

# IRON SHIPS.

Rev 26/8/40

No. 2846 Survey held at Middlesbrough Date, First Survey 29<sup>th</sup> April 1840 Last Survey 12<sup>th</sup> Aug<sup>r</sup> 1870

On the Screw Steamer "John Caughan" Master James Walker

Tonnage under Tonnage Deck 455.20  
 Ditto of Spar Deck, or Awning Deck. 24.64  
 Ditto of Poop, or Raised Or. Dk. 1.44  
 Ditto of Houses on Deck 1.44  
 Ditto of Forecastle 1.44  
 Gross Tonnage 483.58  
 Crew Space, as per Rule 23.83  
 Register Tonnage, cut on Beam... 301.60  
 Engine Room 153.15  
 Register Tonnage, as a Steamer, cut on the Beam 301.60

ONE, OR TWO DECKED VESSELS. Three  
 Half moulded breadth 25  
 Depth from upper part of Keel to top of Upper Deck Beams (or as per Rule, Section 11) 16.6  
 Girth of Half Midship Frame (as per Rule) 26  
 1st Number 55  
 Length 145.9  
 2nd Number 9666  
 Depths to Length within 12 depths

THREE DECKED VESSELS.  
 Half Moulded Breadth 25  
 Total Depth if three or more Decks 16.6  
 Total Girth of Half Midship Frame 26  
 3rd Number 55  
 Length 145.9  
 4th Number 9666  
 Breadths to Length

Built at Middlesbrough  
 When built 1840 Launched July 14<sup>th</sup> 1840  
 By whom built Blackhouse & Dyson  
 Owners J. E. Muller  
 Port belonging to Middlesbrough  
 Destined Voyage Antwerp  
 Surveyed while Building, Afloat, or in Dry Dock

Length on deck as per Rule, 145 Feet. 9 Inches. Moulded Breadth, 25 Feet. 0 Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 16.6 Feet. 11 Inches. Power of Engines, 10 Horse. No. of Decks, one No. of Tiers of Beams two

Dimensions of Ship per Register, length, breadth, depth,	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	$1\frac{1}{2} \times 2$	$1\frac{1}{2} \times 2\frac{1}{8}$						
Do. if centre through plate, depth and thickness								
Stem, if bar iron, moulding and thickness	$1 \times 2$	$1\frac{1}{2} \times 2\frac{1}{8}$						
Stern-post do. do. do.	$8\frac{1}{2} \times 3$	$1\frac{1}{2} \times 1\frac{1}{4}$						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	(Class <u>21</u> )						
Frames, size of Angle Iron, for $\frac{2}{3}$ length amidships	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$5\frac{1}{2} \times 3$	$5\frac{1}{2} \times 3$				
Do. for $\frac{1}{3}$ at each end	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$5\frac{1}{2} \times 3$	$5\frac{1}{2} \times 3$				
Reversed Frames, size of Angle Iron	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$5\frac{1}{2} \times 2\frac{1}{2}$	$5\frac{1}{2} \times 2\frac{1}{2}$				
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$				
Do. at the ends	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$	$1\frac{1}{2} \times 4$				
Do. do. do. at Bilge Keelson	$8\frac{1}{2} \times 4$	$8\frac{1}{2} \times 4$	$8\frac{1}{2} \times 4$	$8\frac{1}{2} \times 4$				
Do. height extended at the Bilges	$3\frac{1}{2} \times 4$	$3\frac{1}{2} \times 4$	$3\frac{1}{2} \times 4$	$3\frac{1}{2} \times 4$				
Beams, Three Decked, Spar, or Awning Decked (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$				
Single or double Angle Iron on Upper edge	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$				
Average space	<u>42</u>	<u>42</u>	<u>42</u>	<u>42</u>				
Beams, Upper or Middle Deck (No. 53) single, or double Angle Iron, Plate or Tee Bulb Iron	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$				
Single, or double Angle Iron, on Upper Edge	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$				
Average space	<u>42</u>	<u>42</u>	<u>42</u>	<u>42</u>				
Beams, Lower Deck or Orlop (No. 22) single, or double Angle Iron, Plate or Tee Bulb Iron	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$	$6\frac{1}{2} \times 4$				
Single or double Angle Iron on Upper Edge	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$				
Average space	<u>42</u>	<u>42</u>	<u>42</u>	<u>42</u>				
Keelson Centre line, single or double plate, box, or intercostal size of Plates	$12 \times 4$	$12 \times 4$	$12 \times 4$	$12 \times 4$				
Do. Bulb Plate to Intercostal Keelson	$2\frac{1}{2} \times 4$	$2\frac{1}{2} \times 4$	$2\frac{1}{2} \times 4$	$2\frac{1}{2} \times 4$				
Do. Size of Angle Irons	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				
Do. Side Intercostal Keelson, size of Plates	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				
Do. Angle Irons on tops of Floors	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				
Do. Bilge Keelson, Bulb Iron	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				
Do. do. Angle Irons	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				
Do. Side Stringers (No. one) size of Angle Irons	$1 \times 3$	$1 \times 3$	$1 \times 3$	$1 \times 3$				

