

IRON SHIPS.

Rev 26/8/40

No. 2876 Survey held at Middlesboro Date, First Survey 29th April 1840 Last Survey 12th Aug^r 1870

On the Screw Steamer "John Caughan" Master James Walker

Tonnage under Tonnage Deck	455.20	ONE, OR TWO DECKED VESSELS.	THREE DECKED VESSELS.	Built at	<u>Middlesboro</u>
Ditto of Spar Deck, or Awning Deck.		Half moulded breadth ...	Half Moulded Breadth ...	When built	<u>1840</u> Launched <u>July 14th 40</u>
Ditto of Poop, or Raised Or. Dk.	<u>24.64</u>	Depth from upper part of Keel to top of Upper Deck Beams (or as per Rule, Section 11) ...	Total Depth of three or more Decks ...	By whom built	<u>Backhouse & Dyson</u>
Ditto of Houses on Deck ...	<u>1.44</u>	Girth of Hull Midship Frame (as per Rule) ...	Total Girth of Half Midship Frame ...	Owners	<u>C. E. Muller</u>
Ditto of Forecastle		1st Number ...	1st Number ...	Port belonging to	<u>Middlesboro</u>
Gross Tonnage	<u>481.28</u>	Length ...	Length ...	Destined Voyage	<u>Antwerp</u>
Crew Space, as per Rule	<u>23.83</u>	2nd Number ...	2nd Number ...	Surveyed while Building, Afloat, or in Dry Dock	<input checked="" type="checkbox"/>
Register Tonnage, cut on Beam ...	<u>301.60</u>	Depths to Length, within 102 depths	Breadths to Length ...		
Engine Room	<u>153.15</u>				
Register Tonnage, as a Steamer, cut on the Beam	<u>301.60</u>				

Length on deck as per Rule, Feet. Inches	Moulded Breadth, Feet. Inches	Depths from top of Floors to Upper and Main Deck Beams, as per Rule	Power of Engines, Horse	No. of Decks	No. of Tiers of Beams
145	25	15	10	one	two
Dimensions of Ship per Register, length, 145 breadth, 25 depth, 15					
Keel, if bar iron, depth and thickness	1 1/2 x 2	1 1/2 x 2 1/8			
Do. if centre through plate, depth and thickness					
Stem, if bar iron, moulding and thickness	1 x 2	1 1/2 x 2 1/8			
Stern-post do. do. do.	8 1/2 x 3	1 1/2 x 1 1/4			
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	(Class 21 20A1)			
Frames, size of Angle Iron, for 2/3 length amidships	3 1/2 x 3	3 1/2 x 3 1/10			
Do. for 1/3 at each end	3 1/2 x 3	3 1/2 x 3 1/10			
Reversed Frames, size of Angle Iron	2 1/2 x 2 1/2	2 1/2 x 2 1/2 1/10			
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	1 1/2 x 1 1/2	1 1/2 x 1 1/2 1/10			
Do. at the ends		1 1/2 x 1 1/2 1/10			
Do. do. do. at Bilge Keelson	3 1/2 x 3 1/2	3 1/2 x 3 1/2 1/10			
Do. height extended at the Bilges					
Beams, Three Deeked, Spar, or Awning Deeked (No.) single or double Angle Iron, Plate or Tee Bulb Iron					
Single or double Angle Iron on Upper edge					
Average space					
Beams, Upper or Middle Deck (No. 52) single, or double Angle Iron, Plate or Tee Bulb Iron	6 1/2	6 1/2 1/10			
Single, or double Angle Iron, on Upper Edge	2 1/2	2 1/2 1/10			
Average space	4 1/2	4 1/2 1/10			
Beams, Lower Deck or Orlop (No. 22) single or double Angle Iron, Plate or Tee Bulb Iron	6 1/2	6 1/2 1/10			
Single or double Angle Iron on Upper Edge	2 1/2	2 1/2 1/10			
Average space	4 1/2	4 1/2 1/10			
Keelson Centre line, single or double plate, box, or intercostal size of Plates	12	12 1/10			
Do. Bulb Plate to Interoostal Keelson	2 1/2	2 1/2 1/10			
Do. Size of Angle Irons	1 x 3	1 x 3 1/10			
Do. Side Interoostal Keelson, size of Plates	1 x 3	1 x 3 1/10			
Do. Angle Irons on tops of Floors	1 x 3	1 x 3 1/10			
Do. Bilge Keelson, Bulb Iron	1 x 3	1 x 3 1/10			
Do. do. Angle Irons	1 x 3	1 x 3 1/10			
Do. Side Stringers (No. one) size of Angle Irons	1 x 3	1 x 3 1/10			
Transoms, material <u>Plating</u> or, if none, in what manner compensated for.					
Knight-heads <u>and</u> Hawse Timbers <u>Angles & Plating</u>					
Windlass <u>Patent</u> Pull Bitt					
The Frames extend in one length from <u>Keel</u> to <u>gunwale</u> Riveted through plates with (3/4 in.) Rivets, about 6 in. apart.					
The Reverse Angle Irons on the floors extend across the middle line <u>from turn of bilge to turn of bilge</u>					
On all the Frames and to <u>turn of bilge and to Main Deck Beams alternately</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>					
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (3/4 in.) diameter, averaging (5 1/2 ins.) from centre to centre.					
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (5/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre.					
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1/10 in.) thick, treble, double or single Riveted; with Rivets (3/4 in.) diameter averaging (2 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>No</u>					
Do. Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (5/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre.					
Do. Edges of Sheerstrake, double or single Riveted. At upper edge <u>single at bulwarks</u> At lower edge <u>double</u>					
Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps (1/10 in.) thick, double or single Riveted; with Rivets (5/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre. Breadth of laps in double Riveting (1 1/2) Breadth of laps in single Riveting (2 1/2)					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>Double riveted</u>					
Planksheer, how secured to the plating of the sides, Explain by Sketch, <u>Butter</u>					
Waterway ,, ,, planksheer and to the Beams, if necessary.					
Beams of the various Decks, how secured to the sides? <u>By beam ends turned & welded</u> No. of Breasthooks, <u>Four</u> Crutches, <u>Four</u>					
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Good</u>					
Manufacturer's name or trade mark, <u>James Backhouse & Co. Glasgow</u>					
We certify that the above is a correct description of the several particulars therein given.					
Builder's Signature, <u>James Backhouse</u> Surveyor's Signature, <u>W. M. Munnell</u>					

