

IRON SHIP.

Rev 13/4/14

No. 1241 Survey held at South Shields Date, First Survey 2nd October 1873 Last Survey 18th March 1874

On the S.S. "Marianne Briggs" Yard Number 101 Master R. Thornton

TONNAGE under 480.49
 Tonnage Deck 14.88
 Ditto of 84.88
 Raised Qr. Dk. 21.71
 Ditto of Houses 12.36
 on Deck 30.91
 Ditto of Forecastle 630.35
 Gross Tonnage 32.15
 Less Crew Space 598.20
 Less Engine Room 201.71
 Register Tonnage 396.49
 as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded) 13.9
 DEPTH from upper part of Keel to top of Upper Deck Beams 13.2
 GIRTH of Half Midship Frame (as per Rule) 24.0
 1st NUMBER 50.9
 1st NUMBER of THREE DECKED VESSEL
 2nd NUMBER 95.94
 PROPORTIONS—Breadths to Length 6.8
 Depths to Length—Upper Deck to Keel 14.3
 Main Deck to Keel

Built at South Shields
 When built 1873-74 Launched 22nd Jan'y 74.
 By whom built J. Readhead & Co.
 Owners Yorkshire Coal & Steam Ship Co. (Limited)
 Port belonging to Goole
 Destined Voyage France
 If Surveyed while Building, Afloat, or in Dry Dock.
While building

LENGTH on deck as per Rule 188 Feet. 6 Inches. BREADTH—Moulded 24 Feet. 6 Inches. DEPTH top of Floors to Upper Deck Beams 12 Feet. 0 Inches. Power of Engines 80 Horse. N^o. of Decks with flat laid one N^o. of Tiers of Beams one

Dimensions of Ship per Register, length, 191 breadth, 24.85 depth, 12.1

KEEL, depth and thickness 7 1/2 x 2 1/2
 STEM, moulding and thickness 7 x 2 1/2
 STERN-POST for Rudder do. do. 7 1/2 x 4
 for Propeller 7 1/2 x 3 1/2
 Distance of Frames from moulding edge to moulding edge, all fore and aft 22
 (Class 90A)
 FRAMES, Angle Iron, for 1/2 length amidships 3 Inches. 3 Inches. 6 16ths.
 Do. for 1/2 at each end 3 Inches. 3 Inches. 5 16ths.
 REVERSED FRAMES, Angle Iron 2 1/2 Inches. 2 1/2 Inches. 5 16ths.
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 14 x 6
 thickness at the ends of vessel 5
 depth at 3/4 the half-bdth. as per Rule 10 1/4
 height extended at the Bilges 29
 BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 6 1/2 x 6
 Single or double Angle Iron on Upper edge 2 1/2 x 2 1/2 x 5
 Average space 4 1/2
 BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 6 1/2 x 6
 Single or double Angle Iron, on Upper Edge 2 1/2 x 2 1/2 x 5
 Average space 4 1/2
 BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 6 1/2 x 6
 Single or double Angle Iron on Upper Edge 2 1/2 x 2 1/2 x 5
 Average space 4 1/2
 KEELSONS Centre line, single or double plate, box, or intercostal, Plates 14 x 9
 Rider Plate 6 3/4 x 7
 Bulb Plate to Intercostal Keelson 4 x 3
 Angle Irons 4 x 3
 Double Angle Iron Side Keelson 17 x 6
 Side Intercostal Plate 4 x 3
 do. Angle Irons 4 x 3
 Attached to outside plating with angle iron 4 x 3
 BILGE Angle Irons 4 x 3
 do. Bulb Iron 6 1/2 x 6
 do. Intercostal plates riveted to plating for 3 1/2 length 8 x 6
 BILGE STRINGER Angle Irons 4 x 3
 Intercostal plates riveted to plating for 3 1/2 length 8 x 6
 SIDE STRINGER Angle Irons 4 x 3
 Bulb Iron 6 1/2 x 6
 Transoms, material. Knight-heads. Hawse Timbers. Iron
 Windlass Harfield's Patent

Flat Keel Plates, breadth and thickness 30 x 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 30 x 10
 fin up. part of Bilge to l. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake 30 x 10
 from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk. Sh'rstrake, breadth & thickness 9 1/2 x 11 1/2
 Butt Straps to outside plating, breadth & thickness 11 feet 9 1/2 x 2 1/2
 Lengths of Plating 14
 Shifts of Plating, and Stringers 37 1/2 x 9
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 3 1/2 x 8
 Angle Iron on ditto 9 x 7
 Tie Plates fore and aft, outside Hatchways 3 1/2 x 3 1/2
 Diagonal Tie Plates on Beams No. of Pairs 9
 Plank-sheer material and scantling Iron Gutter
 Waterways do. do. 3 1/2
 Flat of Upper Deck do. do. 3 1/2
 How fastened to Beams Screw bolts & nuts
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 2 1/2
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 4
 Tie Plates, outside Hatchways 4
 Diagonal Tie Plates on Beams, No. of pairs 4
 Waterways materials and scantlings 4
 Flat of Middle Deck do. do. 2 1/2
 How fastened to Beams 4 1/2
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 2 1/2
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 4
 Stringer or Tie Plates, outside Hatchways 4 1/2
 Flat of Lower Deck 2 1/2
 Ceiling betwixt Decks, thickness and material 4 1/2
 in hold 2 3/4
 Main piece of Rudder, diameter at head 4 1/2
 do. at heel 2 3/4
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. 4 Thickness of 4
 Height up Three to Upper deck & after one to Cabin sole & Iron deck
 How secured to sides of ship Double frames & brackets
 Size of Vertical Angle Irons 2 1/2 x 2 1/2 x 5/16 and distance apart 30 ins.
 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 1/2 apart.

