

IRON SHIP.

Rec 23/12/72

No. 3126 Survey held at Middlesboro Date, First Survey 3rd Jan^r Last Survey 23rd Nov^r 1872
 On the Screw Steamer "E. S. Barry" Yard Number 80 Master Douglass
 Built at Middlesboro
 When built 1872 Launched 3 Aug^o 1872
 By whom built Backhouse & Dixon
 Owners Dixon & Harris
 Port belonging to London
 Destined Voyage Home
 If Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Deck 128.38
 Ditto of Third, Spar, or Awning Deck 50.80
 Ditto of Pop, or Raised Or. Dk. 50.80
 Ditto of Houses on Deck 18.93
 Ditto of Forecastle 18.93
 Gross Tonnage 866.80
 Less Crew Space 822.16
 Net Engine Room 277.38
 Registered Tonnage 515.08

ONE OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) 15.5
DEPTH from upper part of Keel to top of Upper Deck Beams 16.9
GIRTH of Half Midship Frame (as per Rule) 28.8
1st NUMBER 60.8
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 220.0
LENGTH 220.0
2nd NUMBER 133.5
PROPORTIONS—Breadths to Length 108.1
 Depths to Length—Upper Deck to Keel 13
 Main Deck ditto 13

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
on deck as per Rule	220		Moulded	31		top of Floors to Upper Deck Beams	15	6	Engines	99	one	two
						Do. do. Main Deck Beams						
Dimensions of Ship per Register, length, 220 breadth, 31.2 depth, 15.1												
KEEL , depth and thickness	8	2 3/8	Inches in Ship.	8	2 3/8	Inches per Rule.			Flat Keel Plates, breadth and thickness			
STEM , moulding and thickness	7 1/4	2 3/8		7 1/4	2 3/8				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	10/16	30
STERN-POST for Rudder do. do. for Propeller	9	8		9	8				fm up. part of Bilge to lr. edge of Sh'rstrake	9/16	10/16	9/16
Distance of Frames from moulding edge to moulding edge, all fore and aft	23			23					Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	9/16		9/16
FRAMES , Angle Iron, for 3/4 length amidships	3 1/2	3	Inches in Ship.	3 1/2	3	Inches per Rule.			Up. or Spar Dk Sh'rstrake, brdth & thickness	32	13/16	30
Do. for 1/2 at each end	3 1/2	3		3 1/2	3				Butt Straps to outside plating, breadth & thickness	11 1/2	9/16	11 1/2
REVERSED FRAMES , Angle Iron	3	2 1/2		3	2 1/2				Lengths of Plating	11 1/2	9/16	11 1/2
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	1 1/2	10/16		1 1/2	10/16				Shifts of Plating, and Stringers	11 1/2		11 1/2
thickness at the ends of vessel	1 1/2	10/16		1 1/2	10/16				Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	30	2 1/2	31
depth at 3/4 the half-bdth. as per Rule	1 1/2	10/16		1 1/2	10/16				Angle Iron on ditto	5	3/16	5
height extended at the Bilges	9	10/16		9	10/16				Tie Plates fore and aft, outside Hatchways	10	9/16	10
BEAMS , Upper, Spar, or Awning Deck	1 1/2	10/16		1 1/2	10/16				Diagonal Tie Plates on Beams No. of Pairs, 3	10	9/16	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	2 1/2		3	2 1/2				Planksheer material and scantling	Cutter		
Single or double Angle Iron on Upper edge	3	2 1/2		3	2 1/2				Waterways do. do.	3 1/2	11/16	3 1/2
Average space	86			86					Flat of Upper Deck, do. do.	6.5	11/16	8 1/16
BEAMS , Main or Middle Deck	1 1/2	10/16		1 1/2	10/16				How fastened to Beams	28	2 1/2	28
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	2 1/2		3	2 1/2				Stringer Plate on ends of Main or Middle Deck	28	2 1/2	28
Single, or double Angle Iron, on Upper Edge	3	2 1/2		3	2 1/2				Beams, breadth and thickness	28	2 1/2	28
Average space	86			86					Is the Stringer Faie attached to the outside plating?	Yes		
BEAMS , Lower Deck, Hold or Orlop	1 1/2	10/16		1 1/2	10/16				Angle Irons on ditto, No.	2		
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	2 1/2		3	2 1/2				Tie Plates, outside Hatchways	11	3/16	11
Single or double Angle Iron on Upper Edge	3	2 1/2		3	2 1/2				Diagonal Tie Plates on Beams, No. of pairs	11	3/16	11
Average space	86			86					Waterways materials and scantlings	11	3/16	11
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	8	9/16		8	9/16				Flat of Middle Deck do. do.	11	3/16	11
" Rider Plate	8	9/16		8	9/16				How fastened to Beams	11	3/16	11
" Bulb Plate to Intercoastal Keelson	5	3/16		5	3/16				Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	2 1/2	28
" Angle Irons	5	3/16		5	3/16				Is the Stringer Plate attached to the outside plating?	Yes		
" Double Angle Iron Side Keelson	5	3/16		5	3/16				Angle Irons on ditto, No.	2		
" Side Intercoastal Plate	5	3/16		5	3/16				Stringer or Tie Plates, outside Hatchways	11	3/16	11
" do. Angle Irons	5	3/16		5	3/16				Flat of Lower Deck	11	3/16	11
" Attached to outside plating with angle iron	5	3/16		5	3/16				Ceiling betwixt Decks, thickness and material in hold	2 1/2	10/16	2 1/2
BILGE Angle Irons	5	3/16		5	3/16				Main piece of Rudder, diameter at head	5 1/2	10/16	5 1/2
" do. Bulb Iron	5	3/16		5	3/16				do. at heel	5 1/2	10/16	5 1/2
" do. Intercoastal plates riveted to plating for length	5	3/16		5	3/16				Can the Rudder be unshipped afloat?	Yes		
BILGE STRINGER Angle Irons	5	3/16		5	3/16				Bulkheads No. 1 Thickness of	5	10/16	5
Intercoastal plates riveted to plating for length	5	3/16		5	3/16				Height up	11	3/16	11
STRINGER Angle Irons	5	3/16		5	3/16				How secured to sides of ship	Double frames		
ns, material. Knight-heads. Hawse Timbers.	5	3/16		5	3/16				Size of Vertical Angle Irons	3 x 2 1/2 x 9/16		
ss	5	3/16		5	3/16				Are the outside Plates doubled two spaces of Frames in length?	Yes		

