

IRON SHIP 19315

No. 11452 Survey held at Sunderland Date, First Survey April 19th Last Survey September 15th 1877

On the Iron Steamer "Prudent" Master Blunthorn

TONNAGE under Tonnage Deck 1372 15
 Ditto of Third Spar, or Awning Deck 42 37
 Ditto of Poop, or Raised Or. Dk. 2 99
 Ditto of Houses on Deck 5 42
 Ditto of Forecastle Hatchways 5 13
 Gross Tonnage 1428 06
 Less Crew Space 47 38
 Less Engine Room 1380 68
 Less Engine Room 456 98
 Register Tonnage as cut on Beam 923 70

ONE OR TWO DECKED, THREE DECKED VESSEL.
 SPAR OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded) 16 5
 DEPTH from upper part of Keel to top of Upper Deck Beams 25 08
 GIRTH of Half Midship Frame (as per Rule) 38 0
 1st NUMBER 79 58
 1st NUMBER, if a THREE-DECKED VESSEL 7
 [deduct 7 feet] 72 58
 LENGTH 238 5
 2nd NUMBER 173 10
 PROPORTIONS—Breadths to Length under 7 1/2
 Depths to Length—Upper Deck to Keel 10
 Main Deck ditto 14

Built at Sunderland
 When built 1877 Launched 25th Aug
 By whom built Bartram & Harwell
 Owners James Weston Esq
 Port belonging to Sunderland
 Destined Voyage not fixed
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 238 6 BREADTH Moulded 33 DEPTH top of Floors to Upper Deck Beams 23 1 Do. do. Main Deck Beams 16 2 Power of Engines 150 N^o. of Decks with flat laid 2 N^o. of Tiers of Beams 3

Dimensions of Ship per Register, length 240 2 breadth 33 2 depth 23 15

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 7/8 x 2 1/2	9 7/8 x 2 1/2
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2
STERN-POST for Rudder do. do.	8 1/2 x 5	8 1/2 x 5
for Propeller	24"	24"
Distance of Frames from moulding edge to moulding edge, all fore and aft	24"	24"
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2 3 8	4 1/2 3 8
Do. for 1/2 at each end	4 1/2 3 7	4 1/2 3 7
REVERSED FRAMES, Angle Iron	3 3 7	3 3 7
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	22 1/2 10 9	22 1/2 10 9
thickness at the ends of vessel	8 7	8 7
depth at 3/4 the half-bdth. as per Rule	11 1/4	11 1/4
height extended at the Bilges	Twice	Twice
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	7 7 7 7	7 7 7 7
Single or double Angle Iron on Upper edge	2 1/2 2 1/2 6 2 1/2 2 1/2 6	2 1/2 2 1/2 6 2 1/2 2 1/2 6
Average space	48"	48"
BEAMS, Main or Middle Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	5 1/2 3 8 5 1/2 3 8	5 1/2 3 8 5 1/2 3 8
Single or double Angle Iron, on Upper Edge	24"	24"
Average space	24"	24"
BEAMS, Lower Deck, Hold, or Orlop Single or double Ang. Iron, Plate or Tee Bulb Iron	9 9 9 9	9 9 9 9
Single or double Angle Iron on Upper Edge	4 3 1/2 8 4 3 1/2 8	4 3 1/2 8 4 3 1/2 8
Average space	48"	48"
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	17 12 17 12	17 12 17 12
" Rider Plate	10 3/4 12 10 3/4 12	10 3/4 12 10 3/4 12
" Bulb Plate to Intercoastal Keelson	- - - -	- - - -
" Angle Irons	- - - -	- - - -
" Double Angle Iron Side Keelson	- - - -	- - - -
" Side Intercoastal Plate	- - - -	- - - -
" do. Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9
" Attached to outside plating with angle iron	3 3 7 3 3 7	3 3 7 3 3 7
BILGE Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9
" do. Bulb Iron	8 8 8 8	8 8 8 8
" do. Intercoastal plates riveted to plating for length	- - - -	- - - -
BILGE STRINGER Angle Irons	5 4 9 5 4 9	5 4 9 5 4 9
Intercoastal plates riveted to plating for 1/2 length. with Angles	3 3 8 3 3 8	3 3 8 3 3 8
SIDE STRINGER Angle Irons	3 3 7 3 3 7	3 3 7 3 3 7

Transoms, material. Knight-heads. Hawse Timbers. Iron
 Windlass Emerson & Ward Pall Bitt none required

The FRAMES extend in one length from the middle line to the gunwale Riveted through plates with 7/8 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main deck stringer 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 1/8 in. diameter, averaging 5 5/8 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 x 7/8 in. diameter, averaging 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 x 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 7/16 thicker than the plates they connect.

