

IRON SHIP.

No. 4094 Survey held at Stockton Date, First Survey 2^d June Last Survey 26th Nov^r 1878
 On the Screw Steamer "St. Mark" Master George E. Parkins

TONNAGE under Tonnage Deck 1559.18 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third Spar, or Awning Deck. 3.82 SPAR, OR AWNING DECKED VESSEL.
 Ditto of Poop, or Raised Or. Dk. 41.50 HALF BREADTH (moulded) 14.0
 Ditto of Houses 26.50 DEPTH from upper part of Keel to top of Upper Deck Beams 35.5
 Ditto of Forecastle 41.23 GIRTH of Half Midship Frame (as per Rule) 38.9
 Gross Tonnage 1707.68 1st NUMBER 81.2 1/2
 Less Crew Space 63.49 1st NUMBER, if a THREE-DECKED VESSEL [deduct] 4.2 1/2
 Less Engine Room 546.40 LENGTH 256.5
 Register Tonnage as cut on Beam 1094.78 2nd NUMBER 19032
 PROPORTIONS—Breadths to Length Under Eight
 Depths to Length—Upper Deck to Keel Under Eleven
 Main Deck ditto Under Fifteen

Built at Stockton When built 1878 Launched 26th October
 By whom built Richardson Duck & Co
 Owners G. Jinnan & Co
 Port belonging to London
 Destined Voyage Special Survey during building
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 256 Feet. 5 Inches. BREADTH—Moulded 34 Feet. 3 Inches. DEPTH top of Floors to Upper Deck Beams 23 Feet. 6 Inches. Do. do. Main Deck Beams 18 Feet. 6 Inches. Power of Engines 190 Horse. N^o. of Decks with flat laid Two N^o. of Tiers of Beams Three

Inches in Ship.			Inches per Rule.			Inches in Ship.			Inches per Rule.		
Feet.	Inches.	16ths.	Feet.	Inches.	16ths.	Feet.	Inches.	16ths.	Feet.	Inches.	16ths.
256	5		34	3		23	6		18	6	
Dimensions of Ship per Register, length <u>256</u> , breadth <u>34.25</u> , depth <u>23.3</u>											
KEEL, depth and thickness			9 1/2 x 2 1/2			9 1/2 x 2 1/2			PLATES in Garboard Strakes, breadth and thickness		
STEM, moulding and thickness			9 x 2 1/2			9 x 2 1/2			from Garboard to upper part of Bilges		
STERN-POST for Rudder do. do.			9 x 5			9 x 5			of doubling at Bilge, or increased thickness, and length applied		
" " for Propeller			24			24			fm up. part of Bilge to l. edge of Sh'rstrake.		
Distance of Frames from moulding edge to moulding edge, all fore and aft			5 3 8			5 3 8			Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.		
FRAMES, Angle Iron, for 1/2 length amidships			5 3 8			5 3 8			Up. or Spar Dk Sh'rstrake, brdth & thickness		
Do. for 1/2 at each end			3 3 7			3 3 7			Butt Straps to outside plating, breadth & thickness		
REVERSED FRAMES, Angle Iron			5 1/2 3 8			5 1/2 3 8			Lengths of Plating		
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships			5 1/2 3 8			5 1/2 3 8			Shifts of Plating, and Stringers		
" thickness at the ends of vessel			5 1/2 3 8			5 1/2 3 8			Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness		
" depth at 1/2 the half-bdth. as per Rule			5 1/2 3 8			5 1/2 3 8			Angle Iron on ditto		
" height extended at the Bilges			5 1/2 3 8			5 1/2 3 8			Tie Plates fore and aft, outside Hatchways		
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			5 1/2 3 8			5 1/2 3 8			Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling		
Single or double Angle Iron on Upper edge			5 1/2 3 8			5 1/2 3 8			Waterways do. do.		
Average space			5 1/2 3 8			5 1/2 3 8			Flat of Upper Deck do. do.		
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			5 1/2 3 8			5 1/2 3 8			How fastened to Beams		
Single or double Angle Iron, on Upper Edge			5 1/2 3 8			5 1/2 3 8			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness		
Average space			5 1/2 3 8			5 1/2 3 8			Is the Stringer Plate attached to the outside plating?		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			5 1/2 3 8			5 1/2 3 8			Angle Irons on ditto, No. 2		
Single or double Angle Iron on Upper Edge			5 1/2 3 8			5 1/2 3 8			Tie Plates, outside Hatchways		
Average space			5 1/2 3 8			5 1/2 3 8			Diagonal Tie Plates on Beams, No. of pairs		
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates			5 1/2 3 8			5 1/2 3 8			Waterways materials and scantlings		
" Rider Plate			5 1/2 3 8			5 1/2 3 8			Flat of Middle Deck do. do.		
" Bulb Plate to Intercoastal Keelson			5 1/2 3 8			5 1/2 3 8			How fastened to Beams		
" Angle Irons			5 1/2 3 8			5 1/2 3 8			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams		
" Double Angle Iron Side Keelson			5 1/2 3 8			5 1/2 3 8			Is the Stringer Plate attached to the outside plating?		
" Side Intercoastal Plate			5 1/2 3 8			5 1/2 3 8			Angle Irons on ditto, No. 3		
" do. Angle Irons			5 1/2 3 8			5 1/2 3 8			Stringer or Tie Plates, outside Hatchways		
" Attached to outside plating with angle iron			5 1/2 3 8			5 1/2 3 8			Flat of Lower Deck		
BILGE Angle Irons			5 1/2 3 8			5 1/2 3 8			Ceiling betwixt Decks, thickness and material		
" do. Bulb Iron			5 1/2 3 8			5 1/2 3 8			" in hold do. do.		
" do. Intercoastal plates riveted to plating for length			5 1/2 3 8			5 1/2 3 8			Main piece of Rudder, diameter at head		
BILGE STRINGER Angle Irons			5 1/2 3 8			5 1/2 3 8			do. at heel		
Intercoastal plates riveted to plating for 1/2 length.			5 1/2 3 8			5 1/2 3 8			Can the Rudder be unshipped afloat?		
SIDE STRINGER Angle Irons			5 1/2 3 8			5 1/2 3 8			Bulkheads No. 5 Thickness of plates		
Transoms, material. Knight-heads. Hawse Timbers.			5 1/2 3 8			5 1/2 3 8			" Height up fore to upper strake to main deck		
Windlass			5 1/2 3 8			5 1/2 3 8			" How secured to sides of ship		
			5 1/2 3 8			5 1/2 3 8			" Size of Vertical Angle Irons		
			5 1/2 3 8			5 1/2 3 8			" Are the outside Plates doubled two spaces of Frames in length?		

