

IRON SHIP

Rec 3/1/74

No. 2906 Survey held at Hartlepool

Date, First Survey 9th August Last Survey 20th Dec 18

On the Screw Steamer "Ann Webster"

Master J. George

Tonnage under Tonnage Deck 602.09

ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.

THREE DECKED VESSELS.

Built at Hartlepool

When built 1870 Launched 23rd November

By whom built Wm. Alexander & Co

Owners J. D. Hill & Co.

Port belonging to London

Destined Voyage

If Surveyed while Building, Afloat, or in Dry Dock.

Ratio of Spar Deck, or Awning Deck. 40
Ratio of Poop, or Raised Or. Dk. 50
Ratio of Houses Deck 50
Forecastle 50
Space, per Rule 2
Cut on Beam 2
Room 7
Tonnage, as a Steamer, cut on Beam 806

Half moulded breadth 14.2
Depth from upper part of Keel to top of Upper Deck Beams 17.9
Girth of Half Midship Frame (as per Rule) 28.11

1st Number 60.10
Length 200.3

2nd Number 12101

Depths to Length. Over 12

Half Moulded Breadth 14.2
Total Depth if three or more Decks 17.9
Total Girth of Half Midship Frame 28.11

3rd Number 60.10
Length 200.3

4th Number

Breadths to Length Over 7

Length on deck as per Rule, 200 3 Moulded Breadth, 20 4 Depths from top of Floors to Upper and Main Deck Beams, as per Rule 16 3 Power of Engines, 96 Horse. No. of Decks, Four No. of Tiers of Beams, Four

Dimensions of Ship per Register, length, 200.6 breadth, 20.5 depth, 18.9

	Inches in Ship	Inches required per Rule
Keel, if bar iron, depth and thickness	<u>8 x 2 3/8</u>	<u>8 x 2 3/8</u>
Do. if centre through plate, depth and thickness	<u>7 x 2 3/8</u>	<u>7 x 2 3/8</u>
Stem, if bar iron, moulding and thickness	<u>8 x 4 1/4</u>	<u>7 x 4 3/4</u>
Stern-post for Rudder do. do.	<u>8 x 4 1/4</u>	<u>22</u>
Stern-post for Propeller	<u>22</u>	<u>(Class 90A)</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22</u>	
Frames, size of Angle Iron, for 1/2 length amidships	<u>4 x 3 1/16</u>	<u>4 x 3 1/16</u>
Do. for 1/2 at each end	<u>4 x 3 1/16</u>	<u>4 x 3 1/16</u>
Reversed Frames, size of Angle Iron	<u>3 x 3 1/16</u>	<u>3 x 3 1/16</u>
Floors, depth and thickness of Floor Plate at line for half the length amidships	<u>10 1/2 x 8 1/16</u>	<u>10 1/2 x 8 1/16</u>
Do. at the ends	<u>10 1/2 x 7 1/16</u>	<u>10 1/2 x 7 1/16</u>
Do. do. do. at Bilge Keelson	<u>12</u>	<u>12</u>
Do. height extended at the Bilges	<u>37</u>	<u>37</u>
Beams, Upper, Spar, or Awning Deck (No. <u>3 1/2</u>)	<u>7 x 7 1/16</u>	<u>7 x 7 1/16</u>
Single or double Angle Iron, Plate or Tee Bulb Iron	<u>3 x 2 1/2 6/16</u>	<u>2 3/4 2 1/2 5/16</u>
Average space	<u>44 inches</u>	<u>44 inches</u>
Beams, Main or Middle Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron		
Single, or double Angle Iron, on Upper Edge		
Average space		
Beams, Lower Deck, Hold or Orlop (No. <u>27</u>)	<u>7 x 7 1/16</u>	<u>7 x 7 1/16</u>
Single or double Angle Iron, Plate or Tee Bulb Iron	<u>3 x 2 1/2 6/16</u>	<u>2 3/4 2 1/2 5/16</u>
Single or double Angle Iron on Upper Edge	<u>2 3/4 x 4 1/2 6/16</u>	<u>2 3/4 x 4 1/2 6/16</u>
Average space	<u>13 x 10 1/16</u>	<u>13 x 10 1/16</u>
Keelson Centre line, single or double plate, box, or Intercostal, size of Plates		
Bulb Plate to Intercostal Keelson	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>
Size of Angle Irons	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>
Do. Side Intercostal Keelson, size of Plates		
Do. Angle Irons on tops of Floors	<u>7 x 7 1/16</u>	<u>7 x 7 1/16</u>
Do. Bilge Keelson, Bulb Iron		
Do. do. Intercostal plates riveted to plating for length	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>
Do. do. Angle Irons	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>
Side Stringers (No. <u>one</u>) size of Angle Irons	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>
Do. Intercostal plates riveted to plating for length		

