

# IRON SHIPS.

No. 3060 Survey held at Hartlepool Date, First Survey 4th May 1872 Last Survey 17th April 1872

On the Screw Steamer "Agnes Louise" Master James Hodgeman

Tonnage under Tonnage Deck } 592.85  
 Ditto of Third Spar, or of Awning Deck }  
 Ditto of Poop, or Raised Or. Dk. } 95.20  
 Ditto of Houses on Deck } 14.51  
 Ditto of Forecastle }  
 Gross Tonnage } 702.56  
 Crew Space, as per Rule } 41.37  
 Register Tonnage, cut on Beam } 661.19  
 Engine Room } 224.02  
 Register Tonnage, as a Steamer, cut on Beam } 436.37

ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.  
 Half moulded breadth... 20-7  
 Depth from upper part of Keel to top of upper Deck Beams... 17-6 1/2  
 Girth of Half Midship Frame (as per Rule)... 20-7  
 1st Number... 60-8 1/2  
 Length... 104  
 2nd Number... 110 06  
 Depths to Length... Within 12

THREE DECKED VESSELS.  
 Half Moulded Breadth...  
 Total Depth of three or more Decks...  
 Total Girth of Half Midship Frame...  
 3rd Number...  
 Length...  
 4th Number...  
 Breadths to Length... Within 9

Built at Hartlepool  
 When built 1871 Launched 14th September  
 By whom built Wemyss Alexander & Co.  
 Owners Stephenson Clark & Co.  
 Port belonging to London  
 Destined Voyage Coasting  
 If Surveyed while Building, Afloat, or in Dry Dock.

Length on deck as per Rule, 104 Feet. Inches. 104 - Moulded Breadth, 20 Feet. Inches. 20 4 Depths from top of Floors to Upper and Main Deck Beams, as per Rule... 16 Feet. Inches. 16 - Power of Engines, 90 Horse. No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 104-1 breadth, 20-3 depth, 15-6

