

IRON SHIP.

No. 3456 Survey held at Middlesboro Date, First Survey 11th Sept 1874 Last Survey May 1875

On the Screw Steamer "J. B. Walker" Yard Number 114 Master Duncombe

TONNAGE under Tonnage Deck 1434.51
 Ditto of Third, Spar, or Awning Deck 23.45
 Ditto of Roop, or Raised Or. Dk. 24.46
 Ditto of Houses on Deck 1882.42
 Ditto of Forecastle 38.33
 Gross Tonnage 1882.42
 Less Crew Space 1882.42
 Less Engine Room 404.34
 Register Tonnage as cut on Beam 969.42

ONE OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 16.00
 DEPTH from upper part of Keel to top of Upper Deck Beams 25.84
 GIRTH of Half Midship Frame (as per Rule) 34.60
 1st NUMBER 49.44
 1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 42.44
 LENGTH 183.68
 2nd NUMBER 183.68
 PROPORTIONS—Breadths to Length Under 8
 Depths to Length—Upper Deck to Keel 11
 Main Deck ditto 14

Built at Middlesboro
 When built 1874-75 Launched March 8th 1875
 By whom built Rayton & Son & Co
 Owners J. B. Walker & Co
 Port belonging to Middlesboro
 Destined Voyage Java
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 253.6 BREADTH Moulded 32 DEPTH top of Floors to Upper Deck Beams 24.0 Do. do. Main Deck Beams 14.0 Power of Engines 150 Horse. 150 N° of Decks with flat laid Two N° of Tiers of Beams Three

Dimensions of Ship per Register, length, 253.6 breadth, 32 depth, 24

KEEL, depth and thickness 9 x 2 1/2
 RIBS, moulding and thickness 8 1/2 x 2 1/2
 TERN-POST for Rudder do. do. 10 x 4 1/2
 for Propeller 24
 Distance of Frames from moulding edge to moulding edge, all fore and aft 24 (Class 002)

FRAMES, Angle Iron, for 1/2 length amidships 4 1/2
 Do. for 1/2 at each end 4 1/2
 REVERSED FRAMES, Angle Iron 3
 LOORS, depth and thickness of Floor Plate at mid line for half length amidships 2 1/2
 thickness at the ends of vessel 2 1/2
 depth at 1/2 the half-bath, as per Rule 1 1/2
 height extended at the Bilges 4 1/2
 BEAMS, Upper, Spar, or Awning Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron 6 1/2
 Single or double Angle Iron on Upper edge 2 1/2
 Average space 48
 BEAMS, Main or Middle Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 1/2
 Single or double Angle Iron, on Upper Edge 3
 Average space 48
 BEAMS, Lower Deck, Hold or Orlop Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 1/2
 Single or double Angle Iron on Upper Edge 3
 Average space 48
 KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates 16
 Rider Plate 8 1/2
 Bulb Plate to Intercoastal Keelson 5
 Angle Irons 5
 Double Angle Iron Side Keelson 5
 Side Intercoastal Plate 5
 do. Angle Irons 5
 Attached to outside plating with angle iron 4 1/2
 AGE Angle Irons 5
 do. Bulb Iron 4 1/2
 do. Intercoastal plates riveted to plating for length 4 1/2
 AGE STRINGER Angle Irons 5
 Intercoastal plates riveted to plating for length 4 1/2
 DE STRINGER Angle Irons 5
 soms, material. Knight-heads. Hawse Timbers. Plating & Angles
 class Patent Pat Bitt

Flat Keel Plates, breadth and thickness 36
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 36
 fin up. part of Bilge to Ir. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness 40
 Butt Straps to outside plating, breadth & thickness 14 x 9/16
 Lengths of Plating 120
 Shifts of Plating, and Stringers 48
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 36
 Angle Iron on ditto 4 x 4 x 9/16
 Tie Plates fore and aft, outside Hatchways 12
 Diagonal Tie Plates on Beams No. of Pairs, 12
 Planksheer material and scantling Gutter
 Waterways do. do. 4
 Flat of Upper Deck do. 4
 How fastened to Beams 3.0 x 3.0
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 36
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. Two
 Tie Plates, outside Hatchways 12
 Diagonal Tie Plates on Beams, No. of pairs 12
 Waterways materials and scantlings 3 1/2
 Flat of Middle Deck do. do. 3 1/2
 How fastened to Beams 3.0 x 3.0
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 36
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. Two
 Stringer or Tie Plates, outside Hatchways 12
 Flat of Lower Deck 4 x 4 x 9/16
 Ceiling betwixt Decks, thickness and material 2 1/2
 in hold do. R.P.
 Main piece of Rudder, diameter at head 6
 do. at heel 3 1/2
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. 4 Thickness of 6 1/2
 Height up Main deck & Upper deck
 How secured to sides of ship Double frames
 Size of Vertical Angle Irons 3 x 5 x 1/16 and distance apart 30 ins.
 Are the outside Plates doubled two spaces of Frames in length? Yes

FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 2 1/2 apart.
 REVERSED ANGLE IRONS on floors and frames extend across middle line to Main Deck & Stringer and to gunwale alternately
 ELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes
 TING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.
 Butts of Three Strakes at Bilge for one-half length, treble riveted with Butt Straps 1/2 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 Waterway, how secured to Beams gunwale (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Beam ends turned & welded No. of Breasthooks, Four Crutches, Three
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good
 Manufacturer's name or trade mark, Robt's & Co. Birmingham and W. Hartlepool
 The above is a correct description.
 Builder's Signature, Rayton & Son & Co Surveyor's Signature, W. Hartlepool

See Decree Camp
Settled dated 28th Aug 1875 and 16th Dec 1875

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
Are the fillings between the ribs and plates solid single pieces? Solid pieces
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes
Do any rivets break into or through the seams or butts of the plating? Some in butts 14408 Iron

Masts, Bowsprit, Yards, &c., are Iron & 8" Pine good condition, and sufficient in size and length. If of Iron or Steel give
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 Lower Mast 49' x 22" Main Mast 43' x 22"

Plates $\frac{5}{16}$ x $\frac{5}{16}$ two in the round doubled at wedging. seams double and butts
nails riveted

NUMBER for EQUIPMENT		Per Rule	Breaking strain applied	ANCHORS, &c.	No.	Weight.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.		
1	Fore Sails,	Chain	240	1 1/2	55 1/8	340	55 1/2	30.0.0	28 1/2
2	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	240	1 1/2	55 1/8	340	55 1/2	30.0.0	28 1/2
3	Fore Topmast Stay Sails	Ham Strm Cbl	90	1 1/2	55 1/8	340	55 1/2	30.0.0	28 1/2
4	Main Sails,	Hawser	90	8	55 1/8	340	55 1/2	30.0.0	28 1/2
5	Main Top Sails,	Towlines	90	11	55 1/8	340	55 1/2	30.0.0	28 1/2
6	and	Warp	90	6 x 5	55 1/8	340	55 1/2	30.0.0	28 1/2

Standing and Running Rigging None & Hemp sufficient in size and good in quality. She has two Life Long Boats and one butler, one fire pump

The Windlass is good Capstan good and Rudder good Pumps three of Metal good

Engine Room Skylights. How constructed? 5/16 Iron casting & best skylight How secured in ordinary weather? 5 Bulls eyes

What arrangements for deadlights in bad weather? Bulls eyes

Coal Bunker Openings. How constructed? Bunker rings & Iron How are lids secured? Bars Height above deck? 12 1/2

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Five scuppers and open bulwarks

Cargo Hatchways. How formed? 5/16 Iron beams

State size Main Hatch 20' x 12' x 9' Fore hatch 10' x 8' x 6' Quarter hatch 22' x 11' x 8'

If of extraordinary size, state how framed and secured? Two centre plates 2' x 1' and 2' x 9' deep x 5/16 and two fore

What arrangement for shifting beams? Sand after T iron 11' x 11' x 5/16

Hatches, If strong and efficient? Yes

Order for Special Survey No. 500	Order for Ordinary Survey No.	No. 118 in builder's yard.	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	2nd. On the plating during the process of riveting	3rd. When the beams were in and fastened, and before the decks were laid...	4th. When the ship was complete, and before the plating was finally coated or cemented...	5th. After the ship was launched and equipped
Date 21st Aug 1875				Sept 11, 18, 22, 29, Oct 6, 9, 16, 20, 22, 30, Nov 3, 10, 18, 27, Dec 11, 22, 30, 1875	Jan 5, 11, 14, 18, 21, 25, Feb 12, 16, 19, 23, March 12	Apr 13, 16, 19, 22, 30, May 3, 11, 18, 25		

General Remarks, (State quality of workmanship &c.) Workmanship and Materials good.

Has a Forecastle. Frames to top height. Beams 5' x 8' x 5/16 Stringer on d 18' x 5/16
lie plate 9' x 5/16 Plating 5/16. Deck 3" a b fastened with 3/16 b. s. n. ss.

Water Ballast Tank in after Hold. Stange plate 5/16. Angle iron to d 18' x 5/16
binders 5/16 angles to d 2 1/2' x 2 1/4' x 5/16. Mass 5/16. Top of tank 5/16

Iron Deck over Engine & Boiler spaces 5/16 in thickness

Handwritten signature

State if one, two or three decked vessel, or if spar or running decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement and Paint Outside Paint

I am of opinion this Vessel should be Classed A 0 A 1

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,

Special ... £ 61 : 2 : 0 10th May 1875

Certificate ...

(Travelling Expenses) (if any) £

Committee's Minute 14th May 1875

Character assigned TRM 9 OA