

IRON SHIPS.

19486
Regd 1/8/71

No. 11033 Survey held at Newcastle Date, first Survey 1st June 1870 Last Survey 16th January 1871
 on the V.S.S. "Stephenson & Agnes" Master Church

Tonnage under Tonnage Deck 207.23 ONE, OR TWO DECKED VESSELS. THREE DECKED VESSELS.

Half moulded breadth 13.11 Total Depth of three or more Decks 19.0 3/4 Built at Newcastle
 Depth from upper part of Keel to top of Upper Deck Beams 19.0 3/4 Total Girth of Half Midship Frame 29.5 When built 1870 Launched 11th October
 Girth of Half Midship Frame 29.5 3rd Number 62.39 Length 222 By whom built Messrs C. M. Palmer & Co.
 1st Number 62.39 Length 222 Owners Messrs Clarke & Co.
 2nd Number 13,850 4th Number 12,478 Port belonging to London
 Depths to Length 12.7 Breadths to Length 12.478 Destined Voyage London
 Register Tonnage, as a Steamer, cut on the Beam 294.73 If Surveyed while Building, Afloat, or in Dry Dock while building

Length on deck as per Rule 222 0 Moulded Breadth 27 10 Depth from top of Keel to Deck Beam, as per Rule 19 0 3/4 Power of Engines 120 N° of Decks one N° of Tiers of Beams two

Dimensions of Ship per Register, length 224 breadth 28.1 depth 17.4

	Inches in Ship	Inches required per Rule		Inches in Ship	Inches required per Rule
Keel, $\frac{1}{2}$ bar iron, depth and thickness	$4\frac{1}{2} \times 3$	$8 \times 2\frac{3}{8}$	Flat Keel Plates, breadth and thickness	<u>32</u>	<u>11 30 10 for 90°</u>
Do. if centre through plate, depth and thickness	<u>4 3/4 x 3</u>	<u>4 1/4 x 2 3/8</u>	Plates in Garboard Strakes, breadth and thickness	<u>10</u>	<u>9</u>
Stem, if bar iron, moulding and thickness	<u>9 x 5 1/4</u>	<u>7 1/4 x 4 3/4</u>	Do. from Garboard to upper part of Bilges	<u>10</u>	<u>9</u>
Stern-post do. do. do.	<u>9 x 5 1/4</u>	<u>7 1/4 x 4 3/4</u>	Do. of doubling at Bilge, or increased thickness, and length applied		
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>23</u>	Do. from upper part of Bilge to lower edge of Sheerstrake	<u>9 x 8</u>	<u>8</u>
Frames, size of Angle Iron, for $\frac{2}{3}$ length amidships	<u>4 3 8</u>	<u>4 3 7</u>	Do. Sheerstrake, breadth and thickness	<u>36</u>	<u>12 30 12</u>
Do. for $\frac{1}{2}$ at each end	<u>4 3 8</u>	<u>4 3 6</u>	Do. of doubling at Sheerstrake, and length applied		
Reversed Frames, size of Angle Iron	<u>3 2 3/4 7</u>	<u>3 3 7</u>	Butt Straps to outside plating, breadth and thickness	<u>8 1/2</u>	<u>12 x 8 9 3/4 13 x 8</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>19 x 9</u>	<u>18 3/4 x 8</u>	Lengths of Plating	<u>5 spaces</u>	<u>of frames</u>
Do. at the ends	<u>19</u>	<u>17</u>	Shifts of Plating, and Stringers	<u>2 spaces</u>	<u>of frames</u>
Do. do. do. at Bilge Keelson	<u>See section</u>	<u>See section</u>	Gunwale Plate on ends of Awning or Spar Deck Beams, breadth and thickness		
Do. height extended at the Bilges	<u>See section</u>	<u>See section</u>	Angle Iron on ditto		
Beams, Three Decked, Spar, or Awning Decked (No. <u>47</u>) single or double Angle Iron, Plate or Tee Bulb Iron	<u>7 x 7 7 x 7</u>	<u>7 x 7 5</u>	Tie Plates (fore and aft), outside Hatchways		
Single or double Angle Iron on Upper edge	<u>3 2 3/4 7</u>	<u>2 1/2 2 1/2 5</u>	Diagonal Tie Plates on Beams (No. of Pairs)	<u>7</u>	<u>10 1/2 9</u>
Average space	<u>on alternate frames</u>		Planksheer material and scantling		
Beams, Lower Deck or Orlop (No. <u>31</u>) single or double Angle Iron, Plate or Tee Bulb Iron	<u>7 x 7 7 x 7</u>	<u>7 x 7 5</u>	Waterways do. do.		
Single or double Angle Iron on Upper edge	<u>3 2 3/4 7</u>	<u>2 1/2 2 1/2 5</u>	Flat of Deck do. do.	<u>3 1/2 4</u>	<u>3 3/4</u>
Average space	<u>on 2nd and 4th frames</u>		How fastened to Beams	<u>by nut & screw bolts</u>	
Keelson Centre line, single or double plate, box, or Intercostal, size of Plates	<u>27 x 9</u>	<u>24 x 8</u>	Stringer Plates on ends of Lower Deck or Orlop Beams, breadth and thickness	<u>23 1/2</u>	<u>9 23 8</u>
Do. Bulb Plate to Intercostal Keelson	<u>14 x 4</u>	<u>7 x 4</u>	Angle Irons on ditto (No. <u>one</u>)	<u>5 x 4 x 8</u>	<u>5 x 3 1/2 x 8</u>
Do. Size of Angle Irons	<u>5 4 8</u>	<u>5 3 1/2 7</u>	Stringer or Tie Plates, outside Hatchways	<u>5 x 4 x 8</u>	<u>3 1/2 x 3 1/2 x 8</u>
Do. Side Intercostal Keelson, size of Plates			Flat of Deck		
Do. Angle Irons on top of Floors	<u>See section</u>	<u>See section</u>	Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>hatters</u>
Do. Bilge Keelson, Bulb Iron	<u>See section</u>	<u>See section</u>	Do. in hold do. do.	<u>3 1/2</u>	<u>Plank doubled with handwood in hatchways</u>
Do. do. Angle Irons			Clamps or Spirketting		
Do. Side Stringers (No. <u>2</u>) size of Angle Irons	<u>5 4 8</u>	<u>5 3 1/2 7</u>	Main piece of Rudder, diameter at head	<u>5 1/2</u>	<u>5 1/4</u>
			Do. do. at heel	<u>3 1/2</u>	<u>3</u>

