

IRON SHIP.

No. 12,681 Survey held at Sunderland Date, First Survey November 19th 80 Last Survey August 11th 81
 On the S.S. "Dorset" Yard No. 164
 Master Wm. Stamper
 Built at Sunderland
 When built 1881 Launched May 28th 81
 By whom built J. L. Thompson & Sons
 Owners Gr. & West^{rs} 52nd St. N. York
 Residence Bristol
 Port belonging to Bristol
 Destined Voyage New York
 Surveyed while Building Afloat, or in Dry Dock

TONNAGE under 1833.77 ONE, OR TWO DECKED, THREE DECKED VESSEL
 in Tonnage Deck 773.45 SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Third, 11.70
 or Awning Deck.
 Ditto of Poop, or 11.70
 of Deck.
 Ditto of Houses 11.70
 on Deck.
 Ditto of Forecastle 11.70
 Gross Tonnage 2637.63
 Less Crew Space 17.75
 as Engine Room 844.04
 as out on Beam 1715.84

LENGTH 328.0 Feet. Inches. BREADTH 38.8 Feet. Inches. DEPTH 19.0 Feet. Inches. top of Plating to Upper Deck Beams
 on deck as 328.0 Moulded... 38.8 Do. do. Main Deck Beams... 19.0
 per Rule... Dimensions of Ship per Register, length, 331.0 breadth, 39.0 depth, 19.0

KEEL, depth and thickness... 10 x 2 3/4 Inches in Ship. 10 x 2 3/4 Inches per Rule.
 ST. M. moulding and thickness... 10 x 5 1/2
 ST. RN-POST for Rudder do. do. 10 x 5 1/2
 for Propeller 24
 Distance of Frames from moulding edge to moulding edge, all fore and aft 24
 (Class 100A)

FRAMES, Angle Iron, for 3/4 length amidships... 5 3 8 Inches in Ship. 5 3 8 Inches per Rule.
 do. for 1/2 at each end... 5 3 7
 REVERSED FRAMES, Angle Iron... 3 1/2 3 8
 ORS, depth and thickness of Floor Plate... Longitudinal and Transverse Girders
 at mid line for half length amidships... as per Section and Profile
 thickness at the ends of vessel...
 depth at 3/4 the half-bdth. as per Rule...
 height extended at the Bilges...
 BEAMS, Upper, Spar or Awning Deck... 7 7 62.3.9
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron... 3 3 6
 Single or double Angle Iron on Upper edge... alternate frames
 Average space... 6 3 9
 BEAMS, Main, or Middle Deck... 6 3 9
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron
 Single or double Angle Iron on Upper Edge... 6 3 9
 Angle, double Angle Iron, on Upper Edge... On all frames
 Average space... 10 1/2 10 1/2
 BEAMS, Lower Deck... 10 1/2 10 1/2
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron... 10 1/2 10 1/2
 Single or double Angle Iron on Upper Edge... 10 1/2 10 1/2
 Average space... 10 1/2 10 1/2
 BEAMS, Hold, or Orlop... 10 1/2 10 1/2
 Single or d'ble Ang. Iron, Plate or Tee Bulb Iron... 10 1/2 10 1/2
 Single or double Angle Iron on Upper Edge... 10 1/2 10 1/2
 Average space... 10 1/2 10 1/2

KEELSONS, Centre line, single or double plate, 48 11
 box, or Intercoastal, Plates... 30 9
 Rider Plate... 30 9
 Bulb Plate to Intercoastal Keelson... 6 4 9
 Angle Irons... 6 4 9
 Double Angle Iron Side Keelson... 6 4 9
 Side Intercoastal Plate... 6 4 9
 do. Angle Irons... 6 4 9
 Attached to outside plating with angle iron... 3 3 7
 BILGE Angle Irons... 6 4 9
 do. Bulb Iron... 6 4 9
 do. Intercoastal plates riveted to plating for length... 6 4 9
 BILGE STRINGER Angle Irons... 6 4 9
 Intercoastal plates riveted to plating for half length... 12 9
 SIDE STRINGER Angle Irons... 6 4 9

The FRAMES extend in one length from Keel to Gunnwale
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to above M. & S. angle and to two 7/8 in. S. & S. 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 4 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 3/8 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/8 ins. from centre to centre.
 Butts of three Strakes at Bilge for half length, treble riveted with Butt Straps 7/8 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 3/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 ins. from cr. to cr.
 Edges of Main Sheerstrake, double single riveted. Upper Sheerstrake, double single riveted.
 Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.
 Breadth of laps of plating in double riveting 6.54. 4 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
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles
 Manufacturer's name or trade mark Durbin
 The above is a correct description
 Elder's Signature, Joseph L. Thompson Surveyor's Signature, John A. Smith
 Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.
 * If Iron Deck state if whole or part, and if wood deck.

