

## IRON SHIP.

16310

No. 25476

1876

No. 11395 Survey held at Sunderland Date, First Survey June 10<sup>th</sup> 1875 Last Survey April 24<sup>th</sup> 1876  
 in the Scow Steamer "Peer of the Realm" Master M. Nicholson  
 Tonnage under Deck 1744.77 THREE DECKED VESSEL. Built at Sunderland  
 Ditto of Third, Spar, 31.46 HALF BREADTH (moulded) 16.91 When built 1875 9 6 Launched 10 Feb<sup>ry</sup> 1876  
 Ditto of Poop, or — DEPTH from upper part of Keel to top of Upper Deck Beams 26.16 By whom built Messrs. Wm Foxford & Sons  
 Raised Gr. Dk. — GIRTH of Half Midship Frame (as per Rule) 39.45 Owners Messrs. Farlam & Co  
 Ditto of Houses 36.87 1st NUMBER 82.52 Port belonging to Newcastle  
 on Deck — 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] 75.52 Desired Voyage India  
 Ditto of Forecasts — LENGTH 279 ft 210 ft  
 Gross Tonnage 1813.10 2nd NUMBER 8 PROPORTIONS—Breadths to Length 10  
 Less Crew Space 50.51 Depths to Length—Upper Deck to Keel 10  
 Less Engine Room 580.19 Main Deck ditto 14 PLANS  
 Register Tonnage 1182.40 as cut on Beam

LENGTH on deck as per Rule 279 Feet. Inches. BREADTH—Moulded 33 Feet. Inches. 10 1/2 DEPTH top of Floors to Upper Deck Beams 24 Feet. Inches. 2 Do. do. Main Deck Beams 16 Feet. Inches. 10 Power of Engines 200 Horse. No. of Decks with flat laid two No. of Tiers of Beams 3

Dimensions of Ship per Register, length 280.0 breadth 34.0 depth 24.0

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	$9\frac{1}{2} \times 2\frac{1}{2}$	$9\frac{1}{2} \times 2\frac{1}{2}$
STEM, moulding and thickness	$9 \times 2\frac{1}{2}$	$9 \times 2\frac{1}{2}$
STERN-POST for Rudder do. do.	$9 \times 5$	$9 \times 5$
for Propeller	$24"$	$24"$
Distance of Frames from moulding edge to moulding edge, all fore and aft	$24"$	$24"$
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships	$5 \times 3 \times 8$	$5 \times 3 \times 8$
Do. for $\frac{1}{2}$ at each end	$5 \times 3 \times 7$	$5 \times 3 \times 7$
REVERSED FRAMES, Angle Iron	$3 \times 3 \times 7$	$3 \times 3 \times 7$
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	$23\frac{1}{2}$	$23\frac{1}{2}$
thickness at the ends of vessel	$8.7$	$8.7$
depth at $\frac{3}{4}$ the half-bdth. as per Rule	$11\frac{3}{4}$	$11\frac{3}{4}$
height extended at the Bilges	$5\frac{1}{2}$	$5\frac{1}{2}$
BEAMS, Upper, Spar, or Awaiting Deck	$5\frac{1}{2} \times 3 \times 7$	$5\frac{1}{2} \times 3 \times 7$
Angle or double Angle Iron, Plate or Tee Bulb Iron	$24"$	$24"$
Average space	$48"$	$48"$
BEAMS, Main, or Middle Deck	$8 \times 8$	$8 \times 8$
Angle or double Angle Iron, Plate or Tee Bulb Iron	$3 \times 3 \times 6$	$3 \times 3 \times 6$
Average space	$48"$	$48"$
BEAMS, Lower Deck, Hold, or Orlop	$3 \times 3 \times 6$	$3 \times 3 \times 6$
Angle or double Angle Iron on Upper Edge	$8 \times 8$	$8 \times 8$
Average space	$48"$	$48"$
KEELSONS Centre line, single or double plate, or Intercoastal, Plates	$18 \times 13$	$18 \times 13$
Rider Plate	$12 \times 13$	$12 \times 13$
Bulb Plate to Intercoastal Keelson	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$
Angle Irons	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$
Double Angle Iron Side Keelson	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$
Side Intercoastal Plate	$8 \times 8$	$8 \times 8$
do. Angle Irons Bulb	$8 \times 8$	$8 \times 8$
Attached to outside plating with angle iron	$3 \times 3 \times 7$	$3 \times 3 \times 7$
do. Angle Irons	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$
do. Bulb Iron	$8 \times 8$	$8 \times 8$
do. Intercoastal plates riveted to plating for length	$8 \times 8$	$8 \times 8$
do. STRINGER Angle Irons	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$
Intercoastal plates riveted to plating for length	$8 \times 8$	$8 \times 8$
do. STRINGER Angle Irons	$6 \times 4 \times 9 \times 8$	$5\frac{1}{2} \times 4 \times 9$

