

# IRON SHIPS.

Rev 30/5/70

No. 2507 Survey held at London Date, First Survey 21 Dec 1899 Last Survey 28 Mar 1900  
On the Iron S.S. "James Hall" Master A. Linington

Tonnage under Tonnage Deck <u>516.00</u>	ONE, OR TWO DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>London</u>
Ditto of Spar Deck, or Awning Deck.	Half moulded breadth <u>12.0</u>	Half Moulded Breadth <u>12.0</u>	When built <u>1890</u> Launched <u>24 Dec 1890</u>
Ditto of Deck, or Raised Or. Dk. <u>24.96</u>	Depth from upper part of Keel to top of Upper Deck Beams (or as per Rule, Section 11) <u>14.0</u>	Total Depth if three or more Decks <u>14.0</u>	By whom built <u>James Hall, Russell &amp; Co</u>
Houses <u>7.06</u>	Girth of Half Midship Frame (as per Rule) <u>23.0</u>	Total Girth of Half Midship Frame <u>23.0</u>	Owners <u>London &amp; Hull Steam Co</u>
Forecastle	1st Number <u>49.4</u>	3rd Number <u>49.4</u>	Port belonging to <u>London</u>
Gross Tonnage <u>548.02</u>	Length <u>90.5</u>	Length <u>90.5</u>	Destined Voyage <u>India</u>
Crew Space, as per Rule <u>75.06</u>	2nd Number <u>810.1</u>	4th Number <u>810.1</u>	Surveyed while Building, Afloat, or in Dry Dock <u>Under special survey</u>
Registered Tonnage, as on Beam <u>332.76</u>	Depths to Length <u>12</u>	Breadths to Length <u>12</u>	
Net Room <u>111.06</u>			
Registered Tonnage, as a Steamer, cut on the Beam <u>221.12</u>			

Length on deck <u>90.5</u>	Feet. Inches. Moulded Breadth <u>12.0</u>	Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule <u>14.0</u>	Feet. Inches. Power of Engines <u>65</u>	Horse. N° of Decks <u>One</u>	N° of Tiers of Beams <u>One</u>
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Dimensions of Ship per Register, length, breadth, depth,	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<u>6 1/2 x 2 1/4</u>	<u>4 1/4 x 1 1/2</u>				
Do. if centre through plate, depth and thickness	<u>6 1/4 x 2</u>	<u>6 1/2 x 1 1/2</u>				
Stem, if bar iron, moulding and thickness	<u>6 1/2 x 4 1/2</u>	<u>6 1/2 x 3 1/4</u>				
Stern-post do. do. do.	<u>27</u>	<u>22</u>				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>27</u>	<u>22</u>				
Frames, size of Angle Iron, for 2/3 length amidships	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. for 1/3 at each end	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Reversed Frames, size of Angle Iron	<u>2 1/4 x 2 1/4</u>	<u>2 1/4 x 2 1/4</u>				
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>1 1/2 x 9 1/8</u>	<u>1 1/2 x 9 1/8</u>				
Do. at the ends	<u>1 1/2 x 9 1/8</u>	<u>1 1/2 x 9 1/8</u>				
Do. do. do. at Bilge Keelson	<u>6 x 9 1/8</u>	<u>6 x 9 1/8</u>				
Do. eight extended at the Bilges	<u>31 inches</u>	<u>31 inches</u>				
Beams, Three Decked, Spar, or Awning Decked (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	<u>6 x 9 1/8</u>	<u>6 x 9 1/8</u>				
Single or double Angle Iron on Upper edge	<u>2 1/4 x 2 1/4</u>	<u>2 1/4 x 2 1/4</u>				
Average space	<u>3.6</u>	<u>3.6</u>				
Beams, Lower Deck or Orlop (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	<u>4 x 3 1/2</u>	<u>4 x 3 1/2</u>				
Single or double Angle Iron on Upper Edge	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Average space	<u>3.6</u>	<u>3.6</u>				
Keel Centre line, single or double plate, or Intercoastal, size of Plates	<u>10 1/2 x 9 1/8</u>	<u>10 1/2 x 9 1/8</u>				
Do. Plate to Intercoastal Keelson	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. of Angle Irons	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. Intercoastal Keelson, size of Plates	<u>6 x 9 1/8</u>	<u>6 x 9 1/8</u>				
Do. Angle Irons on tops of Floors	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. Keelson, Bulb Iron	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. do. Angle Irons	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				
Do. Side Stringers (No. ) size of Angle Irons	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2</u>				

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads Patent Hawse Timbers Frames

Windlass Greenheart Pall Bitt Plate and Bolt

The Frames extend in one length from Keel to Gunwale

The Reverse Angle Irons on the floors extend across the middle line to above the Hold Beam stringer

On all the Frames and to the Gunwale or alternate frames

Keelsons the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

Plates, Double, double or Riveted to Keel, double or at upper edge, with Rivets ( 1/4 in.) diameter, averaging ( 1 1/2 ins.) from centre to centre.

Do. Ed. from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( 1/4 in.) diameter, averaging ( 3 1/2 ins.) from centre to centre.

