

IRON SHIPS.

No. 11533 Survey held at Newcastle Date, first Survey 1st June 1876 Last Survey 16th January 1877
 on the "Stephenson & Agnes" Master Church
 Tonnage under Tonnage Deck 204.23 ONE, OR TWO DECKED THREE DECKED VESSELS.
 Built at Newcastle
 When built 1870 Launched 11th October
 By whom built Messrs C. M. Palmer & Co.
 Owners Messrs Clarke & Co.
 Port belonging to London
 Destined Voyage London
 If Surveyed while Building, Afloat, or in Dry Dock while building

Half moulded breadth 13' 11" Total Depth if three or more Decks 19' 0 3/4"
 Depth from upper part of Keel to top of Upper Deck Beams 19' 0 3/4" Total Girth of Half Midship Frame 29.5
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 1st Number 62.39 Length 222
 2nd Number 13.850 4th Number 12.7
 Depths to Length 12.7 Breadths to Length 12.7

Register Tonnage, as a Steamer, out on the Beam 294.73
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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 3/2 Power of Engines 120 No. of Decks one No. 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, if bar iron, depth and thickness	7 1/2 x 3	8 x 2 3/4	Plates in Garboard Strakes, breadth and thickness	32	10 30 10 for 90 ft
Do. if centre through plate, depth and thickness	7 1/2 x 3	7 1/4 x 2 3/4	Do. from Garboard to upper part of Bilges	10	9
Stem, if bar iron, moulding and thickness	9 x 5 1/4	7 1/4 x 4 3/4	Do. of doubling at Bilge, or increased thickness, and length applied		
Stern-post do. do. do.	21	23	Do. from upper part of Bilge to lower edge of Sheerstrake	9 x 8	8
Distance of Frames from moulding edge to moulding edge, all fore and aft			Do. Sheerstrake, breadth and thickness	36	12 30 12
Frames, size of Angle Iron, for 2/3 length amidships	4 3 8	4 3 7	Do. of doubling at Sheerstrake, and length applied		
Do. for 1/3 at each end	4 3 8	4 3 6	Butt Straps to outside plating, breadth and thickness	8 1/2	12 x 8 9 1/4 10 x 8
Reversed Frames, size of Angle Iron	3 2 3/4 7	3 3 7	Lengths of Plating	5 spaces of frames	
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	19 x 9	18 3/4 x 8	Shifts of Plating, and Stringers	2 spaces of frames	
Do. at the ends		7	Gunwale Plate on ends of Awning, or Spar Deck Beams, breadth and thickness		
Do. do. do. at Bilge Keelson	See section		Angle Iron on ditto		
Do. height extended at the Bilges	See section		Tie Plates (fore and aft), outside Hatchways		
Beams, Three Decked, Spar, or Awning Decked (No. 1) single or double Angle Iron, Plate or Tee Bulb Iron			Diagonal Tie Plates on Beams (No. of Pairs)		
Single or double Angle Iron on Upper edge			Planksheer material and scantling		
Average space			Waterways do. do.		
Beams, Upper or Middle Deck (No. 47) single or double Angle Iron, Plate or Tee Bulb Iron	7 x 7 7 x 7 1/2	7 x 7 1/2	Flat of Deck do. do.		
Single or double Angle Iron, on Upper Edge	3 2 3/4 7 2 1/2 2 1/2 5		How fastened to Beams		
Average space	on alternate frames		Stringer Plate on ends of Upper or Middle Deck Beams, breadth and thickness	30 1/2 9 31 10	
Beams, Lower Deck or Orlop (No. 31) single or double Angle Iron, Plate or Tee Bulb Iron	7 x 7 7 x 7 1/2	7 x 7 1/2	Angle Irons on ditto (No. 2)	5 x 4 x 8 5 x 3 1/2 x 7	
Single or double Angle Iron on Upper Edge	3 2 3/4 7 2 1/2 2 1/2 5		Tie Plates, outside Hatchways	10 1/2 9 10 1/2 9	
Average space	on 2nd and 4th frames		Diagonal Tie Plates on Beams (No. of pairs)	7 10 1/2 9 10 1/2 9	
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	27 x 9 24 x 8		Waterways materials and scantlings	iron gatter	
Do. Bulb Plate to Intercoastal Keelson	14 x 7 7 x 7 1/2		Flat of Deck do. do.	3 1/2 x 3 1/2 3 3/4	
Do. Size of Angle Irons	5 4 8 5 3 1/2 7		How fastened to Beams	by nut & screw bolts	
Do. Side Intercoastal Keelson, size of Plates			Stringer Plates on ends of Lower Deck or Orlop Beams	23 1/2 9 23 8	
Do. Angle Irons on top of Floors			Angle Irons on ditto (No. one)	5 x 4 x 8 5 x 3 1/2 x 8	
Do. Bilge Keelson, Bulb Iron			Stringer or Tie Plates, outside Hatchways	5 x 4 x 8 3 1/2 x 3 1/2 x 8	
Do. do. Angle Irons			Flat of Deck		
Do. Side Stringers (No. 2) size of Angle Irons	5 4 8 5 3 1/2 7		Ceiling betwixt Decks, thickness and material	2 1/2 battens	
Transoms, material <u>iron</u> or, if none, in what manner compensated for.			Do. in hold do. do.	2 1/2 battens doubled with	
Knight-heads <u>iron</u> Hawse Timbers <u>iron</u>			Clamps or Spirketting	handwork in hatchways	
Windlass <u>iron</u> Pall Bitt <u>iron</u>			Main piece of Rudder, diameter at head	5 1/2	
The Frames extend in one length from <u>Keel</u> to <u>Gunwale</u>			Do. do. at heel	3 1/2	
The Reverse Angle Irons on the floors extend across the middle line <u>to above lower deck stringer angle iron</u>			(Can the Rudder be unshipped afloat?) <u>Yes</u>		
On all the Frames and to <u>the gunwale on alternate frames</u>			Bulkheads No. <u>4</u> Thickness of <u>6/16</u>		
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>			Do. Height up <u>upper deck</u>		
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets <u>1/8"</u> diameter, averaging <u>(5 x 3 1/2 ins.)</u> from centre to centre.			Do. How secured to the sides of the ship <u>by double frames</u>		
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets <u>(3/4 in.)</u> diameter, averaging <u>(3 1/2 ins.)</u> from centre to centre.			Do. Size of Vertical Angle Irons, <u>3 x 3 1/2</u> and their distance apart, <u>30"</u>		
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps <u>(9 x 10/16)</u> thick, <u>double</u> or single Riveted; with Rivets <u>(7/8 in.)</u> diameter averaging <u>(3 1/2 x 3 3/4 ins.)</u> from centre to centre.			Do. Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>		
Do. Edges of Sheerstrake, double or single Riveted. At upper edge <u>single</u> At lower edge <u>double</u>					
Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps <u>(2 x 1/2)</u> thick, double or single Riveted; with Rivets <u>(3/4 in.)</u> diameter, averaging <u>(3 1/2 x 3 1/2 ins.)</u> from centre to centre. Breadth of laps in double Riveting <u>(5)</u> Breadth of laps in single Riveting <u>(3)</u>					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>single in Keelson angles: the rest double</u>					
Planksheer, how secured to the plating of the sides, { Explain by Sketch, } <u>iron gatter</u>					
Waterway ,, ,, planksheer and to the Beams, { if necessary. }					
Beams of the various Decks, how secured to the sides? <u>welded keels riveted to frames</u> No. of Breasthooks, <u>4</u> Crutches, <u>4</u>					
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Palmer & Co.</u>					
Manufacturer's name or trade mark, <u>Palmer & Co. London</u>					

