

I.P. 16754

1st Survey 9th November Last Survey 24th

Master Board No. 41511

Tonnage under Tonnage Deck } 655.55
 Ditto of Third, Spar, or Awning Deck. }
 Ditto of Poop, or Raised Qr. Dk. } 110.78
 Ditto of Houses } 25.50
 Ditto of Forecastle } 13.07
 Hatchways }
 Gross Tonnage } 844.85
 Less Crew Space } 754.15
 Less Engine Room } 257.55
 Register Tonnage as cut on Beam } 496.60

THREE DECKED VESSEL.
 HALF BREADTH (moulded) ... 14.11
 DEPTH from upper part of Keel to top of Upper Deck Beams ... 16.4
 GIRTH of Half Midship Frame (as per Rule) ... 27.9
 1st NUMBER ... 59-0
 1st NUMBER if a THREE-DECKED VESSEL [deduct 7 feet]
 LENGTH ... 190.10
 2nd NUMBER ... 11730
 PROPORTIONS—Breathths to Length ... within 7
 Depths to Length—Upper Deck to Keel ... within 12 1/4
 Main Deck ditto ...

Built at Hartlepool
 When built 1876 Launched 9th June
 By whom built E. Witty & Co.
 Owners Stephenson Clarke & Co.
 Port belonging to London
 Destined Voyage London
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 198 10
 BREADTH Moulded ... 29 11
 DEPTH top of Floors to Upper Deck Beams ... 14 11
 Do. do. Main Deck Beams ...
 Power of Engines ... 100
 Horse ...
 No. of Decks with flat laid One
 No. of Tiers of Beams Two

