

IRON SHIP.

Reg 22/4/73 433

12092 Survey held at S. Shields Date, First Survey 21 Feb 1872 Last Survey 16 June 1873
 the "Birling" Yard Number 23 Master John Smith

AGE under { 254.62 } ONE, OR TWO DECKED, THREE DECKED VESSEL. Built at S. Shields
 Deck { 84.16 } SPAR, OR AWNING-DECKED VESSEL. When built 1872 Launched 19th September
 of Poop, { 1.61 } DEPTH from upper part of Keel to top of Upper Deck Beams By whom built J. Eltringham
 of House { 19.20 } GIRTH of Half Midship Frame (as per Rule) 44.9 Owners Joseph Brown & Co
 of Forecastle { 359.59 } 1st NUMBER 140 Port belonging to London
 Tonnage { 10.34 } 2nd NUMBER 6286 Destined Voyage Rouen
 Crew Space { 341.25 } PROPORTIONS—Breathths to Length 6.3 If Surveyed while Building, Afloat, or in Dry Dock.
 Engine Room { 146.53 } Depths to Length—Upper Deck to Keel 10.8
 ster Tonnage { 194.72 } Main Deck ditto.

NGTH Feet. Inches. BREADTH—Feet. Inches. DEPTH top of Floors to Upper Feet. Inches. Power of Horse. N°. of Decks with flat laid one
 deck as 140 0 Moulded... 22 0 Deck Beams 11 10 Engines 46 N°. of Tiers of Beams one
 Rule ... Dimensions of Ship per Register, length, 144.1 breadth, 22.1 depth, 11.5

KEEL, depth and thickness ... 7 + 1 1/2 Inches in Ship. Inches per Rule. 7 + 1 1/2
 EM, moulding and thickness... 6 1/2 + 1 1/2
 ERN-POST for Rudder do. do. 6 x 3
 for Propeller 6 1/4 x 3 1/2
 stance of Frames from moulding edge to moulding edge, all fore and aft 21
 RAMES, Angle Iron, for 3/4 length amidships 3 2 1/2 5
 Do. for 1/2 at each end 3 2 1/2 4
 REVERSED FRAMES, Angle Iron 2 1/4 2 1/4 4
 LOOKS, depth and thickness of Floor Plate 12 x 6
 at mid line for half length amidships 5
 thickness at the ends of vessel 5
 depth at 3/4 the half bdt. as per Rule 24
 height extended at the Bilges... 24
 BEAMS, Upper, Spar, or Awning Deck 6 3 6 6 3 6
 Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron on alternate frames
 Angle or double Angle Iron on Upper edge
 Average space...
 BEAMS, Main or Middle Deck on alternate frames
 Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron
 Angle or double Angle Iron, on Upper Edge
 Average space...
 BEAMS, Lower Deck, Hold or Orlop on alternate frames
 Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron
 Angle or double Angle Iron on Upper Edge
 Average space...
 KEELSONS Centre line, single or double plate, 15 x 5 15 x 5
 box, or Intercoastal, Plates 4 x 7 5 1/2 x 5
 " Rider Plate 3 3 6 3 3 6
 " Bulb Plate to Intercoastal Keelson
 " Angle Irons
 " Double Angle Iron Side Keelson
 " Side Intercoastal Plate
 " do. Angle Irons
 " Attached to outside plating with angle iron 3 3 6 3 3 6
 BILGE Angle Irons 3 3 6 3 3 6
 " do. Bulb Iron
 " do. Intercoastal plates riveted to plating for length
 BILGE STRINGER Angle Irons 3 x 3 x 6 3 x 3 x 6
 Intercoastal plates riveted to plating for length.

Flat Keel Plates, breadth and thickness 32 4 30 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 32 5 30 5
 fm up. part of Bilge to Ir. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk. Sh'rstrake, breadth & thickness 8 6 9 5 6 9 5 6 9
 Butt Straps to outside plating, breadth & thickness 5 spaces 8 frames
 Lengths of Plating 2
 Shifts of Plating, and Stringers... 28 6 28 6
 Gunwale Plate on ends of 3 x 3 x 6 3 x 3 x 6
 Upper Deck Beams, breadth and thickness... 6 1/2 6 6 1/2 6
 Angle Iron on ditto
 Tie Plates fore and aft, outside Hatchways
 Diagonal Tie Plates on Beams No. of Pairs
 Plankshear material and scantling iron gatter
 Waterways do. do. 3 3
 Flat of Upper Deck do. do. by out & screw bolts
 How fastened to Beams
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness
 Is the Stringer Plate attached to the outside plating?
 Angle Irons on ditto, No.
 Tie Plates, outside Hatchways
 Diagonal Tie Plates on Beams, No. of pairs
 Waterways materials and scantlings
 Flat of Middle Deck do. do.
 How fastened to Beams
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams
 Is the Stringer Plate attached to the outside plating?
 Angle Irons on ditto, No.
 Stringer or Tie Plates, outside Hatchways
 Flat of Lower Deck
 Ceiling between Decks, thickness and material in hold do. do. 2 1/4 3 3/4 2 1/4
 Main piece of Rudder, diameter at head do. at heel 2 1/4 4 1/6
 Can the Rudder be unshipped afloat? yes.
 Bulkheads No. 4 Thickness of 4 1/6
 Height up upper deck
 How secured to sides of ship double frames
 Size of Vertical Angle Irons 2 1/4 x 2 1/4 x 1/2 and distance apart 30 ins.
 Are the outside Plates doubled two spaces of Frames in length? yes.