	Inches in Ship	16ths in Ship	Inches required per Rule	16ths required per Rule
Flat Keel Plates, breadth and thickness				
Plates in Garboard Strakes, breadth and thickness	<u>32</u>	<u>9 1/16</u>	<u>30</u>	<u>9 1/16</u>
Do. from Garboard to upper part of Bilges		<u>9 1/16</u>		<u>9 1/16</u>
Do. of doubling at Bilge, or increased thickness, and length applied				
Do. from up. part of Bilge to lr. edge of Sh'rstake	<u>34 1/2</u>	<u>7 1/16</u>	<u>30</u>	<u>7 1/16</u>
Do. Main Sheerstrake, breadth and thickness		<u>11 1/16</u>		<u>10 1/16</u>
Do. of d'bling at Sh'rstake, & length applied				
Do. from Mn. to Up. or Spar Dk. Sh'rstake				
Do. Up. or Spar Dk. Sh'rstake, breadth & thickness				
Butt Straps to outside plating, breadth & thickness	<u>10 x 9 1/16</u>	<u>9 3/4</u>	<u>9 1/16</u>	<u>9 1/16</u>
Lengths of Plating	<u>9 ft. 2 in.</u>	<u>9 ft. 2 in.</u>		
Shifts of Plating, and Stringers	<u>1 1/4 inches</u>	<u>1 1/4 inches</u>		
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>3 1/2</u>	<u>9 1/16</u>	<u>20 1/2</u>	<u>9 1/16</u>
Angle Iron on ditto	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>		
Tie Plates (fore and aft), outside Hatchways	<u>10</u>	<u>9 1/16</u>	<u>9 1/2</u>	<u>9 1/16</u>
Diagonal Tie Plates on Beams (No. of Pairs, <u>2</u>)	<u>10</u>	<u>9 1/16</u>	<u>9 1/2</u>	<u>9 1/16</u>
Planksheer material and scantling				
Waterways do. do.	<u>3 3/4</u>	<u>4 1/16</u>	<u>3 3/4</u>	
Flat of Deck do. do.	<u>11.8</u>	<u>9 1/16</u>		<u>9 1/16</u>
How fastened to Beams				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
(Is the Stringer Plate attached to the outside plating?)	<u>yes</u>			
Angle Irons on ditto (No.)				
Tie Plates, outside Hatchways				
Diagonal Tie Plates on Beams (No. of pairs,)				
Waterways materials and scantlings				
Flat of Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>2 1/2</u>	<u>7 1/16</u>	<u>2 5</u>	<u>7 1/16</u>
(Is the Stringer Plate attached to the outside plating?)	<u>yes</u>			
Angle Irons on ditto (No. <u>two</u>)	<u>4 1/2 x 3 1/2 7/16</u>	<u>4 1/2 x 3 1/2 7/16</u>	<u>3 1/2 x 3 1/2 7/16</u>	
Stringer or Tie Plates, outside Hatchways	<u>3 1/2 x 3 1/2 7/16</u>	<u>3 1/2 x 3 1/2 7/16</u>	<u>3 1/2 x 3 1/2 7/16</u>	
Flat of Deck				
Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>7 1/16</u>		
Do. in hold do. do.	<u>2</u>	<u>7 1/16</u>	<u>5</u>	
Main piece of Rudder, diameter at head	<u>5</u>		<u>5</u>	
Do. do. at heel	<u>3</u>		<u>3</u>	
(Can the Rudder be unshipped afloat? <u>yes</u>)				
Bulkheads No. <u>4</u> Thickness of <u>6 1/16</u>				
Do. Height up <u>Main Deck</u> , after one to <u>capin Deck</u> <u>18 in.</u>				
Do. How secured to the sides of the ship <u>to double frames</u>				
Do. Size of Vertical Angle Irons, <u>3 x 3 1/2 7/16</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 English Oak Pall Bitt Teak

The Frames extend in one length from Keel to gunwale

The Reverse Angle Irons on the floors and frames extend across the middle line line to the top of bilge 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 Riveted to Keel, double or at upper edge, with Rivets (1 1/16 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 1/4 in.) diameter, averaging (3 1/16 ins.) from centre to centre.