	Inches in Ship	Inches per Rule	Inches required per Rule	16ths required		Inches in Ship	Inches per Rule	Inches required per Rule	16ths required
KEEL, depth and thickness	7 1/2 + 2 1/4	7 1/2 + 2 1/4	7 1/2 + 2 1/4	7 1/2 + 2 1/4	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied half length up part of Bilge to l. edge of Sh'rstrake	32	8 1/6	32	8 1/6
STEM, moulding and thickness	7 1/4 + 2 1/4	7 1/4 + 2 1/4	7 1/4 + 2 1/4	7 1/4 + 2 1/4	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	33	10 1/6	33	12 1/6
SPERN-POST for Rudder do. do. for Propeller	8 + 4	8 + 4	8 + 4	8 + 4	Up. or Spar Dk Sh'rstrake, brdth & thickness	-	-	-	-
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	22	22	22	Butt Straps to outside plating, breadth & thickness	9 3/4	7 1/6	9 3/4	7 1/6
FRAMES, Angle Iron, for 2/3 length amidships	3 1/2	3 1/2	3 1/2	3 1/2	Lengths of Plating	2 1/2	2	2 1/2	2
Do. for 1/3 at each end	3 1/2	3 1/2	3 1/2	3 1/2	Shifts of Plating, and Stringers	2 1/4	2 1/4	2 1/4	2 1/4
REVERSED FRAMES, Angle Iron	3	2 1/2	3	2 1/2	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	4 1/2	9 1/6	4 1/2	9 1/6
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	17	17	17	17	Angle Iron on ditto	4 1/2 + 3 + 7/6	4 1/2 + 3 + 7/6	4 1/2 + 3 + 7/6	4 1/2 + 3 + 7/6
Thickness at the ends of vessel	4 1/6	4 1/6	4 1/6	4 1/6	Tie Plates fore and aft, outside Hatchways	10	8 1/6	10	8 1/6
depth at 2/3 the half-bdth. as per Rule	12 1/2	12 1/2	12 1/2	12 1/2	Diagonal Tie Plates on Beams No. of Pairs,	-	-	-	-
height extended at the Bilges	3 1/4	3 1/4	3 1/4	3 1/4	Planksheer material and scantling	-	-	-	-
BEAM, Upper, Spar, or Awning Deck	7	7 1/6	7	7 1/6	Waterways do. do.	3 1/2	4 1/6	3 1/2	4 1/6
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	3	3	3	Flat of Upper Deck do. do.	3 1/2	4 1/6	3 1/2	4 1/6
Average space	44	44	44	44	How fastened to Beams	2 1/2	2 1/2	2 1/2	2 1/2
BEAMS, Main, or Middle Deck	8 1/2	8 1/6	8 1/2	8 1/6	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	4 1/2	4 1/2	4 1/2	4 1/2
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8 1/6	8	8 1/6	Is the Stringer Plate attached to the outside plating?	-	-	-	-
Average space	44	44	44	44	Angle Irons on ditto, No.	-	-	-	-
BEAMS, Lower Deck, Hold, or Orlop	4	4 1/6	4	4 1/6	Tie Plates, outside Hatchways	-	-	-	-
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4	4 1/6	4	4 1/6	Diagonal Tie Plates on Beams, No. of pairs	-	-	-	-
Average space	44	44	44	44	Waterways materials and scantlings	-	-	-	-
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	1 1/2	1 1/6	1 1/2	1 1/6	Flat of Middle Deck do. do.	-	-	-	-
Rider Plate	1 1/2	1 1/6	1 1/2	1 1/6	How fastened to Beams	-	-	-	-
Bulb Plate to Intercoastal Keelson	4 1/2	4 1/6	4 1/2	4 1/6	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	2 1/2	2 1/2	2 1/2	2 1/2
Angle Irons	4 1/2	4 1/6	4 1/2	4 1/6	Is the Stringer Plate attached to the outside plating?	-	-	-	-
Double Angle Iron Side Keelson	4 1/2	4 1/6	4 1/2	4 1/6	Angle Irons on ditto, No. 2	3 1/2	3 1/2	3 1/2	3 1/2
Side Intercoastal Plate	4 1/2	4 1/6	4 1/2	4 1/6	Stringer or Tie Plates, outside Hatchways	-	-	-	-
do. Angle Irons	4 1/2	4 1/6	4 1/2	4 1/6	Flat of Lower Deck	-	-	-	-
Attached to outside plating with angle iron	4 1/2	4 1/6	4 1/2	4 1/6	Ceiling betwixt Decks, thickness and material in hold	2 1/2	2 1/2	2 1/2	2 1/2
BILGE Angle Irons	4 1/2	4 1/6	4 1/2	4 1/6	do. do. do.	2 1/2	2 1/2	2 1/2	2 1/2
do. Bulb Iron	4 1/2	4 1/6	4 1/2	4 1/6	Main piece of Rudder, diameter at head	2 3/4	2 3/4	2 3/4	2 3/4
do. Intercoastal plates riveted to plating for length	4 1/2	4 1/6	4 1/2	4 1/6	do. at heel	2 3/4	2 3/4	2 3/4	2 3/4
BILGE STRINGER Angle Irons	4 1/2	4 1/6	4 1/2	4 1/6	Can the Rudder be unshipped afloat?	Yes	-	-	-
Intercoastal plates riveted to plating for length	4 1/2	4 1/6	4 1/2	4 1/6	Bulkheads No. 4 Thickness of	-	-	-	-
SIDE STRINGER Angle Irons	4 1/2	4 1/6	4 1/2	4 1/6	Height up	5 1/6	5 1/6	5 1/6	5 1/6

Transoms, material. Knight-heads. Hawse Timbers. Plates
 Windlass of Iron Patent Pall Bitt

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to above hold beam 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 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 3/8 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 3/8 ins. from centre to centre.
 Butts of Two Strakes at Bilge for half 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 2 7/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 3/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Treble
 Waterway, how secured to Beams (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Ends turned & pieces bedded No. of Breasthooks, Five Crutches, Two

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good
 Manufacturer's name or trade mark, Stockton M. S. Co. Hartlepool M. S. Co.

The above is a correct description.
 Builder's Signature, E. Witty & Co. Surveyor's Signature, S. R. Gladstone

Surveyor to Lloyd's Register of British and Foreign Shipping.

