

# IRON SHIPS.

No. 3418 Survey held at Dunbarton Date, First Survey 6<sup>th</sup> April Last Survey 22 Dec<sup>r</sup> 1871

On the Screw Steamer 'India' Master P. Sillars

Tonnage under Tonnage Deck 1323.11

Ditto of Spar Deck, or Awning Deck 7

Ditto of Poop, or Ratted Gr. Deck 10.0

Ditto of Houses on Deck 10.0

Ditto of Forecastle 1333.11

188 Tonnage 1333.11

Crew Space, as per Rule 40.41

Register Tonnage, as per Rule 1323.11

Boiler Room 426.70

Register Tonnage, as a Steamer, cut on Beam 228

ONE OR TWO DECKED, THREE DECKED VESSELS.  
SPAR, OR AWNING DECKED VESSEL.

Half moulded breadth .... 15.00 Total Depth if three or more Decks .....

Depth from upper part of Keel to top of Upper Deck Beams .....

Girth of Half Midship Frame (as per Rule) 26.66 3rd Number .....

1st Number 23.90 Length .....

2nd Number 26.66 4th Number .....

Depths to Length Under 12 Breadths to Length Under 9

Built at Dunbarton

When built 1871 Launched 1.12.71

By whom built W. M. Denny & Bros

Owners Portuguese Government

Port belonging to Lisbon

Destined Voyage Clar - Lisbon

Surveyed while Building, Afloat, or in Dry Dock.

Length on deck as per Rule 260.5 Moulded Breadth 30 Depths from top of Floors to Upper and Main Deck Beams, as per Rule 23.5 Horse. Power of Engines 160 No. of Decks 3 No. of Tiers of Beams 3

Dimensions of Ship per Register, length, 271 breadth, 30.15 depth, 22.45

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness .....	<u>10 x 2 1/2</u>	<u>10 x 2 1/2</u>		
Do. if centre through plate, depth and thickness .....	<u>9 x 2 1/2</u>	<u>9 x 2 1/2</u>		
Stem, if bar iron, moulding and thickness .....	<u>9 x 5</u>	<u>9 x 5</u>		
Stern-post for Rudder do. do. ....	<u>9 x 5</u>	<u>9 x 5</u>		
Stern-post for Propeller .....	<u>9 x 5</u>	<u>9 x 5</u>		
Distance of Frames from moulding edge to moulding edge, all fore and aft .....	<u>24 24</u>	<u>24 24</u>		
Frames, size of Angle Iron, for 2/3 length amidships .....	<u>5 3 0</u>	<u>5 3 0</u>		
Do. for 1/3 at each end .....	<u>5 3 0</u>	<u>5 3 0</u>		
Reversed Frames, size of Angle Iron .....	<u>3 1/2 3 0</u>	<u>3 1/2 3 0</u>		
Floors, depth and thickness of Floor Plate at mid line for half the length amidships .....	<u>22 - 10</u>	<u>21 1/4 - 10</u>		
Do. at the ends .....	<u>4 - 8</u>	<u>4 - 8</u>		
Do. do. do. at Bilge Keelson .....	<u>10 - 10</u>	<u>10 - 10</u>		
Do. height extended at the Bilges .....	<u>44 -</u>	<u>43 1/2</u>		
Beams, Upper, Spar, or Awning Deck (No. ) .....	<u>4 - 7</u>	<u>4 - 7</u>		
Single or double Angle Iron, Plate or Tee Bulb Iron .....	<u>2 1/2 2 1/2 5</u>	<u>2 1/4 2 1/2 5</u>		
Average space .....	<u>4 -</u>	<u>4 -</u>		
Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron .....	<u>4 - 7</u>	<u>4 - 7</u>		
Single, or double Angle Iron, on Upper Edge .....	<u>2 1/2 2 1/2 5</u>	<u>2 1/4 2 1/2 5</u>		
Average space .....	<u>4 -</u>	<u>4 -</u>		
Beams, Lower Deck, Hold or Orlop (No. ) single or double Angle Iron, Plate or Tee Bulb Iron .....	<u>3 2 1/2 5</u>	<u>3 2 1/2 5</u>		
Single or double Angle Iron on Upper Edge .....	<u>4 -</u>	<u>4 -</u>		
Average space .....	<u>4 -</u>	<u>4 -</u>		
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates .....	<u>20 - 9 0</u>	<u>27 1/2 - 9 0</u>		
Do. Bulb Plate to Intercoastal Keelson .....	<u>8 - 9</u>	<u>1 1/2 - 9</u>		
Do. Size of Angle Irons .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		
Do. Side Intercoastal Keelson, size of Plates .....	<u>24 4 9</u>	<u>24 4 9</u>		
Do. Angle Irons on tops of Floors .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		
Do. Bilge Keelson, Bulb Iron .....	<u>10 1/2 - 0</u>	<u>10 1/2 - 0</u>		
Do. do. Intercoastal plates riveted to plating for 2/3 length .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		
Do. do. Angle Irons .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		
Side Stringers (No. 2 pairs) size of Angle Irons .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		
Do. Intercoastal plates riveted to plating for length .....	<u>5 1/2 4 9</u>	<u>5 1/2 4 9</u>		

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

Knight-heads None Hawse Timbers Wood chocks

Windlass Capstan Pull Bitt

The Frames extend in one length from Keel to Deck Stringers Riveted through plates with 7/8 in. Rivets, about 6 apart.