Flat Keel Plates, breadth and thickness 36 inches in ship. 11 inches per rule. 36 inches in ship. 11 inches per rule.  
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied —  
 fm up. part of Bilge to lr. 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. 40 inches in ship. 13 inches per rule. 40 inches in ship. 13 inches per rule.  
 Up. or Spar Dk Sh'rstrake, brdth & thickness —  
 Butt Straps to outside plating, breadth & thickness 10 1/2 inches in ship. 8 1/2 inches per rule. 10 1/2 inches in ship. 8 1/2 inches per rule.  
 Lengths of Plating 10 feet  
 Shifts of Plating, and Stringers 2 spaces of frames  
 Gunwale Plate on ends of —  
 Upper Deck Beams, breadth and thickness 40 inches in ship. 9 inches per rule. 40 inches in ship. 9 inches per rule.  
 Angle Iron on ditto 4 x 4 x 9  
 Tie Plates fore and aft, outside Hatchways 6/16 inch thick  
 Diagonal Tie Plates on Beams No. of Pairs, 4/16 at ends  
 Planksheer material and scantling Gutter gunwale  
 Waterways do. do. —  
 Flat of Upper Deck do. 3 1/2 inches in ship. 3 1/2 inches per rule.  
 How fastened to Beams Galvanized Iron  
 Stringer Plate on ends of Main or Middle Deck 61 inches in ship. 10 inches per rule. 61 inches in ship. 10 inches per rule.  
 Beams, breadth and thickness 61 inches in ship. 10 inches per rule.  
 Is the Stringer Plate attached to the outside plating? Yes  
 Angle Irons on ditto, No. 2 4 x 4 x 9  
 Tie Plates, outside Hatchways 14 inches in ship. 14 inches per rule.  
 Diagonal Tie Plates on Beams, No. of pairs —  
 Waterways materials and scantlings —  
 Flat of Middle Deck do. 3 1/2 inches in ship. 3 1/2 inches per rule.  
 How fastened to Beams Galvanized Iron  
 Stringer Plates on ends of Lower Deck, Hold  
 Beams 37 inches in ship. 9 inches per rule. 37 inches in ship. 9 inches per rule.  
 Is the Stringer Plate attached to the outside plating? Yes  
 Angle Irons on ditto, No. 3 4 x 4 x 9  
 Stringer or Tie Plates, outside Hatchways 6 x 4 x 9  
 Flat of Lower Deck —  
 Ceiling betwixt Decks, thickness and material 2 inches in hold. 2 1/2 inches in hold.  
 Main piece of Rudder, diameter at head 6 3/4 inches in ship. 6 3/4 inches per rule.  
 do. at heel 3 1/2 inches in ship. 3 1/2 inches per rule.  
 Can the Rudder be unshipped afloat? Yes  
 Bulkheads No. 5 Thickness of 5/8 inch  
 Height up to main and upper deck as per rule  
 How secured to sides of ship Between double frames  
 Size of Vertical Angle Irons 3 x 3 x 7/16 and distance apart 30 ins.  
 Are the outside Plates doubled two spaces of Frames in length? Yes

ans, material. Knight's Leads. Hawse Timbers. Chron  
 ss Harfield's Patent Pall Bitt Iron

RAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

REVERSED ANGLE IRONS on floors and frames extend near middle line to Main deck and to gunwale alternately

LSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

ING. Garboard, double riveted to Keel, with rivets 1 1/8 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 3 1/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/4 ins. from centre to centre.

Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double single riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double 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 — 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 5 1/2 Breadth of laps of plating in single riveting nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & treble throughout

ay, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)

s of the various Decks, how secured to the sides? Turned down and secured with inner plates No. of Breasthooks, 5 Crutches, 49 Transoms

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

Manufacturer's name or trade mark, Stockton Malleable Iron Co.

above is a correct description.

Signature, William Osford Esq.

Surveyor's Signature, James Sibum

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



Please see letters dated 2 June 1875, Ballast tanks have been carefully tested to a head of water exceeding the draught of the vessel, and found very satisfactory.