Are the butts of plating planed or ot
 the carvel work and of the butts lay close together throughout th
 the fillings between the ribs and plates solid single pieces?
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the
 Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are of Mrk Pine in 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 Main Mast - 68 ft. Dia 10 1/2. Fore Mast 65 ft. Dia 18 1/2. Mizzen Mast 51 ft.

16247. Iron

One of the
good of the

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.	W'ght req'd per Rule.	Test req'd per Rule.
						Bowers	Stream					
SAILS.	240	1 1/16	34 Tons	240 of 1 1/16	34 Tons	3		3	17-1-0	18-8-0	16-3-0	10-0-0
CABLES, &c.									16-3-11	18-2-0	16-3-0	10-0-0
Chain									14-1-14	15-19-0	14-0-0	15-17-0
Fore Sails,												
Fore Top Sails,												
Fore Topmast Stay Sails												
Main Sails,												
Main Top Sails,												
and												
quality	120	4										

Standing and Running Rigging Wich + Rem sufficient in size and good in quality. She has Three Long Boats and Good

The Windlass is Good Capstan Good and Rudder Good. Pumps Four of 6 inch metal

Engine Room Skylights. How constructed? 3 in. Pine. 1/16 boning How secured in ordinary weather? Bullseyes

Coal Bunker Openings. How constructed? Iron boning How are lids secured? Bars Height above deck? 13 inches

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Ports + Scuppers

Cargo Hatchways. How formed? 1/16 Plate

State size Main Hatch 11 ft x 11 ft. boning 30 in Forehatch 11 ft x 11 ft. boning 30 Quarterhatch 11 ft x 12 ft. boning 30 in

If of extraordinary size, state how framed and secured? Wich

What arrangement for shifting beams? Wich

Hatches, If strong and efficient? Strong & efficient

Order for Special Survey No. 545 Date 9 Nov 1875

Order for Ordinary Survey No. 55 Date 55 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
	<u>Special Survey Date of Survey</u>	<u>1875 Nov. 9-12-15-24-30 Dec 3. 8. 21 - 1876 Jan</u>	<u>4. 6. 11-17. 21. 25. 28. 31 Feb 3. 8. 11-16. 21. 26.</u>	<u>March 2. 9. 21. 29. April 6. 12. 24.</u>	

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

Has a raised Quarter Deck frames all bolted height; beams of bull iron 7 x 7 1/16
 Double angles on top edge 3 x 3 + 6 1/16 Stringer plates on end 36 x 9 1/16 Angles on do. 4 1/2 x 3 + 7 1/16
 Tie plates 10 x 8 1/16. Plating outside 7/16 to 5/16 aft Deck 3 1/2 1/4 Pine
 Main sheers plates doubled from 10 ft. abaft break to 50 ft. before do. with 7/16 plate. The
 strake above sheers plates doubled from 12 ft. before break to 6 1/2 ft. abaft do. with 7/16 plate
 reduced ab end to 6 1/16 x 5/16. Main Deck Stringer plates extend 4 frame spaces abaft break.
 Raised Deck do. 4 frame spaces before. Butts of shell plating treble riveted in neighborhood
 of break with straps to thicker than the plates.
 Water ballast tanks fitted from fore bulkhead thence aft 112 ft. frames cut connection
 made with three plates. Side plates 7/16 Angles 3 1/2 x 3 + 7 1/16. Web plates 6 1/16 Angles on do.
 3 x 2 1/2 + 6 1/16. Top plating 6 1/16. Tested with a head of water to the height of load line.

Edw. Withy & Co.

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

How are the surfaces preserved from oxidation? Inside flat boned with Portland cement Outside other parts with Paint

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

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

Special ... £ 37 : 14 : 0 3 May 1876

Certificate ...

Committee's Minute 5th May 1876

Character assigned 90 A 1

This vessel appears eligible to be classed as recommended viz 90 A 1
 Lloyd's Register of Shipping
 15th May 1876
 112 ft

Sept 3rd September 1875

See Certificate