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

Do. of two Strakes at Bilge for half length, treble riveted with Butt Straps 1 1/16 thicker than their plates.

Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (3 1/4 in.) diameter, averaging (3 1/16 ins.) from centre to centre.

Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single to bilge At lower edge Double

Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (9 3/4 x 7 1/2) thick, double or single Riveted; with Rivets (3 1/4 in) diameter, averaging (3 1/4 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, double, double or single Riveted? Double & treble riveted

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? Beam ends turned & secured to sides No. of Breasthooks, five Crutches, three

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, Wm. A. & Co. J. R. & Co. Hartlepool Iron Works. For Head of

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

Builder's Signature, Wm. Alexander & Co. Surveyor's Signature, S. P. Gladstone

IRON 447-0375

Workmanship. Are the butts of plating planed or otherwise? 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? 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 in one
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes 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 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 51 ft 6 in Diam, 18 1/2 ft Bore Mast 49 ft Diam

8570 Iron

Number for equipment	13399	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	W't req'd per Rule.	Test r per R.
SAILES.	CABLES, &c.										
Fore Sails,	Chain	40	5 1/6	31-0-0	1 1/6	31-0-0	Bowers	3	15-3-14 17-0	15-1-0	16-0
Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	at Sunderland	13 ft	1070			(State Machine where Tested, and name of Superintendent).	at Sunderland	11 ft 10 in	1070	
Fore Topmast Stay Sails	Heads Stream Cable	60	7 1/10				Stream	1	6-2-0	6-2-0	
Main Sails,	Hawser	80	6				Kedges	2	3-1-7 1-8-2	3-1-0 1-3-0	
Main Top Sails,	Towlines ...	80	8 1/2								
and	Warp	90	5								
	All of good quality.	160	4 1/2								

Her Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has Two Long Boat and one jolly
The present state of the Windlass is E. Oak Capstan 2 of Iron and Rudder Good Pumps 2 of 7 in Iron
Engine Room Skylights. How constructed? 3 in Pine, to 1/4 casing How secured in ordinary weather? Bullseyes
What arrangements are there for deadlights in such for bad weather? none

Coal Bunker Openings. How constructed? Iron pipes How are lids secured? Bars How high above deck? 12 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? ports in bulwark

Cargo Hatchways. How formed? 7/16 plate coming 29 in. Above State size Main 22 ft x 11 ft. Fore 22 ft x 11 ft
If of extraordinary size, state how framed and secured?
What arrangement for shifting beams? Plate in centre 7/16 the whole depth of beams. Double angles on top & bottom
Hatches, themselves, whether strong and efficient? Strong & efficient Main Hatchways. State size 22 ft x 11 ft.

Order for Special Survey No. 361 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought
Date 16th Aug 1870 Surveys held 2nd. On the plating during the progress of riveting
Order for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid
Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented
No. in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, It fitted with Raised Quarter Deck, frames all to the top height
beams built 6 1/2 x 6 1/6, double angles on top edges 2 1/2 x 2 1/2 x 3/16, stringer plates on
ends of do. 26 x 7 1/6 angles 4 1/2 x 3 1/2 x 7/16, side plates 9 x 7/16 Diagonal do. 9,
Plating 6/16. Deck 3 in. W. Pine.
Water ballast tanks fitted in fore & after hold. frames cut off connections
made with Pine plates, side plates 6/16. angles on do. 4 x 8 x 7/16. Web plate
6/16, angles top & bottom edges 3 1/2 x 3/2. Top plating 15/16. *See Lon. Sec,
Iron Deck fitted over Engine & Boiler space length 44 ft 7 in 6/16 plate
riveted to beams.
Length over twelve depths, sharp transverse increased 16 in the keel for 3,
gunwale stringers increased in breadth for 3/4 length. Bulk plate fitted between
bulge keelson angles. 7 x 7/16.

Widely Alexander & Co.

In what manner are the surfaces preserved from oxidation? Inside Flat Cemented with Portland Cement Outside 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£ 7 : 6 : 0
Certificate : : :

(Travelling Expenses)
(if any) £

Committee's Minute 3rd January 1870

Character assigned 90 A1

This Steamship appears to have been built in accordance with the Rules, and the ship's papers submitted, and the ship is eligible for Classification and is recommended to be classified "A1" and "B" for double bottom.