**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? *Yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes very well*  
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 very few*

Masts, ~~Bowsprit~~, Yards, &c., are *of Iron &* 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 *See Sketch attached*

16,310 Iron

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
21660		270	1 3/4	55 1/2	270-1 1/2	55 1/2	Bowers	1	38.2.0	29.00.0	30.0.0	28 1/2
1 Complete Set	SAILS.	CABLES, &c.										
	Fore Sails,	Chain	Breaking strain applied to 3 hanks of each 15 fathoms 27 1/2 tons, tested at R.W.C.P.T. signed J. Hartness and attested 14 Sept. 1875									
	Fore Top Sails,	Hmpn Strm Cbl	90	1 1/2								
	Fore Topmast Stay Sails	Hawser Chain	90	1 1/2								
	Main Sails,	Towlines	90	1 1/2								
	Main Top Sails,	Warp	90	6 1/2								
		quality	good									

Standing and Running Rigging *were* *hemp* sufficient in size and *good* in quality. She has 2 *Long* Boat and 2 *others*  
The Windlass is *good* Capstan *good* and Rudder *good* Pumps *Metal & good*  
Engine Room Skylights.—How constructed? *upon Iron casing 5 feet* How secured in ordinary weather? *Rolls & thumb screws*  
What arrangements for deadlights in bad weather? *above decks* *Solid Oak shutters, and thick circular glass*  
Coal Bunker Openings.—How constructed? *Hatches 4 ft x 3 ft* How are lids secured? *Hatch bars* Height above deck? *10 ins*  
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *6 Scuppers on each side*  
*for Bulwark.*  
Cargo Hatchways.—How formed? *Iron plate comings and Headledges*  
State size Main Hatch *20' x 11' x 2 ft high* Forehatch *10' x 8' x 2 ft high* Quarterhatch *16' x 10' x 2 ft high*  
If of extraordinary size, state how framed and secured? *are shifting carling in main hatch*  
What arrangement for shifting beams? *- - -*  
Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>2576</i>	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	<i>Built under J. and S. Surveyed 1875 June 10 17 Aug 25 30 Sept 7 13 24 Oct 4 12 15 18 22 25 27 Nov 1 13 21 25 19 22 26 29 Dec 13 14 15 20 21 29 31 Jan 4 11 14 19 20 22 25</i>
Date <i>10 June 1875</i>		2nd. On the plating during the process of riveting	<i>28 31 Feb 3 7 10 26 March 6 9 15 22 23 24 28 April 11 19 24</i>
Order for Ordinary Survey No. <i>-</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>(There is another set of dates attached from the Builder of Ballast Tanks 26/8/85)</i>
Date <i>-</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. <i>46</i> in builder's yard.		5th. After the ship was launched and equipped	

**General Remarks** (State quality of workmanship, &c.) *This Vessel has been constructed in accordance with the rules, and the tracings of Midship section and other plans submitted and approved by the Committee; In lieu of fitting an additional angle iron upon each of the Bulkheads in fore Ballast tank, as required by the Secretary's letter dated 22<sup>nd</sup> October 75, the Bulkheads being in place, the Builders have fitted 2 strong Bulb plates, vertically, on each side of the centre line Bulkhead as shown upon the sketch in red ink, these Bulbs are secured to the floor plates, and knee'd to the Bulkhead and tank top. She has a complete Iron upper deck with wood flat above, and the main deck has also been plated over, in wake of the engine & boiler spaces; The Ballast tank in fore hold extends from the foremost bulkhead of boiler room, forward 42 feet, and the after tank extends from the after bulkhead of engine room, aft to within 3 spaces of the After Bulkhead, 64 ft in length; Bridge house is 31 feet long, and a short Monkey forecastle or anchor deck is fitted about 16 ft long. The workmanship and materials being of a good description*

State if ~~one, two, or three~~, decked vessel, or if open, or running deck; and the length of poop, forecabin, or raised quarter deck, and the length of bulks, and of double bottom.

How are the surfaces preserved from oxidation? Inside *Portland Cement to upper* Outside *3 coats of paint*

I am of opinion this Vessel should be Classed *\*90 A.I.* *Sum of Bulbs and Paint above*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *James Libun*  
Special ... £ 69 : 1 : 6 *21<sup>st</sup> April 1876*  
Certificate ... : : : *M.C. not 11*

(Travelling Expenses, if any, £ *1.10.0*.)  
Committee's Minute *28 April* 18 *76*

Character assigned *90 A.I.* *After Lloyd's Reg.*  
*2 Dk* *3<sup>rd</sup> Br* *from 1875*  
*106 feet* *106 ft*