | |
| " Number | <u>2</u> | | | | | | Stringer or Tie Plates outside Hatchways | | | | | |
| Transoms, material | <u>or, if none, in what manner compensated for.</u> | | | | | | | Deck Beam Clamps | | | | |
| Knight-heads | <u>are they free from defects?</u> | | | | | | | " Shelf | | | | |
| Hawse Timbers | <u>are they free from defects?</u> | | | | | | | Stringers in Hold | <u>Double angle iron 3 x 3 x 3/8; 4 x 3 x 3/8</u> | | | |
| Bulkheads, No. | <u>3</u> | | | | | | | Deck, Lower | | | | |
| Thickness of | <u>5/16</u> | | | | | | | Deck, Upper, how fastened to Beams | <u>Screw Bolts from below</u> | | | |
| how secured to the sides of the ship | <u>to the frames</u> | | | | | | | | | | | |
| size of vertical angle iron and their distance apart | <u>2 1/2 x 2 1/2</u> | | | | | | | | | | | |
| The Frames or Ribs extend in one length from | <u>to</u> | | | | | | | | | | | |
| " rivetted through plates with (1/4 in.) rivets, about (2 1/2) apart. | | | | | | | | | | | | |
| The reverse angle irons on the floors extend in one length across the middle line from | <u>Keelson</u> | | | | | | | | | | | |
| " to | <u>above Bilge</u> | | | | | | | | | | | |
| " on the frames | <u>from</u> | | | | | | | | | | | |
| " to | <u>to</u> | | | | | | | | | | | |
| Keelson, how are the various lengths of plates or angle irons connected? | <u>Shifted</u> | | | | | | | | | | | |
| Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (1/2 in.) from centre to centre of rivet. | | | | | | | | | | | | |
| " Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (1/2 in.) diameter, averaging (1/2 in.) from centre to centre of rivets. | | | | | | | | | | | | |
| " Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (1/2 in.) diameter, averaging (1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? | <u>No</u> | | | | | | | | | | | |
| " Edges from bilge to planksheer, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (1/4 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? | <u>No</u> | | | | | | | | | | | |
| " Butts from bilge to planksheers, worked carvel with a lining piece (7/16) thick, or clencher, double or single rivetted; rivets (1/4 in.) diameter averaging (2 1/2 in.) from centre to centre of rivets. Breadth of laps in double rivetting (1/2) Breadth of laps in single rivetting (5") | | | | | | | | | | | | |
| Planksheer, how secured to the plating of the sides | <u>Explain by sketch, if necessary.</u> | | | | | | | | | | | |
| Waterway | <u>Bolted to Stringer</u> | | | | | | | | | | | |
| Side trussing | <u>breadth and thickness of plates</u> | | | | | | | | | | | |
| Deck trussing | <u>how secured?</u> | | | | | | | | | | | |
| Deck Beams, how secured to the side? | <u>With plate knees rivetted to Ribs</u> | | | | | | | | | | | |
| Hold or Lower Deck | <u>"</u> | | | | | | | | | | | |
| Paddle | <u>"</u> | | | | | | | | | | | |
| No. of breasthooks | <u>crutches</u> | | | | | | | | | | | |
| how are pointers compensated? | <u>"</u> | | | | | | | | | | | |
| What description of iron is used for the angle iron and plate iron in the vessel? | <u>"</u> | | | | | | | | | | | |

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.

1st. On the several parts of the frame, when in place, and before the plating was wrought _____

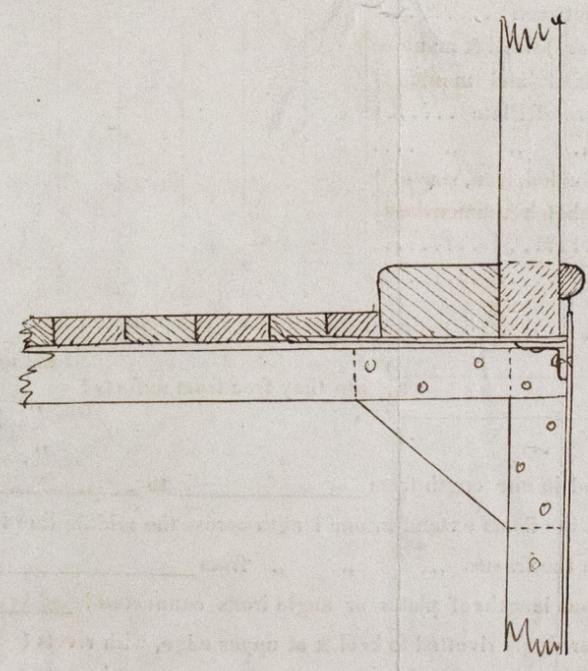
2nd. On the plating during the progress of rivetting _____

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 sizes 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 for 1854.

J. H. C.

