

# IRON SHIP, 19315

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

On the Iron Steamer "Prudent" Master Blindhorn

<b>TONNAGE</b> under Tonnage Deck <u>1372 15</u>	<b>ONE OR TWO DECKED, THREE DECKED VESSEL.</b>	Built at <u>Sunderland</u>
Ditto of Third Spar, on Awaiting Deck <u>42 37</u>	<b>SPAR OR AWNING-DECKED VESSEL.</b>	When built <u>1877</u> Launched <u>25<sup>th</sup> Aug</u>
Ditto of Poop, Raised Or. Dk. <u>2 99</u>	<b>HALF BREADTH</b> (moulded) <u>16 5</u>	By whom built <u>Bartram &amp; Haswell</u>
Ditto of Houses on Deck <u>5 42</u>	<b>DEPTH</b> from upper part of Keel to top of Upper Deck Beams <u>25 08</u>	Owners <u>James Weston Esq</u>
Ditto of Forecasts <u>5 13</u>	<b>GIRTH</b> of Half-Midship Frame (as per Rule) <u>38 0</u>	Port belonging to <u>Sunderland</u>
Gross Tonnage <u>1428 06</u>	<b>1st NUMBER</b> <u>79 58</u>	Destined Voyage <u>not fixed</u>
Less Crew Space <u>47 38</u>	<b>1st NUMBER, if a THREE-DECKED VESSEL</b> <u>7</u>	If Surveyed while Building, Afloat, or in Dry Dock.
Less Engine Room <u>1380 68</u>	<b>2nd NUMBER</b> <u>17310</u>	
Register Tonnage as cut on Beam <u>923 70</u>	<b>PROPORTIONS</b> —Breadths to Length <u>under 7 1/2</u>	
	Depths to Length—Upper Deck to Keel <u>10</u>	
	Main Deck ditto <u>14</u>	

Official Number

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

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

	Inches in Ship.			Inches per Rule.			Flat Keel Plates, breadth and thickness		Inches. In Ship.		16ths. In Ship.		Inches. per Rule.		16ths. per Rule.	
	In Ship.	In Ship.	16ths. In Ship.	Inches. per Rule.	Inches. per Rule.	16ths. per Rule.										
<b>KEEL</b> , depth and thickness	9 7/2	2 1/2		9 7/2	2 1/2		36	11 5/10	36	11 5/10						
<b>STEM</b> , moulding and thickness	8 1/2	2 1/2		8 1/2	2 1/2		PLATES	10 5/8		10 5/8						
<b>STERN-POST</b> for Rudder do. do.	8 1/2	5		8 1/2	5		of doubling at Bilge, or increased thickness, and length applied									
for Propeller	24			24			fm up. part of Bilge to Ir. edge of Sh'rstrake									
Distance of Frames from moulding edge to moulding edge, all fore and aft							Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness	40	12 5/9	40	12 5/9					
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	4 1/2	3	8	4 1/2	3	8	Butt Straps to outside plating, breadth & thickness									
Do. for 1/2 at each end	4 1/2	3	7	4 1/2	3	7	Lengths of Plating	8 9/16	11 13/16	8 9/16	11 13/16					
<b>REVERSED FRAMES</b> , Angle Iron	3	3	7	3	3	7	Shifts of Plating, and Stringers	5 spaces								
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	22 1/2		10 9/16	22 1/2		10 9/16	Gunwale Plate on ends of Awaiting Spar, or Upper Deck Beams, breadth and thickness	48	9	48	9					
thickness at the ends of vessel			8 7/16			8 7/16	Angle Iron on ditto	4 x 4 x 9	4 x 4 x 9							
depth at 2/3 the half-bdth. as per Rule	11 1/4			11 1/4			Tie Plates fore and aft, outside Hatchways	13	9	13	9					
height extended at the Bilges							Diagonal Tie Plates on Beams No. of Pairs,									
<b>BEAMS</b> , Upper, Spar, or Awaiting Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	7		7	7		7	Planksheer material and scantling									
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	6	2 1/2	2 1/2	6	Waterways do. do.									
Average space			48			48	Flat of Upper Deck do. do.	4	7/8	4	7/8					
<b>BEAMS</b> , Main, or Middle Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	5 1/2		3 8	5 1/2		3 8	How fastened to Beams									
Single, or double Angle Iron, on Upper Edge			24			24	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	34	10	34	10					
Average space							Is the Stringer Plate attached to the outside plating?	25 1/2	8	25 1/2	8					
<b>BEAMS</b> , Lower Deck, Hold, or Orlop Single or double Ang. Iron, Plate or Tee Bulb Iron	9		9	9		9	Angle Irons on ditto, No. 2	4	4 9/16	4	4 9/16					
Single or double Angle Iron on Upper Edge	4	3 1/2	8	4	3 1/2	8	Tie Plates, outside Hatchways									
Average space							Diagonal Tie Plates on Beams, No. of pairs									
<b>KEELSONS</b> Centre line, single or double plate, box, or Intercostal, Plates	17		12	17		12	Waterways materials and scantlings									
" Rider Plate	10 3/4		12	10 3/4		12	Flat of Middle Deck do. do.									
" Bulb Plate to Intercostal Keelson							How fastened to Beams									
" Angle Irons			8			8	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	32	9	32	9					
" Double Angle Iron Side Keelson							Is the Stringer Plate attached to the outside plating?	25	8	25	8					
" Side Intercostal Plate			8			8	Angle Irons on ditto, No. 3	4	4 9/16	4	4 9/16					
" do. Angle Irons	5	4	9	5	4	9	Stringer or Tie Plates, outside Hatchways	5	4 9/16	5	4 9/16					
" Attached to outside plating with angle iron	3	3	7	3	3	7	Flat of Lower Deck									
<b>BILGE</b> Angle Irons	5	4	9	5	4	9	Ceiling betwixt Decks, thickness and material in hold do. do.	4 1/2		4 1/2						
" do. Bulb Iron	8		8	8		8	Main piece of Rudder, diameter at head do. at heel	8 1/4		6 1/4						
" do. Intercostal plates riveted to plating for length							Can the Rudder be unshipped afloat?	3 1/4		3 1/4						
<b>BILGE STRINGER</b> Angle Irons	5	4	9	5	4	9	Bulkheads No. 4 Thickness of			6 5/8		6 5/8				
Intercostal plates riveted to plating for 1/2 length. with Angles	3	3	7	3	3	7	Height up									
<b>SIDE STRINGER</b> Angle Irons							How secured to sides of ship									
Transoms, material. Knight-heads. Hawse Timbers.							Size of Vertical Angle Irons	3	3 7/8							
Windlass							and distance apart			30						
							Are the outside Plates doubled two spaces of Frames in length?									