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

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 5/8 in. Rivets, about 5 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper turn of bilges in and to the Engine room 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 7/8 in. diameter, averaging 4 1/4 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 5/8 in. diameter, averaging 2 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 1/2 ins. from centre to centre.
 Butts of one Strake at Bilge for 1/2 length, double 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 5/8 in. diameter, averaging 2 1/2 ins. from centre to centre.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 2 1/2 ins. from centre to centre.
 Edges of Main Sheerstrake, double and single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, double riveted, for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length
 Butts of Main Stringer Plate, double riveted, for 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 1/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double riveted
 Waterway, how secured to Beams riveted (Explain by Sketch, if necessary)
 of the various Decks, how secured to the sides? by bracket pieces riveted No. of Breasthooks, 4
 Description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? frames and plates from Palmer & Co., London
 Manufacturer's name or trade mark, John Elliott & Co.

The above is a correct description.
 Builder's Signature, J. Eltringham Surveyor's Signature, A. Reed

Workmanship. Are the butts of plating planed or otherwise fitted? *Chopped and filed*
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? *fairly so.*
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 *wood* 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 *✓*

11264 *Iron*

NUMBER for EQUIPMENT <i>6914</i>		Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
No. of SAILS.	Fore Sails,	<i>180</i>		<i>20.6.0.0</i>	<i>1</i>	<i>10.0.0.0</i>	Bowers ... (Machine where Tested, date, and name of Superintendent.) <i>Lloyd's Reg. R. R. Russell, Sept.</i>	<i>2</i>	<i>7.1.7</i>	<i>9.11.2.7</i>	<i>7.1.0</i>	<i>9.11.2.7</i>
	Fore Top Sails,	<i>60</i>		<i>10.6.0.0</i>	<i>1/2</i>	<i>5.0.0.0</i>		<i>2</i>	<i>7.1.0</i>	<i>9.9.1.14</i>	<i>7.1.0</i>	<i>9.9.1.14</i>
	Fore Topmast Stay Sails,	<i>90</i>		<i>10.6.0.0</i>	<i>1/2</i>	<i>5.0.0.0</i>		<i>2</i>	<i>7.1.0</i>	<i>9.9.1.14</i>	<i>7.1.0</i>	<i>9.9.1.14</i>
	Main Sails,	<i>90</i>		<i>10.6.0.0</i>	<i>1/2</i>	<i>5.0.0.0</i>		<i>2</i>	<i>7.1.0</i>	<i>9.9.1.14</i>	<i>7.1.0</i>	<i>9.9.1.14</i>
	Main Top Sails,	<i>90</i>		<i>10.6.0.0</i>	<i>1/2</i>	<i>5.0.0.0</i>		<i>2</i>	<i>7.1.0</i>	<i>9.9.1.14</i>	<i>7.1.0</i>	<i>9.9.1.14</i>
CABLES, &c.		<i>180</i>		<i>20.6.0.0</i>	<i>1</i>	<i>10.0.0.0</i>	Kedges		<i>1.1.14</i>	<i>1.1.14</i>	<i>1.1.0</i>	<i>1.1.0</i>

Standing and Running Rigging *hemp* sufficient in size and *good* in quality. She has *one* Long Boat and *one other*
The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good and sufficient*

Engine Room Skylights.—How constructed? *solid shutters & hatches* How secured in ordinary weather? *bolted down*
What arrangements for deadlights in bad weather? *Tapanulius*

Coal Bunker Openings.—How constructed? *cast iron* How are lids secured? *by studs* Height above deck? *2"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *three ports & mooring-pipes on each side.*

Cargo Hatchways.—How formed? *iron comings & head ledges riveted together.*

State size Main Hatch *14.6 x 9.0* Forehatch *5.0 x 9.0* Quarterhatch *10.6 x 6.6*

If of extraordinary size, state how framed and secured? *two cross beams of lumber and double angles*

What arrangement for shifting beams? *yes.*

Hatches, If strong and efficient? *yes.*

Order for Special Survey No. *264* DATES of
Date *9 Dec 1871* Surveys held
Order for Ordinary Survey No. — while building
Date — as per
No. *23* in builder's yard. 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 progress 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

built under Special Survey.

General Remarks, *This is a one decked vessel with a top gallant forecastle 15ft long and a poop 70ft long, at the break of which the sheerstrake is doubled, the side plating is increased in thickness, and the deck stringer is increased 19" in width. She is fitted with a water ballast tank before and abaft the engine room, each about 16ft in length, top plating 4", flange plates 5 1/8 in thickness, both efficiently constructed, and the main frames doubled in way of flange plate &c.*

~~one, two or three decked vessel, or if spar or ironing decked, and lengths of poop, forecastle or raised quarter deck, or of double or part double bottom.~~

Surfaces preserved from oxidation? Inside *Cement and paint* Outside *Paint & Composition.*

This Vessel should be Classed *90 A.1.*

Entry Fee ... £ 4 : : is received by me,

Special ... £ 1 : : :

Certificate ... : : :

R. R. Russell

25th April 1876

GOA

Met M.C.

This vessel appears to be classed as a 90 A.1 as a 1876
22/4