

IRON 456-0031

IRON SHIP.

No. 10419 Survey held at Sunderland Date, First Survey April 1st 1873 Last Survey November 14th 1873On the Iron Ship *Arena* Yard Number 28 Master *Roberts*

TONNAGE under 547.92

Tonnage Deck

Ditto of Third, Spar, or Awning Deck.

Ditto of Poop, or

Revised Q. D.

Ditto of Houses, or

on Deck

Ditto of Forecastle

Gross Tonnage 728.03

Less Crew Space 35.95

Less Engine Room 232.97

Register Tonnage

ut on Beam 459.11

ONE, OR TWO DECKED, THREE DECKED VESSEL.

SPAR, OR AWNING DECKED VESSEL.

HALF BREADTH (moulded) 13.95

DEPTH from upper part of Keel to top of Upper Deck Beams 16.60

GIRTH of Half Midship Frame (as per Rule) 27.65

1st NUMBER 58.2

1st NUMBER, if a THREE-DECKED VESSEL

deduct 7 feet

LENGTH 198

2nd NUMBER 11523

PROPORTIONS—Breadths to Length

Depths to Length—Upper Deck to Keel

Main Deck ditto

Built at Sunderland

When built 1873 Launched Sept 10th 1873

By whom built Davison & Stothoe

Owners Wilson Pickell & Co

Port belonging to Liverpool

Destined Voyage

If Surveyed while Building, Afloat, or in Dry Dock.

Wilst. Moulding

LENGTH on deck as per Rule 198 Feet. Inches. BREADTH—Moulded 13 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 15 Feet. Inches. Do. do. Main Deck Beams 15 Feet. Inches. Power of Engines 4 Horse. No. of Decks with flat laid 1 No. of Tiers of Beams 1

Dimensions of Ship per Register, length, 200. breadth, 28.3 depth, 15

KEEL, depth and thickness 7 1/2 x 2 1/4

STEM, moulding and thickness 7 x 2 1/4

STERN-POST for Rudder do. do. 7 x 4 1/2

for Propeller 7 x 4 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 No. for 1/2 at each end 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2

REVERSED FRAMES, Angle Iron 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 15 8 8 9 15 8 8 9

thickness at the ends of vessel 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2

depth at 1/2 the half-bdth. as per Rule 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2

height extended at the Bilges 1/2 the half-bdth. depth 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2 7 1/2

BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2

Single or double Angle Iron on Upper edge 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2

Average space alternate frames

BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2

Single, or double Angle Iron, on Upper Edge 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2

Average space

BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2

Single or double Angle Iron on Upper Edge 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2 2 1/2

Average space

BEAMS, Centre line, single or double plate, box, or intercostal plates 12 1/4 10 12 1/4 10 12 1/4 10

Rider Plate 7 8 7 8 7 8 7 8

Bulb Plate to intercostal Keelson 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Angle Irons 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Double Angle Iron Side Keelson 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Side intercostal plate 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

do. Angle Irons 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Attached to outside plating with angle iron 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

BILGE Angle Irons 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

do. Bulb Iron 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2 6 1/2

do. Intercostal plates riveted to plating for length 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

BILGE STRINGER Angle Irons 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Intercostal plates riveted to plating for length 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

SIDE STRINGER Angle Irons 4 1/2 3 7 1/2 4 1/2 3 7 1/2 4 1/2 3 7 1/2

Transoms, material. Knight-heads. Hawse Timbers. Iron plates

Windlass Patent Iron Pall Bitt nil

The FRAMES extend in one length from Keel to Gunwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Upper Deck and Hold Stringer 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 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/4 in. diameter, averaging 3 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/4 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/2 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 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

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

way, how secured to Beams Gunter Gunwale (Explain by Sketch, if necessary.)

of the various Decks, how secured to the sides? Riveted to Beams & Stringers No. of Breasthooks, 5 Crutches, 1

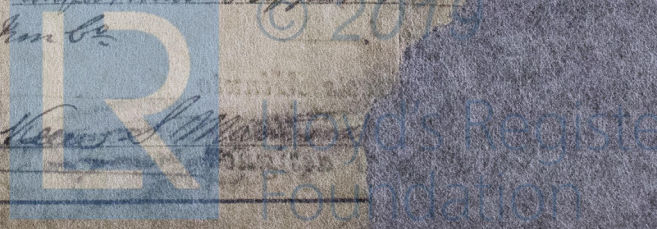
at description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs & Z-plates

manufacturer's name or trade mark, Plates Charlton Iron Works & Stockton Malleable Iron Co

The above is a correct description.