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 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 3/4 7/8 in. diameter averaging 3 3/8 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 or single riveted; with rivets 3/4 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 3/4 7/8 in. diameter, averaging 3 3/8 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 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 btimes Breadth of laps of plating in single riveting —

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

Waterway, how secured to Beams cutted Gunwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Drum turned on Beams No. of Breasthooks, 5 Crutches, 29

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, Stoughton Mc Iron Co West Scotland Iron Co Angled 1/2 3/4 and 1/2 Stoughton Mal & Co

The above is a correct description.

Builder's Signature, for Bartram Haswell & Co 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 *Shrouns rigged*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.						Bowers	1	25.3.21	25.12.20	25 1/2	25 3/20
	Fore Sails,	270	15/8	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,							1	21.3.0	22.3.1.0	21.3.0	22 3/20
	Fore Topmast Stay Sails											
	Main Sails,	75	1	90 10	90 10		Stream	1	10.1.0	10.12.2.0	10 1/2	10 1/2
	Main Top Sails,	90	9	90 10	90 10		Kedges	1	5.1.18	6.12.2.0	5 1/4	5 1/4
	CABLES, &c.	85	7/6	90 6	90 6							
	Chain	120	4 1/2									

Standing and Running Rigging *Wire & Straps* sufficient in size and *good* in quality. She has *Long Boat* and The Windlass is *good*. *Winches + Capstan* *good* and Rudder *good* Pumps *10 per tracing attached*  
 Engine Room Skylights.—How constructed? *Made iron &c.* How secured in ordinary weather? *✓*  
 What arrangements for deadlights in bad weather? *Solid wood shutters and Bulb Eyes*  
 Coal Bunker Openings.—How constructed? *Iron castings* How are lids secured? *Wood 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? *Weld and screws*  
 Hatches, If strong and efficient? *Wood Hatches 2 1/2 inches*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
2696	29 <sup>th</sup> March 1877			93		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	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, fore-castle, or raised quarter deck, and the length of double, or part double bottom. *100'*  
 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,  
 Special ... £ 59 : 10 : 6 *15<sup>th</sup> Sept. 1877*  
 Certificate ...

Committee's Minute *18th September, 1877.*  
 Character assigned *100 A.1*  
 Lloyd's Register  
 2 Day, 3 Inch Iron Deck  
 28 1/2 3 tier B. 17/9/77