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? *at the Butts in a few Cases only*

3 Masts, Bowsprit, Yards, &c., are *Iron & wood* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scanlings 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. *Please see Sketch*
 State also Length and Diameter of Lower Masts and Bowsprit. *The plates have been subjected to hot and Cold tests: 6/16 plate bent Cold across Grain bent to 30°; 1/2" with Grain 75° plates Manufactured by Stockton Wall Iron Co.*

NUMBER for EQUIPMENT 30,917		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.			
SAILS.		CABLES, &c.														
N ^o .	Fore Sails,	Chain	300	1 15/16	67 5/10	94 5/10	300. 1 15/16	Jan 29/81	Bower Anchors	9468	37.3	18	34.10	0.0	36.2.0	July 15/81
		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	Both tested at R.W.C.P. by J. Hartnup													
	Fore Top Sails,	Iron Stream Chain	90	1 1/2	62 2/3	34 1/8	90. 1 1/2	May 6/81		8920	36.1	0	33.15	2.14	36.2.0	Jan 6/81
		Steel Wire	100	12			100. 12									
	Fore Topmast Stay Sails,	or Hempen Strm Cable	90	10			90 10									
		Towline, Hemp	160	3 1/4	22	100	90 8 1/2	Steel hawsers		9300	31.0	24	29.11	1.0	31.0.0	May 9/81
		Steel Wire							All tested at R.W.C.P. by J. Hartnup							
	Main Sails,	Hawser	320	5 1/2				certified by makers &	Stream Anchor	7492	11.0	20	10.2	2.2.0	11.1.0	Jan 5/81
	Main Top Sails, and	Warp	80	5				Black & Co.	Kedge	9153	5.2	0	7.16	1.0	5.2.0	Mar 24/81
		quality good	100	3 1/2	26	100		Glasgow	2nd Kedge	9102	2.3	21	5.10	0.0	2.3.0	Mar 4/81
	Standing and Running	Pieces	100													

Standing and Running Rigging *Iron & Wood Rope* sufficient in size and *good* in quality. She has *4 life Long* Boats and *three others*
 The Windlass is *Ensign & Walker* Capstan *4 St. Winches* and Rudder *good* Pumps *5 hand, also Steam, 8000*

Engine Room Skylights.—How constructed? *Wood Sk. 1 1/2" on Iron Casings* How secured in ordinary weather? *hand screws*
 What arrangements for deadlights in bad weather? *Solid Shutters fitted with Bulb Eyes*

Coal Bunker Openings.—How constructed? *Iron Coam 9"* How are lids secured? *hatch bars* Height above deck? *15" & 44"*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Scuppers, and Iron Guard Rails Galvanized*

Cargo Hatchways.—How formed? *Iron Coamings fitted in the usual manner*
 State size Main Hatch *24 ft by 13 ft* Forehatch *16 ft x 12 ft* Quarterhatch *16 ft x 13 ft & 20 ft x 13 ft*

If of extraordinary size, state how framed and secured? *Fitted with Web plate also Shifting Iron Beams*
 What arrangement for shifting beams? *and wood gale and aft Coamings.*

Hatches, If strong and efficient? *Solid Strong and efficient*

Order for Special Survey No. <i>2923</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.S. and Surveyed 1880 Nov. 19/22</i>
Date <i>3rd Sept. 80</i>	2nd. On the plating during the process of riveting	<i>27 Decr. 23 11 18 21 24 31 / 81 Jan 4 10 12 18 29 Feb 13 5 8 15 18 21</i>
Order for Ordinary Survey No. _____	3rd. When the beams were in and fastened, and before the decks were laid....	<i>25 March 13 8 14 19 22 25 28 April 4 6 8 11 13 20 22 26 29 28 29</i>
Date _____	4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>May 25 4 11 12 14 16 18 20 25 26 June 8 13 21 July 4 7 15 19 22</i>
No. <i>1614</i> in builder's yard.	5th. After the ship was launched and equipped	<i>25 26 28 30 August 13 14</i>

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

See letters Sep 3. 9. 23. 30. Nov 13. / 80. Jan 12. 20. Apr 20. Mar 24. June 22 / 81.

This Vessel is built in accordance with the Rules and the accompanying Drawings, on the Longitudinal Cellular principle Total length of Double Bottom is 248 feet Containing 460 tons of Ballast in addition to the above the space under the Engines for 28 ft in length is similarly constructed & is used as a well only

In the three Decks there are thirteen partial or other bulkheads; and at the Bilges there is a keel fitted for 130 ft amidships formed of a bulb 8 1/2" x 9 1/2" and two angles 3 1/2" x 3 1/2" x 9 1/2"

In the after peak there is a trimming Tank contain 20 tons; each Tank has been pressed as per Rule and proved efficient

State if one, two, or three-decked vessel, or if open, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter-deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Cement to Bilges paint above Outside* *Paint*

I am of opinion this Vessel should be Classed *100 A 1* Two Decks & Tanning Skel *R 21.3* *Fr 6* *8.7* *1.10* *7-1*

The amount of the Entry Fee ... £ *5 : 0 : 0* is received by me, *J. H. W.*
 Special ... £ *89 : 0 : 0* August 1881
 Certificate ...
 (Travelling Expenses, if any, £ *0, 10, 0*.)

Committee's Minute *Tuesday, August, 1881*

Charterer assigned *George J. ...*