Transoms, material Plating or, if none, in what manner compensated for.  
 Knight-heads and Hawse Timbers Angles & Plating  
 Windlass Potter Pull Bitt Pull Bitt  
 The Frames extend in one length from Keel to Gunnwale  
 The Reverse Angle Irons on the floors extend across the middle line from turn of bilge to turn of bilge  
 On all the Frames and to turn of bilge and to Main Deck Beams 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 at upper edge, with Rivets ( $\frac{3}{4}$  in.) diameter, averaging ( $5\frac{1}{2}$  ins.) from centre to centre.  
 Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( $\frac{5}{8}$  in.) diameter, averaging ( $2\frac{1}{2}$  ins.) from centre to centre.  
 Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes ( $\frac{9}{16}$  in.) thick, treble, double or single Riveted; with Rivets ( $\frac{3}{4}$  in.) diameter, averaging ( $2\frac{1}{2}$  ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No  
 Do. Edges from bilge to sheerstrake, worked carvel with a lining piece (1 in.) thick, or clencher, double or single riveted; with rivets ( $\frac{5}{8}$  in.) diameter, averaging ( $2\frac{1}{2}$  ins.) from centre to centre.  
 Do. Edges of Sheerstrake, double or single Riveted. At upper edge single at bulwarks At lower edge double  
 Do. Butts from Bilge to Planksheers, worked Carvel with Butt Straps ( $\frac{9}{16}$  in.) thick, double or single Riveted; with Rivets ( $\frac{5}{8}$  in.) diameter, averaging ( $2\frac{1}{2}$  ins.) from centre to centre. Breadth of laps in double Riveting ( $1\frac{1}{2}$  in.) Breadth of laps in single Riveting ( $2\frac{1}{2}$  in.)  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double riveted  
 Planksheer, how secured to the plating of the sides, Butter  
 Waterway planksheer and to the Beams, if necessary.  
 Beams of the various Decks, how secured to the sides? By Beam ends turned & welded No. of Breasthooks, four 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, James Walker & Co. & Blackton Middlesbrough  
 We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature, James Walker Surveyor's Signature, James Walker

IRON 447-0017



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 ins and 58 feet 9 ins x 1 foot 4 ins

8 2 1/4 in

N <sup>o</sup> .	Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W't req'd per Rule.	Test req'd per Rule.
	SAILS.											
	CABLES, &c.											
	Chain .....	180	1 3/16	25 5/8	1 3/16	25 1/10	Bowers ....	3	12 x 2.0	14 x 16 x 1	12	13 1/2
	Fore Sails, (State Machine where Tested, and name of Superintendent).	90	1 3/16	25 x 8					12 x 0 - 0	13 - 14 - 2	12	13 1/2
	Fore Top Sails, <u>Sloyds Wear Public Chain &amp; Anchor</u>								10 x 1 - 0	12 - 14 - 14	10	12
	Fore Topmast Stay Sails, <u>Slender Stream</u>											
	Main Sails, Cable	90	8 1/2	Testing House			Stream ....	1	5 x 1 x 0		5	5
	Main Top Sails, Hawser .....	90	7				Kedges ....	2 1/2	2 x 2 x 14		2 1/2	2 1/2
	Towlines ...	90	7						1 x 1 - 10		1 1/4	1 1/4
	Warp .....	90	11									
	All of <u>quality</u>											

Her Standing and Running Rigging Line & Hemp 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 hunch 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 inch casing deadlights to ship

Coal Bunker Openings.—How constructed? Iron Pipes How are lids secured? Studs & cross 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 in scupper ports 3 feet 6 ins x 6 ins

Cargo Hatchways.—How formed? with 1/2 plates rivetted to beams State size 14 feet x 8 feet

If of extraordinary size, state how framed and secured? and 1/2 plates 15 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 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 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 11" x 11" x 1/16". 2 1/2" x 2 1/2" x 1/16". Stringer plate on d. 25 x 1/16". angle iron on d. 5 x 3 x 1/16". tie plate 8 x 1/16". Plating 5/16". rivets 5/8". space 2 1/4". Deck 3" U.S. fastened with 8/16" h. S. N. B.

Fitted with Water Ballast Tanks. Fore Tank 33 feet 3 ins. After Tank 31 feet 6 ins. Side flange plates 1/16". knee plates 1/16". angle irons 11" x 3" x 1/16". girder plates 1/16". angle irons top & bottom 2 1/4" x 2 1/4" x 5/16". 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 rivetted

Buckmaster 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 : 0

(if any). Certificate .... : : :

Committee's Minute 24 August 1870

Character assigned 90 A 1

Wm. Minnwell

This Vessel appears eligible for the Class



Lloyd's Register Foundation