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

Builder's Signature, Wm. M. Palmer Surveyor's Signature, R. P. Reed

120N449-0399

Workmanship.

Are the butts of plating planed or otherwise fitted? *Planned*

9486 *in*

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.
<i>15,235</i>	<i>270</i>	<i>1 7/16</i>	<i>37.3.0.0</i>	<i>1 5/16</i>	<i>34.0.0.0</i>	<i>Bowers</i>	<i>3</i>	<i>10.1.23</i>	<i>19.5.3.0</i>	<i>16.3.0</i>	<i>10.0.0.0</i>
<i>SAILS.</i>	<i>CABLES, &c.</i>					<i>(State Machine where Tested, and name of Superintendent).</i>					
<i>Fore Sails,</i>	<i>Chain</i>	<i>Lloyds P.H. R. Russell</i>	<i>Supt</i>	<i>Lyn</i>		<i>with</i>	<i>1</i>	<i>0.0.10</i>		<i>7.0.0</i>	
<i>Fore Top Sails,</i>	<i>(State Machine where Tested, and name of Superintendent).</i>					<i>Stream</i>					
<i>Fore Topmast Stay Sails</i>	<i>Hawser</i>	<i>90</i>	<i>7/8</i>	<i>15/16</i>							
<i>Main Sails,</i>	<i>Towlines ...</i>	<i>90</i>	<i>9/16</i>	<i>9 5/16</i>							
<i>Main Top Sails,</i>	<i>Warp</i>	<i>90</i>	<i>5 x 3 x 4</i>			<i>Kedges</i>	<i>2</i>	<i>4.0.0.1</i>		<i>3.2.0</i>	
	<i>All of good quality.</i>							<i>2.0.32</i>		<i>1.3.0</i>	

Her Standing and Running Rigging *lump* 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 lullage* How secured in ordinary weather? *lotted down*

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

Coal Bunker Openings.—How constructed? *Cast iron conings* 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 coning (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 0 x 9.0*

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

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 120 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 - : - : -

Committee's Minute 18

Character assigned



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