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

Knight-heads Iron Hawse Timbers Iron

Windlass Spican roll Pall Bitt Iron

The Frames extend in one length from Keel to Gunwale Riveted through plates with (3/4 in.) Rivets, about 6 apart.

The Reverse Angle Irons on the floors extend across the middle line to above lower deck stringer angle iron

On all the Frames and to the gunwale on alternate frames

Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (5/16 in.) diameter, averaging (5 x 3 1/2 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps (9 x 10/16) thick, double double or single Riveted; with Rivets (7/8 in.) diameter averaging (3 1/2 - 3 3/4 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No

Do. Edges of Sheerstrake, double or single Riveted. At upper edge single At lower edge double

Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps (8 x 12/16) thick, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre. Breadth of laps in double Riveting (5) Breadth of laps in single Riveting (3)

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? some treble in Keelson angles: the rest double

Planksheer, how secured to the plating of the sides, { Explain by Sketch, } Iron gatter

Waterway ,, ,, planksheer and to the Beams, { if necessary. }

Beams of the various Decks, how secured to the sides? welded knees riveted to frames No. of Breasthooks, 4 Crutches, 4

What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Palmer & Co.

Manufacturer's name or trade mark, Palmer & Co. Jarrow

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, Wm. Murray Surveyor's Signature, R. P. Reed

Lloyd's Register Foundation

120N449-0399

Workmanship.

Are the butts of plating planed or otherwise fitted? Plawed

94862w

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? Solid single pieces

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? fairly so and are the rivets well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. If they are of Iron or Steel give the Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit

Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
15,235	270	1 7/16	37.3.0.0	1 5/16	34.0.0.0						
SAILS.	CABLES, &c.										
Fore Sails,	Chain										
Fore Top Sails,	(State Machine where Tested, and name of Superintendent).										
Fore Topmast Stay Sails,	Lloyds P.H. R. Bunell Supt Lyne										
Main Sails,	90	7/8		15/16							
Main Top Sails,	90	9/16		9 5/16							
	90	5 x 3 x 4									
	All of <u>good</u> quality.										

Her Standing and Running Rigging lewp sufficient in size and good in quality. She has 1 life Long Boat and 2 others

The present state of the Windlass is good Capstan good and Rudder good Pumps good and sufficient

Engine Room Skylights.—How constructed? solid oak and bulwags How secured in ordinary weather? lotted down

What arrangements are there for deadlights in such for bad weather? Tarpaulins &c

Coal Bunker Openings.—How constructed? Cast iron coverings How are lids secured? nut & screw bolts How high above deck? 6"

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? five ports and three mooring pipes on each side

Cargo Hatchways.—How formed? iron covering (3 ft deep) riveted to hull State size Fore 17 x 9; Mizzen 17 x 9

If of extraordinary size, state how framed and secured? ordinary size

What arrangement for shifting beams? Round iron bar (2 1/2") with 2 nut and screw bolts at each end.

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 10 x 9

Order for Special Survey No.	DATE	of	1st.	2nd.	3rd.	4th.	5th.
767	June 1870	Surveys held	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the progress of riveting	When the beams were in and fastened, and before the decks were laid	When the ship was complete, and before the plating was finally coated or cemented	After the ship was launched and equipped
		while building	} <u>built under special survey</u>				
		as per					
No. 260		in builder's yard.	Section 18.				

General Remarks. This is a sister vessel to, and is precisely like, the "Lord Alfred Paget," Report No 11202. She is fitted with a water ballast tank extending for a length of 128 feet amidships, top plating 5/16; and the main sheerstrakes are treble riveted from Prop to Forecastle.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement & paint Outside Paint & composition

I am of opinion this Vessel should be Classed 100A.I.

The amount of the Entry Fee£ 5 : - : - is received by me,
 Travelling Expenses (if any)£ 43 : 14 : -
 Special£ - : - : -
 Certificate - : - : -

J. Reed

Committee's Minute 18

Character assigned _____