IRON 47-0017

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? 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 pieces
 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? Some in butts

Her Masts, Bowsprit, Yards, &c., are in Good R.P. 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 58 feet x 1 foot 4 in and 58 feet 9 in x 1 foot 4 in
8 2/14 Len

N ^o .	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.
	10800											
	SAILS.											
	CABLES, &c.											
	Chain	180	1 3/16	25 5/8	1 3/16	25 1/10	Bowers	3	12-2-0	14-10-1	12	13 1/2
	Fore Sails, (State Machine where Tested, and name of Superintendent).	90	1 3/16	25-8					12-0-0	13-4-2	12	13 1/2
	Fore Top Sails, <u>Slaydon's Wear Public Chain & Anchor Testing House</u>								10-1-0	12-4-1-14	10	12
	Fore Topmast Stay Sails, <u>Slaydon's Wear Public Chain & Anchor Testing House</u>											
	Main Sails, <u>Slaydon's Wear Public Chain & Anchor Testing House</u>	90	8 1/2				Stream	1	5-1-0		5	
	Main Top Sails, <u>Slaydon's Wear Public Chain & Anchor Testing House</u>	90	7									
	Warp	90	11									
	All of <u>quality</u>	90	11									
		90	3 1/2				Kedges	25	2-2-14		2 1/2	1 1/4
		90	3 1/2						1-4-10		1 1/4	1 1/4

Her Standing and Running Rigging is sufficient in size and good in quality. She has one Life Long Boat and two others

The present state of the Windlass is patent Capstan bench and Rudder good Pumps two of metal good

Engine Room Skylights.—How constructed? Red line on top of bridge How secured in ordinary weather? By gratings

What arrangements are there for deadlights in such for bad weather? house to 3/16 iron casing deadlights to ship

Coal Bunker Openings.—How constructed? Iron Pipes How are lids secured? Studs across bars How high above deck? 6 in

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? By 5 up scupper ports 3 feet 6 in x 6 in

Cargo Hatchways.—How formed? with 1/16 plates riveted to beams State size 14 feet x 8 feet
 If of extraordinary size, state how framed and secured? and tie plates 1 1/2" above deck

What arrangement for shifting beams? Centre plate fitted 22" x 8 1/2"

Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 14 feet x 8 feet

Order for Special Survey No. 244 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought
 Date 30th May 1870 Surveys held 2nd. On the plating during the progress of riveting been 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 build
 Date _____ as per 4th. When the ship was complete, and before the plating was finally coated or cemented _____
 No. 55 in builder's yard. Section 18. 5th. After the ship was launched and equipped _____

General Remarks,

Has a raised quarter deck. Frames to topsheight. Beams angles 4" x 4" x 1/16".
 2 1/2" x 2 1/2" x 1/16". Stringer plate on deck 2 1/2" x 1/16", angle iron on deck 3" x 3" x 1/16", tie plate 8" x 1/16".
 Plating 5/16", rivets 5/8", space 2 1/8". Deck 3" U.S. fastened with 8/16" h. s. n. p.

Fitted with Water Ballast Tanks. Fore Tank 33 feet 3 in. After Tank 31 feet 6 in.
 Side flange plates 1/16", knee plates 1/16", angle iron 4" x 3" x 1/16", girder plates 1/16".
 Angle iron top & bottom 2 1/2" x 2 1/4" x 1/16". Top of Tank 1/16"

The Butt straps of the Sheenstake, upper deck stringer plate and one strake at the bilges, for one-half the length amidships, increased 1/16" of an inch and double riveted

Richardson Dixon

In what manner are the surfaces preserved from oxidation? Inside with Paint & Cement Outside with Paint

I am of opinion this Vessel should be Classed 90 A 1

The amount of the Entry Fee £ 5 : : : is received by me,
 Travelling Expenses Special £ 22 : 15 : :
 (if any). Certificate : : : :

Committee's Minute 24 August 1870

Character assigned 90 A 1

W. M. Minwell
 This Report appears
 eligible for the Class
 90 A 1
 26.8.70
 Lloyd's Register
 Foundation

No. 1840
 dated 19th April 1870
 Secretary
 See