Do. Bu. from Keel to turn of Bilge, worked carvel with butt straps to strakes ( 3/8 in.) thick, treble, double or single Riveted; with Rivets ( 1/4 in.) diameter, averaging ( 3 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No

Do. Ed. from bilge to sheerstrake, worked carvel with a lining piece ( 1/2 in.) thick, or clencher, double or single riveted; with rivets ( 1/4 in.) diameter, averaging ( 2 1/2 ins.) from centre to centre.

Do. Edges of Sheerstrake, double or single Riveted. At upper edge single to Bulwark At lower edge Double

Butts from Bilge to Planksheers, worked Carvel with Butt Straps ( 3/8 in.) thick, double or single Riveted; with Rivets ( 1/4 in.) diameter, averaging ( 2 1/2 ins.) from centre to centre. Breadth of laps in double Riveting ( 1 1/2 ) Breadth of laps in single Riveting ( 2 1/2 )

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

Planksheer, how secured to the plating of the sides, Explain by Sketch,

Waterway " " planksheer and to the Beams, Explain by Sketch,

Beams of the various Decks, how secured to the sides? Welded and riveted to frames No. of Breasthooks, Four Crutches, Four

What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best Mild Steel

Manufacturer's name or trade mark, Best Best

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, James Hall Russell & Co Surveyor's Signature, A. Linington

1899/446 0215



Workmanship. Are the butts of plating planed or otherwise fitted? All 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  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Yes  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?  
Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in corners of Butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the 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 Length of Mast 55 ft. Bowsprit 12 x 12 inch dia

7973. Iron

Tested by R. Bunce at Low Walker  
Barncastle upon Tyne  
Tested by R. Bunce at  
Low Walker Barncastle upon Tyne

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W'tht req'd per Rule.	Test req'd per Rule.
SAILES.												
CABLES, &c.												
N <sup>o</sup> .	Fore Sails,	Chain .....	180	2 1/2	20.0.0.0	1 1/2	Bowers ....	3	2.3.6	10.18.3.0	2.1.0	10 1/2
2	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).										
4	Fore Topmast Stay Sails	Hempen Stream					(State Machine where Tested, and name of Superintendent).		2.2.14	10.18.0.0	2.1.0	10 1/2
5	Main Sails,	W. Cable	30	2 1/2					1.2.23			
6	Main Top Sails,	Hawser .....	20	6		7 1/2	Stream ....	7	2.2.20			
and		Towlines ...	45	4 1/2		5 1/2			1.1.5	9.11.2.7	7.0.2	9 1/2
		Warp .....							1.3.0		3.0.0	
		All of quality					Kedges ....	1	1.2.4		1.2.0	

Her Standing and Running Rigging Good sufficient in size and Good in quality. She has 23 Long Boat and 24 fut life boat

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good

Engine Room Skylights.—How constructed? Iron frames with wood casings How secured in ordinary weather? With iron clamps

What arrangements are there for deadlights in such for bad weather? None

Coal Bunker Openings.—How constructed? Iron frames with wood casings How are lids secured? With iron clamps How high above deck? 18 inches

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Three scuppers and two discharge ports on each side

Cargo Hatchways.—How formed? Iron frames, welded beams State size See Hatch List

If of extraordinary size, state how framed and secured? Medium size

What arrangement for shifting beams? None

Hatches, themselves, whether strong and efficient? Very efficient Main Hatchways.—State size 4 ft 6 in by 7 ft 6 in

Order for Special Survey No. 285 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under

Date Dec 1809 Surveys held 2nd. On the plating during the progress of riveting Special survey from the 21<sup>st</sup>

Order for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid Dec 1809 until the

Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented 22<sup>nd</sup> May 1840

No. 247 in builder's yard. Section 18. 5th. After the ship was launched and equipped In of Vessels 33

General Remarks, The Shearstrake is doubled with plate 24 x 7/16 for length of 150 feet amidships, and a Buck Bar at Bulkhead on 24 x 7/16, and the Gunwale plate is increased 2 1/2 in for length amidships as compensation for the proportion of the hull. Has a Buck Bar 150 x 5/16 rivetted to Double Angle Bars 3 x 3 1/2 x 7/16 as substitution for Hold Beams. This arrangement was submitted and sanctioned as per Secretary's letter dated 29<sup>th</sup> November 1809. I have compared the scantlings of this vessel with the 90 st classification, and find some parts equal to the 100 st, and some less than the 90 st. That I hereby respectfully state as my opinion that the vessel is worthy of the favourable consideration of the Committee for the 90 st classification.

In what manner are the surfaces preserved from oxidation? Inside Red Lead Paint Outside Red Lead Paint

I am of opinion this Vessel should be Classed 90 st

The amount of the Entry Fee ..... £ 4 : 0 : 0 is received by me,

Travelling Expenses Special ..... £ 15 : 12 : 0

(if any). None Certificate .... Gratis

Committee's Minute 31 May 1840

Character assigned 90 A 1

W. Little

Sam of opinion that the hull of this vessel is eligible for Classing 90 A as recommended above. The Committee will please observe the fact that the hull is 2 inch less thick than the main piece of Shearstrake is 2 inch less diameter at head and 1/2 less at heel than is required by the recently revised Rules, but all these being up to the requirements required by which she was built. They may not be objected to in this case. I also to remark that the Committee may see fit to add 20 Tons which has been omitted.

May 31/40