The REVERSED ANGLE IRONS on floors and frames extend from across middle line to upper turn of bilge on every 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 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 1/4 ins. from centre to centre.

Butts of one Strake at Bilge for half length, double riveted with Butt Straps 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 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, double riveted for whole length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, double riveted for whole 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? Treble and Double riveted

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

Beams of the various Decks, how secured to the sides? Welded knees riveted to frames. No. of Breasthooks, 5 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles and Bulbs from

Manufacturer's name or trade mark, Sydney's Sunderland, Plates Hartlepool Malleable Iron Co, and John Vaughan

Bishop-Auckland.

The above is a correct description.

Builder's Signature, John Readhead & Co. Surveyor's Signature, L. H. Cooke.

Lloyd's Register
 Foundation
 IRON456-0456

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 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? A few

Masts, Bowsprit, Yards, &c., are Pitch 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

12532 Iron.

| NUMBER for EQUIPMENT 10553 | | 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. | W'ght req'd per Rule. | Test req'd per Rule. |
|------------------------------|-------------------------|---|---------|-----------------------|---------------------|----------------------|--------------|------------------|--------------------|-----------------------|-----------------------|----------------------|
| Hull Sails and Rigging Wire | SAILS. | | | | | | | | | | | |
| | CABLES, &c. | 195 | 1 3/16 | 25 1/2 | 13/16 | 25 1/20 | | | | | | |
| | Chain ... | Breaking Strain 38 7/16 | | | | | Bowers ... | 1 | 12.3.0 | 14.10.2.14 | 12.0.0 | 13 7/20 |
| | Fore Sails, | (Machine where Tested, date, and name of Superintendent.) | | | | | 1 | 12.1.21 | 14 3/16 | | 12.0.0 | |
| | Fore Top Sails, | Lloyd's Type R House. R. Burrell. Supt. | | | | | 1 | 10.3.21 | 12 7/8 | | 10.0.23 | 12 1/20 |
| | Fore Topmast Stay Sails | Date of Certificate 16 th Decr 1873. | | | | | Stream ... | 1 | 5.1.0 | | 5.0.0 | |
| Standing and Running Rigging | Hempen Stream | 90 | 10 1/2 | | | | | | | | | |
| | Cable | 90 | 9 1/2 | | | | | | | | | |
| | Hawser ... | 90 | 6 | | | | | | | | | |
| | Towlines ... | 90 | 4 1/2 | | | | | | | | | |
| The Windlass is | Warp ... | 90 | 3 1/2 | | | | | | | | | |
| | quality good. | 90 | 3 1/2 | | | | | | | | | |

standing and running rigging Hemp sufficient in size and good in quality. She has One Life Long Boat and Two others

The Windlass is Good Capstan Good and Rudder Good Pumps Good

Engine Room Skylights.—How constructed? Iron Comings & Wood Tops How secured in ordinary weather? Bolted to Angles

What arrangements for deadlights in bad weather? Solid Shutters and Bulls eyes

Coal Bunker Openings.—How constructed? Wood Comings How are lids secured? By Bars Height above deck? 12"

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Three ports each side besides mooring ports

Cargo Hatchways.—How formed? Iron Comings and Head Ledges

State size Main Hatch 23' 10" x 10' 4" Forehatch 9' 2" x 6' 4" Quarterhatch 22' 4" x 10' 4"

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

What arrangement for shifting beams? Intermediate headledges and wood fore & afters.

Hatches, If strong and efficient? Yes

| | | | |
|--|---|---|---|
| Order for Special Survey No. <u>90</u> | 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 | <u>Built under Special Survey</u> |
| Date <u>23 Sep 1873</u> | | 2nd. On the plating during the process of riveting | <u>1873 Oct. 2. 16. 21. 22. Dec 3.</u> |
| Order for Ordinary Survey No. — | | 3rd. When the beams were in and fastened, and before the decks were laid | <u>10. 12. 18. 21. 24. 28. Dec 4. 10.</u> |
| Date — | | 4th. When the ship was complete, and before the plating was finally coated or cemented | <u>10. 17. 22. 24. 31. 1874 Aug</u> |
| No. <u>101</u> in builder's yard. | | 5th. After the ship was launched and equipped | <u>5. 8. 10. 12. 15. 20. Feb 4. 9. 17. 27. March 6. 18.</u> |

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

This is a one decked vessel built in accordance with the midship section attached. She has a top gallt forecastle 29 feet in length, and a raised quarter deck 93 feet. The main deck stringer plate extends eight frame spaces abaft the break bulkhead, the raised quarter deck stringer plate extends four frame spaces before the break, and the stringer plate fitted under the raised br. deck extends from aft through the Engine Room to the tenth frame before the break bulkhead, and each stringer plate is attached to the outside plating. She is fitted with water ballast tanks before and abaft the Engine Room of the united lengths of 91 1/2 feet, the top plating 5/16" and the side plates 6/16" in thickness. The general quality of the workmanship is good.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecastle 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 90 A1.

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

Special ... £ 29 : 10 : :

on 590 tons Certificate ... : : : :

(Travelling Expenses)
(if any) £ —

Committee's Minute 14th April 1874

Character assigned 90 A1

J. H. Cooke.

This vessel appears to be eligible to be classed as 90 A1. (per Lloyd's Register) 13/4/74