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<u>7 1/2 x 2 1/4</u>	<u>7 1/2 x 2 1/4</u>	Flat Keel Plates, breadth and thickness	<u>33</u>	<u>9 1/16</u>
Do. if centre through plate, depth and thickness	<u>7 x 2 1/4</u>	<u>7 x 2 1/4</u>	Plates in Garboard Strakes, breadth and thickness	<u>33</u>	<u>9 1/16</u>
Stem, if bar iron, moulding and thickness	<u>7 x 2 1/4</u>	<u>7 x 2 1/4</u>	Do. from Garboard to upper part of Bilges		<u>8 1/16</u>
Stern-post for Rudder do. do.	<u>8 1/4 x 3 7/8</u>	<u>7 x 2 1/4</u>	Do. of doubling at Bilge, or increased thickness, and length applied		
Stern-post for Propeller do. do.	<u>8 x 4 1/4</u>	<u>7 x 2 1/4</u>	Do. fin up. part of Bilge to l. edge of Sh'rstrake		<u>7 1/16</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22</u>	<u>22</u>	Do. Main Sheerstrake, breadth and thickness	<u>30 1/2</u>	<u>30</u>
			Do. of d'bling at Sh'rstrake, & length applied		<u>7 1/16</u>
			Do. from Mn. to Upr. or Spar Dk. Sh'rstrake		
			Do. Up. or Spar Dk Sh'rstrake, brdth & thickness		
Frames, size of Angle Iron, for 1/3 length amidships	<u>4 x 3</u>	<u>4 x 3</u>	Butt Straps to outside plating, breadth & thickness	<u>9 3/4</u>	<u>9 3/4</u>
Do. for 1/3 at each end	<u>4 x 3</u>	<u>4 x 3</u>	Lengths of Plating	<u>9 1/2 - 2 in.</u>	<u>10 1/2 - 2 in.</u>
Reversed Frames, size of Angle Iron	<u>3 x 3</u>	<u>3 x 3</u>	Shifts of Plating, and Stringers	<u>1 1/4</u>	<u>1 1/4</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>10 1/4 x 8 1/16</u>	<u>10 1/4 x 8 1/16</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>27</u>	<u>26 1/4</u>
Do. at the ends	<u>10 1/2 x 7 1/16</u>	<u>10 1/4 x 8 1/16</u>	Angle Iron on ditto	<u>2 1/2</u>	<u>3 x 7 1/16</u>
Do. do. do. at Bilge Keelson	<u>1 3/4</u>	<u>3 6 1/16</u>	Tie Plates (fore and aft), outside Hatchways	<u>9</u>	<u>8 3/4</u>
Do. height extended at the Bilges	<u>137</u>	<u>3 6 1/16</u>	Diagonal Tie Plates on Beams (No. of Pairs, 2)	<u>19</u>	<u>8 3/4</u>
Beams, Upper, Spar, or Awning Deck (No. 31) single or double Angle Iron, Plate or Tee Bulb Iron	<u>7 x 7 1/16</u>	<u>7 x 7 1/16</u>	Planksheer material and scantling		
Single or double Angle Iron on Upper edge	<u>3 x 2 1/2</u>	<u>3 x 2 1/2</u>	Waterways do. do.		
Average space	<u>44</u>	<u>44</u>	Flat of Upper Deck do. do.	<u>3 3/4</u>	<u>3 3/4</u>
Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron			How fastened to Beams	<u>14 1/2</u>	<u>9 1/16</u>
Single, or double Angle Iron, on Upper Edge			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness		
Average space			(Is the Stringer Plate attached to the outside plating?)		
Beams, Lower Deck, Hold or Orlop (No. 20) single or double Angle Iron, Plate or Tee Bulb Iron	<u>7 x 7 1/16</u>	<u>7 x 7 1/16</u>	Angle Irons on ditto (No. )		
Single or double Angle Iron on Upper Edge	<u>3 x 2 1/2</u>	<u>3 x 2 1/2</u>	Tie Plates, outside Hatchways		
Average space	<u>22 1/2</u>	<u>22 1/2</u>	Diagonal Tie Plates on Beams (No. of pairs, )		
Keelson Centre line, single or double plate, box, or intercostal, size of Plates	<u>13 x 10 1/16</u>	<u>12 1/4 x 10 1/16</u>	Waterways materials and scantlings		
Do. Bulb Plate to Intercostal Keelson	<u>4 1/2 x 3</u>	<u>4 1/2 x 3</u>	Flat of Middle Deck do. do.		
Do. Size of Angle Irons	<u>4 1/2 x 3</u>	<u>4 1/2 x 3</u>	How fastened to Beams		
Do. Side Intercostal Keelson, size of Plates			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>24</u>	<u>24</u>
Do. Angle Irons on tops of Floors			(Is the Stringer Plate attached to the outside plating?)		
Do. Bilge Keelson, Bulb Iron			Angle Irons on ditto (No. 2)	<u>3 1/2</u>	<u>3 1/2</u>
Do. do. Intercostal plates riveted to plating for length			Stringer or Tie Plates, outside Hatchways	<u>3 1/2</u>	<u>3 1/2</u>
Do. do. Angle Irons	<u>4 1/2 x 3</u>	<u>4 1/2 x 3</u>	Flat of Lower Deck		
Side Stringers (No. one) size of Angle Irons	<u>4 1/2 x 3</u>	<u>4 1/2 x 3</u>	Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>2 1/2</u>
Do. Intercostal plates riveted to plating for length			Do. in hold do. do.	<u>4 3/4</u>	<u>4 3/4</u>
			Main piece of Rudder, diameter at head	<u>2 3/4</u>	<u>2 3/4</u>
			Do. do. at heel		
			(Can the Rudder be unshipped afloat? <u>Yes</u> )		
			Bulkheads No. <u>4</u> Thickness of <u>5 1/16</u>		
			Do. Height up <u>Main Deck after one to cabin deck plates over an 5 1/16</u>		
			Do. How secured to the sides of the ship <u>to double frames</u>		
			Do. Size of Vertical Angle Irons, <u>3 x 2 1/4</u> and their distance apart, <u>30 in.</u>		
			Do. Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>		

Transoms, material Plate or, if none, in what manner compensated for.  
 Knight-heads Iron Hawse Timbers Iron  
 Windlass Swivel Patent Pall Bitt Iron  
 The Frames extend in one length from Keel to gunwale Riveted through plates with (3/4 in.) Rivets, about 1/2 in. apart.  
 The Reverse Angle Irons on the floors and frames extend across the middle line to top of bilge to gunwale and to gunwale alternately  
 Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes  
 Plates, Garboard, double or single Riveted to Keel, double or single at upper edge, with Rivets (1 in.) diameter, averaging (5 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 to strakes (9 3/8) thick, double or single Riveted; with Rivets (3/4 in.) diameter averaging (3 3/8 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No  
 Do. of two Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than their plates.  
 Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/16) thick, or clencher, double or single riveted; with rivets (3/4 in.) diameter, averaging (3 1/8 ins.) from centre to centre.  
 Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single At lower edge double  
 Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (10 1/4) thick, double or single Riveted; with Rivets (3/4 in) diameter, averaging (3 1/8 ins) from centre to centre.  
 Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for half length amidships. Breadth of laps of plating in double Riveting (4 3/4) Breadth of laps of plating in single Riveting (2 3/4)  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & treble  
 Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? End turned & thus welded No. of Breasthooks, Seven Crutches, Two  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good  
 Manufacturer's name or trade mark, T.R. & Co. - Thorne - Stockton-on-Tees - W. W. & Co.