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to top of Main Deck Stringer angle 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 1/16 in. diameter, averaging 5 1/2 ins. from centre to centre.
 " Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 4 ins. from centre to centre.
 " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 4 ins. from centre to centre.
 " Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.
 " Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 4 ins. from cr. to cr.
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 4 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 5 1/4 Breadth of laps of plating in single riveting 5 1/4
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes And angle iron properly shifted & strapped
 way, how secured to Beams (Explain by Sketch, if necessary.)
 Is of the various Decks, how secured to the sides? With welded & Bracket Iron Riveted No. of Breasthooks, Five Crutches, None
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best March, Hopkins
 Manufacturer's name or trade mark, West Stockton and Bowesfield
 The above is a correct description.
 Builder's Signature, Richardson Duck & Co Surveyor's Signature, M. Davidson
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 481-0344

222 3 3 Iron

Yes

Yes

Yes

Yes

Yes Several in Butts at Seam Every time

Iron & Pine in gold

Fore Mast- Length 79'-6" plating 4.6 x 5.6 diameter at Keel 24" head 16" as per plan

Main Mast Length 43.9 plating $\frac{9}{16}$ & $\frac{5}{16}$ " " " 32 " 14 " " " "

Bowesfield Iron and Tested Cold

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	Wght req'd per Rule.	Test req'd per Rule.		
Complete Machinery and other outfit	SAILS.	CABLES, &c. Chain	270	1 3/4	44.2.2-0 55.2.2-0	270-1 3/4 44 5/8 tons	Bowers	3	30.2.18 29.3-18 25-2-8	29.3.3-0 28.12-2-0 28.5.3-21	30.0-0 30.0-0 25.2-0	28 1/2 tons 25 1/2 tons 25 1/2 tons		
	Fore Sails,	(State Machine where Tested, Date, & name of Superintendent.) Nettleton near Dudley 11/15/1894												
	Fore Top Sails,	Agred J & Lewis Superintendant												
	Stay Mast	Hemp Strm Cbl	45	1 1/6	30.8.0-0 20.6-0-0	45-1 1/6 30 3/4 tons								
	Main Sails,	Hawser	38	8/6										
	Main Bottom Sails,	Towlines	20	1 1/2		90-11"								
		Warp S	27	4 1/2		90-11"		Stream	...	1	9.3.16 4.3.13	13.0-0-0 7.5-0-0	9 1/2 cwt 4 1/4 "	11 1/2 tons 7 1/2 "
		Other outfit	quality	20	4 1/2		90 7	Kedges	...	3	2-2-2 5-2-2	2-2-2 5-2-2	2 1/2 " 5 "	

Two Kemp's Manilla sufficient in size and *good* in quality. She has *two* ~~large~~ *long* Boats and *three others*

Walker Capstan *Bow* and Rudder *Iron* Pumps *Bow*

How constructed? *Leak And Bull Eyes* How secured in ordinary weather?

lights in bad weather? *Carpauling*

How constructed? *Iron* How are lids secured? *Solid Hatches* Height above deck? *16" x 24"*

ments for clearing upper deck of water, in case of shipping a sea? *Five Ports Gangways Snoring
Ladders on each side between Poop and Forecastle*

armed ? Iron

24' x 13' Forehatch 14 x 10 Quarterhatch 18 x 12

ow framed and secured? *Main Two day web plates & three fore & afters*

beams? After One day, web plate & three girders and girders

at? Yes Sold 3rd time

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, }

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held while as per Sect	3rd. When the beams were in and fastened, and before the decks were laid....	<i>Last Survey 26th Nov 1878</i>
	4th. When the ship was complete, and before the plating was finally coated or cemented..	
	5th. After the ship was launched and equipped	

ality of workmanship, &c.) Good

I finished with Short Loop and Toppallant Forecastle all
 frames extended to the Top height plating 9/6
 Panting beams fitted as required, and Stations fitted
 inside of Tunnel. Strake under Sheerstrake and three
 other alternate (inner) strakes from Stem aft doubled
 for 13 ft ~~extending~~ extending down to 10 ft Water Mark

Richardson Bros & Co.