

IRON SHIPS.

No. 234 Survey held at Newcastle Date 15 Feb 1864
 on the Steam S. S. Columba Master J. Sheen
 Tonnage Gross 146.44 Engine Room 46.88 Register 99.51 Built at Newcastle
 When Built 1863 Launched 15 December By whom built Mitchell & Co
 Port belonging to Negapatam Destined Voyage E. Indies
 If Surveyed Afloat on in Dry Dock and while building as per sea 17

Length aloft		Extreme Breadth		Depth from top of Upper Deck		Power of Engines	
Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
105	0	19	0	11	6	25	0
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft				Stem, if bar iron, moulding and thickness			
18				5 1/2			
Floors, Size of Angle Iron, and No. at bottom of Floor Plate				Stern-post, if bar iron, moulding and thickness			
2 1/2				5 1/2			
depth and thickness of Floor Plate at mid line				Keel, if bar iron, depth and thickness			
12				5 1/2			
depth and thickness of Floor Plate at Bilge Keelson				Garboard Plates, Breadth and thickness			
5				24			
Size of Reversed Angle Iron, and No. at top of Floor Plate				From Garboard to upper part of Bilge			
2 1/4				6			
Frames, Size of Angle Iron, single or double				From upper part of Bilge to Sheerstrakes			
2 1/2				6			
Reversed Iron, if to every frame				Sheerstrakes, Breadth and thickness			
2 1/4				32			
Beams, Deck (No. 10) double Angle Iron				Butt Straps to outside plating, Breadth and thickness			
5				4 x 7 1/2			
Plate or Bar Iron				Planksheers			
5				10			
double or single Angle Iron				Gunwale Plate or Stringer on ends of Up. Dk Beams			
5				10			
average space between				Angle Iron on ditto			
3 feet				2 1/2			
if wood (No.) sided & moulded				Diagonal Tie Plates on Beams			
19				4 1/2			
Hold, or Lower Deck (No.)				Waterway			
19				10			
double Angle Iron, Plate or Bar Iron				Deck			
5				5			
double or single Angle Iron				Ceiling in Hold			
5				5			
average space between				Ceiling between Decks			
3 1/2				2 1/4			
if wood (No.) sided & moulded				Beam Clamps or Spirketting			
3 1/2				Shelf			
Paddle, wood, sided and moulded, or if Iron, size of Plate				Stringer Plates on ends of Hold or Lower Dk Beams			
Engine				None			
Keelson, single plate, box or intercostal				Ceiling between Decks			
2 1/2				Plating			
Size of Plates				Stringer or Tie Plates outside Hatchways			
2 1/2				Deck Beam Clamps or Spirketting			
Size of Angle Irons				Shelf			
2 1/2				Stringers in Hold			
Ditto Bilge (No.)				Deck, Lower			
2 1/2				Deck, Upper, how fastened to Beams			
Transoms, material				Bulkheads, No.			
Plate or, if none, in what manner compensated for.				Thickness of			
Knight-heads, and Hawse Timbers				how secured to the sides of the ship			
Plate & Cheek				size of vertical angle iron and their distance apart			
The Frames or Ribs extend in one length from keel to Gunwale				rivetted through plates with () rivets, about () apart.			
The reverse angle irons on the floors extend in one length across the middle line from to upper part of bilges							
Keelson, how are the various lengths of plates or angle irons connected?				Butt Straps & Butts of Keelson			
Plates, Garboard, double rivetted to keel & at upper edge, with rivets () diameter averaging () from centre to centre of rivet.							
Edges from Garboards to upper part of bilge, worked carvel with a lining piece () thick, or clenchier, double or single rivetted; rivets () diameter, averaging () from centre to centre of rivets.							
Butts from Keel to turn of bilge, worked carvel with a lining piece () thick, double or single rivetted; rivets () diameter, averaging () from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?							
Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clenchier, double or single rivetted; rivets () diameter, averaging () from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?							
Edge of Sheerstrake, double or single rivetted?							
Butts from bilge to planksheers, worked carvel with a lining piece () thick, double or single rivetted; rivets () diameter averaging () from centre to centre of rivets. Breadth of laps in double rivetting () Breadth of laps in single rivetting ()							
Butt Straps of Keelsons, Stringer and Tie Plates, double rivetted?							
Planksheer, how secured to the plating of the sides				Bolted to Stringer and			
Waterway, planksheer and to the Beams				single plating			
Deck Beams, how secured to the side?				single plating			
Hold or Lower Deck							
Paddle							
No. of breasthooks crutches how are pointers compensated?							
What description of iron is used for the angle iron and plate iron in the vessel?				Builder's Signature			
Cast-iron and "I.W. & B. Walker"				Lloyd's Register			

IRON 437-0130

3462. Iron.

Workmanship. Are the lands or laps of the clenchwork 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? Observed
Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? With thin strips between
Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Generally and are the rivet holes well and sufficiently countersunk in the outer plate? Some rivets which were driven were made
Are there any rivets which either break into or have been put through the seams or butts of the plating? Agreed

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.
2	Fore Sails,	Chain	150 13/16	Bower,	5 1/2
	Fore Top Sails,	Hempen Stream Cable	50 4 1/8		4 3/4
	Fore Topmast Stay Sails,	Hawser	45 5 1/2	Stream,	P. & 1 3/4
	Main Sails,	Towlines	50 4 1/2		
	Main Top Sails,	Warp	50 3 1/2	Kedge,	1 1
and —		All of <u>best</u> quality.			

Her Standing and Running Rigging Complete sufficient in size and best in quality.

She has 1 Life Long Boat and 18 ft - 4 Quarter boat - 16 ft -

The present state of the Windlass is good Capstan winch and Rudder good Pumps 2 Deck Pumps

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	<u>Union Iron Works</u>
	2nd.	On the plating during the progress of rivetting	
	3rd.	When the beams were in and fastened, and before the decks were laid	<u>Decr 15. 20 & 22. 1864</u>
	4th.	When the ship was complete, and before the plating was finally coated	<u>3. 12. & 26. Decr 9.</u>
	5th.	After the ship was launched	<u>Jan 3. 4. 15. & 26</u>

The upper deck beams in this vessel are of single angle iron, the sectional area of which is slightly below the requirements of the Rules. She has several lower beams of single angle iron not required by Rules. The Gunwale stringer is 1 3/4 inches than required by Rules. The scantlings are in other respects equal to the 9 years' grade, but in consequence of the upper deck beams being of single angle iron only I would beg to leave the item of grade for the Committee's consideration.

In what manner are the surfaces preserved from oxidation? Red lead and Good Cement - to above bilges

I am of opinion this Vessel should be classed A1

The amount of the Fee £ 2 : - : - is received by me,

Jan 11/12 Special Rate £ 5 : - : -
Certificate (if required) £ : - : -

Committee's Minute 2nd February 1864

Character assigned A 1 for 9 Years

The frames and spar, and other scantlings of this Small Steam Tug have been compared with Old Table Gauge 9 A. The only deviation is in the single angle iron beams, as stated, the strength or sectional area of which is slightly under, barely sufficient to prevent her obtaining the 9th grade. The Committee decided to class her. It will be observed the frames and beams are closer than the Rules require.

Feb 1/04

To have his 1st
5/2/04