We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature, Wemyss Alexander & Co. Surveyor's Signature, S. P. Gladstone

1800150-0682

**Workmanship.** Are the butts of plating planed or otherwise fitted? Planed  
 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? Solid in one length  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes 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 in butts

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 Main Mast 70 feet, Diameter 17 1/2, Fore Mast 64 feet, Diameter 18, Mizen 57 1/2

10008 Irons Rules 1871

Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
<b>SAILS.</b>											
<b>CABLES, &amp;c.</b>	240	1 5/16	31-000	1 5/16	31-0-0	Bowers ....	3	15-2-0 15-1-14 13-1-0	16-10-3-0 16-16-2-7 14-10-1-14	15-1-0 15-1-0 13-1-0	16-14-0-0 16-14-0-0 14-15-0-0
Fore Sails, Chain .....						(State Machine where Tested, and name of Superintendent).					
Fore Top Sails, John Harbuck Superintendant.						Stream ....	1	6-1-24		6-2-0	
Fore Topmast Stay Sails, Hempen Stream Cable	60	4/8				Kedges ....	2	3-0-24 1-3-0		3-1-0 1-3-0	
Main Sails, Hawser .....	80	1 1/8									
Main Top Sails, Towlines ....	80	5/8									
Warp, .....	80	5/8									
All of <u>Good</u> quality.	120	4									

Her Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has Three Long Boats and four boats  
 The present state of the Windlass is Good Capstan 2 of Iron and Rudder Good Pumps 2 of 7 inch Metal  
**Engine Room Skylights.**—How constructed? Iron, Oak, iron comings How secured in ordinary weather? Bullseyes  
 What arrangements are there for deadlights in such for bad weather? Bullseyes  
**Coal Bunker Openings.**—How constructed? Iron pipes How are lids secured? Clasps How high above deck? 6 inches  
**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? Port in bulwark  
**Cargo Hatchways.**—How formed? 7/16 Plate State size 18 1/2 x 12 1/2 in height of comings 30 inches  
 If of extraordinary size, state how framed and secured? Packet 14 1/2 x 11 1/2 in height of comings 18 inches  
 What arrangement for shifting beams? 7/16 Plate the whole depth of comings  
**Hatches, themselves, whether strong and efficient?** Good **Main Hatchways.**—State size 22 1/2 x 11 1/2 in height of comings 30 inches

Order for Special Survey No. 500 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Special Survey  
 Date 9th May 1871 Surveys held 2nd. On the plating during the progress of riveting Seen twice each  
 Order for Ordinary Survey No. \_\_\_\_\_ while building 3rd. When the beams were in and fastened, and before the decks were laid week during  
 Date \_\_\_\_\_ as per 4th. When the ship was complete, and before the plating was finally coated or cemented building  
 No. 23 in builder's yard. Section 18. 5th. After the ship was launched and equipped

**General Remarks,** Is fitted with raised quarter deck frames all to the top height, beams built 6 1/2 x 4 1/8. Double angles on top edges 2 1/2 x 2 1/2 x 5/16. Stringer plates on ends of do. 2 1/4 x 7/16. Angles 1 1/2 x 3/4 x 5/16. Tie plates 8 x 7/16. Diagonal plates 8 x 7/16. Plating 1/16. Deck 3 inch pine, fastened with 9/16 nut bolts. Waterballast tanks fitted in fore & main hold, frames cut off connection made with knee plates, side plates 7/16. Angles on do. 1 1/2 x 3/4 x 7/16. Web plates 1/16. Angles on do. 2 1/2 x 2 1/2 x 5/16. Plating 5/16.  
 Main deck stringer plates extend 12 feet abaft-beak of raised deck, the same connected to raised deck stringer plates with vertical plate 8 1/2 x 1/2. Double angles top & bottom edges.

W. H. Alexander

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.  
 In what manner are the surfaces preserved from oxidation? Inside Painted with red lead Outside, other parts with paint

I am of opinion this Vessel should be Classed 90 A1  
 The amount of the Entry Fee ..... £ 5 : 0 : 0 is received by me,  
 Special ..... £ 33 : 1 : 0  
 Certificate .... : :  
 (Travelling Expenses) (if any) £

I concur in the opinion that this vessel should be classed 90 A 1.  
 Rules 1870 for the vessel 1871 for outfit

Committee's Minute 19th April 1872  
 Character assigned 90 A 1

See Surveyors letter dated 20th March 1871

