

2911 IRON SHIPS.

Rec 25/7/62

No. 7532 Survey held at Sunderland Date July 23^d & September 17th 1862
 on the Steamer "Aries" Master _____
 Tonnage Gross 611 Engine Room 132 Register 479 Built at Sunderland
 When Built 1862 By whom built James Craig Owners now G. P. Obegne
 Launched July 15th 1862 Port belonging to Sunderland Destined Voyage Havana
 If Surveyed Afloat or in Dry Dock during Building

Length aloft 198 Feet. Inches. Extreme Breadth.... 27 8 Feet. Inches. Depth from top of Upper Deck } 15 11 Feet. Inches. Beam to top of Floor..... } Power of Engines.... 120 Horse No.

Description	Inches in Ship		Inches required per Rule		Description of Iron	Inches in Ship		Inches required per Rule	
	In Ship	In Ship	Inches	16ths		Inches	16ths	Inches	16ths
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	<u>18</u>		<u>18</u>		Stem, if bar iron, moulding and thickness	<u>6 1/2</u>	<u>2 3/4</u>	<u>7</u>	<u>2 3/4</u>
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	<u>4</u>	<u>3</u>	<u>7</u>	<u>4</u>	Stem-post, if bar iron, moulding and thickness	<u>8 1/2</u>	<u>4</u>	<u>7</u>	<u>5 1/2</u>
depth and thickness of Floor Plate at mid line	<u>16</u>		<u>8</u>	<u>16</u>	Keel, if bar iron, depth and thickness	<u>6 1/2</u>	<u>2 3/4</u>	<u>7</u>	<u>2 3/4</u>
depth and thickness of Floor Plate at Bilge Keelson	<u>5</u>		<u>8</u>	<u>4</u>	Garboard Plates, thickness..	<u>16</u>	<u>10</u>	<u>16</u>	<u>10</u>
Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	<u>3</u>	<u>2 3/4</u>	<u>6</u>	<u>3</u>	From Garboard to upper part of Bilge	<u>9</u>		<u>9</u>	
Frames, Size of Angle Iron, single or double	<u>4</u>	<u>3</u>	<u>7</u>	<u>4</u>	From upper part of Bilge to Sheerstrakes	<u>8</u>		<u>8</u>	
Reversed Iron, 1/2 to every frame to the upper part of bilge and 1/2 to every alternate frame to the top height	<u>3</u>	<u>2 3/4</u>	<u>6</u>	<u>3</u>	Sheerstrakes	<u>9</u>		<u>9</u>	<u>10-9-8</u>
Beams, Deck (No. 49) double Angle Iron or Bulb Iron with double Angle Iron on top	<u>3</u>	<u>2 1/2</u>	<u>5</u>	<u>3</u>	Breadth & thickness of Butt Straps to outside plating	<u>8 1/2</u>	<u>10-9-8</u>	<u>7 1/2</u>	<u>10</u>
depth & thickness of plate amidships	<u>7</u>		<u>7</u>	<u>7</u>	Planksheers				
double or single Angle Iron on lower edge					Gunwale Plate or Stringer on ends of Up. Dk Beams	<u>2 1/2</u>	<u>9</u>	<u>21</u>	<u>8</u>
average space between	<u>3 feet</u>		<u>3 feet</u>		Angle Iron on ditto	<u>4 1/2</u>	<u>7</u>	<u>4 1/2</u>	<u>7</u>
if wood (No.) sided & moulded					Waterway	<u>8</u>		<u>3 1/2</u>	
Hold, or Lower Deck (No. 31) double Angle Iron or Bulb Iron with double Angle Iron on top	<u>3</u>	<u>2 1/2</u>	<u>6</u>	<u>3</u>	Deck	<u>3 1/2</u>		<u>3 1/2</u>	
depth & thickness of plate amidships	<u>7</u>		<u>7</u>	<u>7</u>	Ceiling in Hold to turn of bilge	<u>2 1/2</u>			
double or single Angle Iron on lower edge					Ceiling betwixt Decks	<u>2 1/2</u>			
average space between	<u>3 ft & 6 in</u>		<u>3 ft & 6 in</u>		Beams Clamps				
if wood (No.) sided & moulded					Stringer Plates on ends of Hold or Lower Dk Beams	<u>2 1/2</u>	<u>9</u>	<u>21</u>	<u>8</u>
Paddle, wood sided and moulded on iron, size of Plate					Ceiling between Decks				
Engine					Stringer or Tie Plates outside Hatchways	<u>10</u>	<u>9</u>	<u>10 3/4</u>	<u>8</u>
Keelson, wood, sided & moulded, iron, size of anticorast plate, in Box, give sketch & dimensions	<u>26</u>	<u>8</u>	<u>22</u>	<u>8</u>	Deck Beam Clamps				
Side or Bilge double Angle Iron	<u>4 1/2</u>	<u>3 1/4</u>	<u>7</u>	<u>4 1/2</u>	Stringers in Hold	<u>4 1/2</u>	<u>3 1/2</u>	<u>7</u>	<u>7</u>
Number of Beams on each side & extra on Hold Beams 18 in x 7 1/2 in					Deck Irons				