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

Edges of Main Sheerstrake, double or 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 1/2 length amidships.

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

Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting 3

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

Waterway, how secured to Beams fasten gunwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? arms turned on beams No. of Breasthooks, 5 Crutches, 20

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plate Hartford Mal Iron Co

Manufacturer's name or trade mark, Swinton Mc Iron Co West Hartford Iron Co Angles 3/4 and 1/2 Swinton Mal & Co

The above is a correct description.

Builder's Signature, for Bartram & Harwell Surveyor's Signature, Thos Campbell

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

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*
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? *only a very few*

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 *Aluminum rigged*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.										
		Chain					Bowers	1	25.3.21	25.12.20	25 1/2	25 3/20
	Fore Sails,	Bearing strain applied		47 5/10	270 15/8	47 5/10		1	25.1.0	24.19.154	25 1/2	25 3/20
	Fore Top Sails,	Bearing strain applied		66 5/10	270 15/8	66 5/10		1	21.3.0	22.3.1.0	21.3.0	22 3/20
	Fore Topmast Stay Sails	Bearing strain applied		66 5/10	270 15/8	66 5/10		1	21.3.0	22.3.1.0	21.3.0	22 3/20
	Main Sails,	Hawser ...		75	90 10	75	Stream	...	10.1.0	10.12.2.0	10 1/2	10 1/2
	Main Top Sails,	Towlines ...		85	90 10	85	Kedges	...	5.1.18	6.12.2.0	5 1/4	5 1/4
		Warp ...		85	90 6	85			2.3.24	4.16.1.0	2 3/4	2 3/4
		quality		120	4 1/2	120						

Standing and Running Rigging *Wire & Stumps* sufficient in size and *good* in quality. She has Long Boat and The Windlass is *good*. Winches + Capstan *good* and Rudder *good* Pumps *none* *trailing attached*
Engine Room Skylights.—How constructed? *Made iron &c.* How secured in ordinary weather? *Yes*
What arrangements for deadlights in bad weather? *Solid wood shutters and Bulb Eyes*
Coal Bunker Openings.—How constructed? *Iron castings* How are lids secured? *Solid Hatches* Height above deck? *7"*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports and Scuppers on each side*

Cargo Hatchways.—How formed? *Plate and angle iron*
State size Main Hatch *20' x 11'* Forehatch *12' x 8'* Quarterhatch *20' x 10'*
If of extraordinary size, state how framed and secured? *Strong Plate Beams*
What arrangement for shifting beams? *Wash and screws*
Hatches, If strong and efficient? *Solid Hatches 2 1/2 inches*

Order for Special Survey No. <i>2696</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 P. S. and Surveyed 1877 April 19 May 28 15 14 June 4 12 15 21 26 27 July 6 10 16 19 20 24 25 August 7 8 16</i>
Date <i>27th March 1877</i>		2nd. On the plating during the process of riveting	
Order for Ordinary Survey No. <i>93</i>		3rd. When the beams were in and fastened, and before the decks were laid....	
Date <i>12</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	
No. <i>93</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *The workmanship is of good quality and well finished throughout. This vessel has been built in conformity with the Rules and in accordance with the Midship section and Profile tracing attached with a view to class 100 A.1 The ballast Tanks have been pressed to a head of water equal to the maximum load line and found to be efficient. She is fitted with an entire Iron deck 4/16 thick in excess of the Rules. A Bridge House on deck 28 feet In lieu of a Beam in the fore hold there is a partial bulkhead fitted between double frames in anticipation of making a complete bulkhead if required. It will be observed the stream anchor is a little less in weight than required by the Rules*

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length 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 *100 A.1 2 decks 3 tier of Beams*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *HK*
Special ... £ 59 : 10 : 6 *15th Sept. 1877*
Certificate ...

Committee's Minute 18th September, 1877.

Character assigned *100 A.1*
Lloyd's Regd.
2 Day, 3 Ltr B.
28th 3 Ltr B.
17/9/77