The **FRAMES** extend in one length from Keel to gunwale Riveted through plates with 3/4 in Rivets, about 6 in apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend across middle line to Stringer in Head and to gunwale alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 1 1/2 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 1/8 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/8 ins. from centre to centre.

Butts of Two Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 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 1/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/8 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 1 1/4 Breadth of laps of plating in single riveting 1 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes

Waterway, how secured to Beams Butt (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Beam ends turned abovest of Breasthooks, Low Catches, 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, Hartlepool Malleable b'd Bonsfield

The above is a correct description.

Builder's Signature, William D. Barry Surveyor's Signature, Wm. D. Barry

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 10928 Iron
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? Single 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? None in Butts

Masts, Bowsprit, Yards, &c., are 3. Pine in good condition, and sufficient in size and length. If of Iron or Steel give
Scanlings 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 M. Mast 58' x 14 1/2" B. Mast 64' x 14 1/2"

NUMBER for EQUIPMENT		Fathoms	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.										
	Fore Sails,	Chain	240	1 1/16	31.8-0.0	1 1/16	Bowers	3	18-1-8	19-6-2-4	18-0-0	19-0-0
	Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)	Staffordshire	Public B.			(Machine where Tested, date, and name of Superintendent.)		18-0-0	19-4-1-4	18-0-0	19-0-0
	Fore Topmast Stay Sails	Hempen Stream	90	1 1/16	M. R. Reade		Stream	1	15-1-0	16-4-1-10	15-1-0	16-1-10
	Main Sails,	Cable	90	6	Supm 23-29 May 1842				8-0-0			
	Main Top Sails,	Hawser	90	6			Kedges	2				
	and	Towlines	90	8								
		Warp	90	8								
		quality	Good	11								

Standing and Running Rigging Line & Hemp sufficient in size and good in quality. She has one late Boat and two others

The Windlass is good Capstan good and Rudder good Pumps (3 of Metal) good

Engine Room Skylights.—How constructed? 1/2 Iron framing & glass How secured in ordinary weather? Bulls eyes

What arrangements for deadlights in bad weather? Bulls eyes

Coal Bunker Openings.—How constructed? Wood coverings How are lids secured? Bars Height above deck? 6"

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? 6 scupper Bolls & 5 scuppers

Cargo Hatchways.—How formed? 1/2 Iron beamings

State size Main Hatch 21-6 x 11 Forehatch 11-6 x 9-3 Quarterhatch 23-6 x 9-3

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? beam plates 21 x 8 1/2 & beam 8 x 8 1/2 with angles 2 x 2 x 8 1/2

Hatches, If strong and efficient? Yes

Order for Special Survey No. 118 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

Date 31st Jan 1842 Surveys held 2nd. On the plating during the progress of riveting

Order for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid

Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented

No. 80 in builder's yard Section 18. 5th. After the ship was launched and equipped

General Remarks, This S.S. is a Sister Vessel to the S.S. James Mason Report N^o 3092
Has a Raised Quarter Deck:—Frames to topheight. Beams Bulls 6 1/2 x 8 1/2, angles
2 1/2 x 2 1/2 x 5/8 & 2 1/2 x 2 1/2 x 5/8, stringer plate 28' x 21 x 8 1/2 x 5/8. Angle on D^e H^e 3 1/2 x 5/8. Sic plate 9 x 8 1/2
Plating 5/8 x 5/8. Deck 8' W.S. fastened with 5/8 b.s. n. b.
Sopallant Forecastle:—Frames to topheight. Beams 7 x 7 1/2, angles 3 x 3 x 5/8. Plating 5/8
Deck 2 1/2 fastened with 5/8 b.s. n. b.
Water Ballast Tanks in Fore & Aft Hold. Plating 5/8. Ribs 5/8, angles
5 x 4 x 5/8 & 2 1/2 x 2 1/2 x 5/8. girders 5/8 top of tank 5/8.
Break of Raised Quarter Deck strengthened by the Main S^e Stringer
plate running aft 11-6' and the Raised Quarter deck stringer 10' before the
break and connected with an 8 1/2 vertical plate. Three bills of raised quarter
deck plating are fully riveted

Buckingham Dixon

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 Paint & cement Outside Paint

I am of opinion this Vessel should be Classed 100 A

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

Special ... £ 11 : 2 :

Certificate ... : :

(Travelling Expenses)
(if any) £

Committee's Minute 11th Dec 1872

Character assigned 100 A

100 A

100 A

100 A

100 A