Builder's Signature, Davison & Stothoe

Surveyor's Signature, Joseph Thomas & Sons



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? None fitted
Are the fillings between the ribs and plates solid single pieces? Yes
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes generally
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 in butts only

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

12174 Iron

Midship Section attached

John Reg
25 yards in Foremast
None on Mainmast
NUMBER for EQUIPMENT 4822

12675

| N ^o | SAILS. | CABLES, &c. | 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. |
|----------------|-------------------------|---|----------|---------|-----------------------|---------------------|----------------------|---|------------------|--------------------|-----------------------|----------------------|----------------------|
| | Fore Sails, | Chain ... | 210 | 15 1/16 | 31 | 15 1/16 | 31 | Bowers ... | 3 | 15-2-0 | 16-18-3-0 | 15-1-0 | 16-14-0 |
| | Fore Top Sails, | (Machine where Tested, date, and name of Superintendent.) | | | | | | (Machine where Tested, date, and name of Superintendent.) | | | | | |
| | Fore Topmast Stay Sails | Hempen Stream Cable | 80 | 8 3/4 | | | | Stream ... | 1 | 6-2-0 | | 6-2-0 | |
| | Main Sails, | Hawser .Gnar. | 60 | 7 1/8 | | | | Kedges ... | 2 | 5-0-27 | | 3-1-0 | |
| | Main Top Sails, | Towlines ... | 80 | 6 1/2 | | | | | | | | | |
| | and | Warp ... | 80 | 6 1/2 | | | | | | | | | |
| | | quality <u>Good</u> | 160 | 3 1/2 | | | | | | | | | |

Standing and Running Rigging Complete sufficient in size and Good in quality. She has 1 Life Long Boat and 2 other

The Windlass is Iron Patent Capstan 2 M. Steam and Rudder Good Pumps Good

Engine Room Skylights. How constructed? Strong Wood Frame How secured in ordinary weather? Bars & Screws

What arrangements for deadlights in bad weather? Strong Wood Frame with Bulbs Eyes in & Bars & Screws

Coal Bunker Openings. How constructed? Strong Wood How are lids secured? Iron Bars Height above deck? 7 1/2

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

Cargo Hatchways. How formed? Plates & Angles

State size Main Hatch 22 ft by 10 ft Fore Hatch 12 ft by 6 ft Quarter Hatch 4 ft by 8 ft
If of extraordinary size, state how framed and secured? Strong Wood

What arrangement for shifting beams? in

Hatches, If strong and efficient?

Order for Special Survey No. 2412 DATES of
Date 26th March 1873 Surveys held
Ordinary Survey No. 2412 while building
as per
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

Remarks,

She has a Full Poop 103 feet long, the Main Deck Sheersake at front of Poop is 13/16 tapering to 12/16 & 11/16, and front Poop plates are 9/16 running well into the Bulwork which is 9/16 at that part. There is also a Clamp Plate 15 1/2 broad by 8 1/16 and 23 1/2 feet long at this place fitted a little below the Main Deck Beams and rivetted to the reversed bars on the frame.
She has a double bottom at the very after end of the vessel 33 feet long. Top plates 9/16 flange 1/16.
The Top Gallant Forecastle is 30 1/2 feet long.

State if one, two or three decked vessel, or if span or running decked, and lengths of poop, forecabin, &c. or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Red Paint & Cement in Cotton Outside Red Paint

I am of opinion this Vessel should be Classed * 90A1

The amount of the Entry Fee ... £ 5 : : : is received by me,
Special ... £ 34 : 12 : :
Certificate ... : : : :
Travelling Expenses)
any £

Senhouse Martinidele

This vessel has been in accordance with the provisions of the Act of 1864 and is approved and eligible to be classed 90A1

See's Minute 18th Nov 1873

r assigned

90A1

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Lloyd's Register Foundation