Transoms, material _____ or _____ in what manner compensated for _____
 Knight-heads " none are they free from defects? _____
 Hawse Timbers " do how secured to the sides of the ship between two framed uprights
 size of vertical angle iron and their distance apart 3 x 3 1/2 in apart
 The Frames or Ribs extend in one length from Keel to gunwale rivetted through plates with (3/4 in.) rivets, about (5 1/2) apart.
 The reverse angle irons on the floors extend in one length across the middle line from _____ to upper part of bilge on every frame
 " " " on the frames " " " from and _____ to the upper deck on alternate frames
 Keelson, how are the various lengths of plates or angle irons connected? with double angle irons at top & bottom 4 1/2 x 3 1/2 x 1 1/2
 Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (7/8 ins.) diameter averaging (3 1/2 in.) from centre to centre of rivet.
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 ins.) from centre to centre of rivets.
 Butts from Keel to turn of bilge, worked carvel with a lining piece (9/16) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? no
 Edges from bilge to planksheer, worked clencher with a lining piece (1) thick, double or single rivetted; rivets (3/4 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? no
 Butts from bilge to planksheers, worked carvel with a lining piece (9/16) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter averaging (2 1/2 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4) Breadth of laps in single rivetting (2 1/2)
 Planksheer, how secured to the plating of the sides { Explain by sketch, }
 Waterway " " planksheer and to the Beams { if necessary. } Bolted down to stringer plate
 Side trussing _____ breadth and thickness of plates _____ how secured? _____
 Deck trussing " " " " _____
 Deck Beams, how secured to the side? with three plates as per table & rivetted to the frames & beams
 Hold or Lower Deck " _____
 Paddle " " " " _____
 No. of breasthooks 14 how are pointers compensated? all stringers carried round the bows
 What description of iron is used for the angle iron and plate iron in the vessel? _____

Builder's Signature
James Craig

Angle Iron Josh Wilson & Bell
 Plates G. B. Richardson & Co & Boldrow & Baughman

IRON 436-0040

2911 Iron

Workmanship. Are the lands or laps of the clenwork 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? Yes

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 with single pieces

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes

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

Her Masts, Yards, &c., are in good 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 <u>certificates produced Admiralty test.</u>	240	1 5/16	Bower,	3 21.2.20
/	Fore Top Sails,	Hempen Stream Cable	80	8 1/2	Stream,	1 6.3.24
/	Fore Topmast Stay Sails,	Hawser	60	7/8	Kedge,	2 3.1.10
/	Main Sails,	Towlines	70	6		1.1.20
/	Main Top Sails,	Warp	70	5 1/2		
and <u>others as usual</u>		All of <u>good</u> quality.				

Her Standing and Running Rigging is of wire hemp sufficient in size and good in quality.

She has Long Boat and

The present state of the Windlass is good Capstan good and Rudder good Pumps one in each compartment

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

- DATES of Surveys held while building, as per Section 17.
- 1st. On the several parts of the frame, when in place, and before the plating was wrought January 30th
 - 2nd. On the plating during the progress of rivetting March 3^d
 - 3rd. When the beams were in and fastened, and before the decks were laid April 17th
 - 4th. When the ship was complete, and before the plating was finally coated May 5th
 - 5th. After the ship was launched July

This ship exceeds the dimensions allow'd by rule the compensation for which are shown in the accompanying sketch marked in red, there is also an iron bottom fitted to the Engine room, she is also built with a full poop 44 feet long, no top gallant fore-castle

In what manner are the surfaces preserved from oxidation? with red lead & Peacock's patent and with Portland cement in the bottom to turn of bilges

I am of opinion this Vessel should be classed G.A.S.

The amount of the Fee£ 5 : " : " is received by me,
 Special£ " : " : "
 Certificate (if required)£ " : 5 : "

Robt. B. Simey

Committee's Minute 20 September 1862

Character assigned G.A.

We are of opinion that the floor plates should have been carried further up on the bilges and cutting them down to level line on the upper edges should not be deemed to be a precedent. Mr. Simey has written to state the number of boats this vessel has - in other respects we are of opinion she is eligible for the class above recommended

*29 September 1862
 To have fee 1/6
 See Mr Simey's do 27/9/62*