The Reverse Angle Irons on the floors and frames extend from the middle line on every frame to shore round deck and to upper and lower alternately

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

Plates, Garboard, double or single Riveted to Keel, double or single at upper edge, with Rivets 1/2 in. diameter, averaging 3 1/2 ins. from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1 1/2 in.) thick, double or single Riveted; with Rivets 7/8 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. of three Strakes at Bilge for 144 ft length, treble riveted with Butt Straps 1/2 thicker than their plates.

Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece ( 1/2 ) thick, or clencher, double or single riveted; with rivets (1 1/2 in.) diameter, averaging (3 ins.) from centre to centre.

Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single At lower edge double

Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (1 1/2 in.) thick, double or single Riveted; with Rivets (1 1/2 in.) diameter, averaging (3 ins.) from centre to centre.

Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for whole length amidships. Breadth of laps of plating in double Riveting (3 1/2 in.) Breadth of laps of plating in single Riveting ( )

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

Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.) See Section

Beams of the various Decks, how secured to the sides? Enged bracket knees No. of Breasthooks, four Crutches, four up to

What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Blockhouse - Keel and after

Manufacturer's name or trade mark, Consett Blockhouse

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

Builder's Signature, W. M. Denny & Bros Surveyor's Signature, H. J. Munn

180450-0098



Workmanship. Are the butts of plating planed or otherwise fitted? Planed 9652 Rm  
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They do  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Mid single piece  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? They do and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? They are  
Are there any rivets which either break into or have been put through the seams or butts of the plating? A few at 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

Masts of Oregon Pine.

(1070 Rules)

Number for equipment <u>19866</u>		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.	CABLES, &c.									
	Fore Sails,	Chain .....	150	1 9/16	44.6ms	300. 1 9/16	42 10/16	23.3.25	23.17.2.0	23 1/2	23 1/2
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	150	1 9/16	44.6	300. 1 9/16	42 10/16	23.2.0	23.10.0.0	23 1/2	23 1/2
	Fore Topmast Stay Sails	Hempen Stream Cable	90	1	-	90. 1	-	20.0.21	20.19.1.14	19.3.25	20 1/4
	Main Sails,	Hawser .....	90	1	-	90. 1	-	-	-	10	-
	Main Top Sails,	Towlines ...	90	1	-	90. 1	-	11.0.0	-	5	-
	and	Warp .....	60	3/4	-	6	-	5.0.0	-	2 1/2	-
		All of <u>good</u> quality.	60	3/4	-	6	-	2.3.0	-	-	-

Her Standing and Running Rigging Strong sufficient in size and good quality. She has Six Long Boats and

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

Engine Room Skylights. How constructed? On deep iron comings How secured in ordinary weather? Screwed to comings

What arrangements are there for deadlights in such for bad weather? Bullseyes in wood deadlights

Coal Bunker Openings. How constructed? On upper deck How are lids secured? Hydts How high above deck? Flush

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? Four ports and three mooring pipes each side

Cargo Hatchways. How formed? With iron comings State size 15/6 x 8/12 and smaller

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? One of wood in main hatch at upper and lower decks

Hatches, themselves, whether strong and efficient? Yes Main Hatchways. State size 15/6 x 8/12

Order for Special Survey No. 744 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under  
Date July 22/71 Surveys held 2nd. On the plating during the progress of riveting Special Survey  
Order for Ordinary Survey No. 155 while building 3rd. When the beams were in and fastened, and before the decks were laid between  
Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented 6th April  
No. 155 in builder's yard. Section 18. 5th. After the ship was launched and equipped and 22nd December 1871  
(46 trials)

General Remarks,

This vessel has been built in accordance with the appended mid-section. After she was launched, a platform-deck was fitted from the fore bulkhead, aft to the Machinery space, at the height marked in red on the section, having beams at alternate frames 5 1/2 x 3 1/2 x 7/8 secured with bracket knees and angle irons & the reverse angles on frames and at the middle line screwed to the lower deck pillars w. the plate on each side of hatchways 12 x 7/8 flat of deck 2 1/2 frames

Certificates of Test of Cables. endorsed, "that twelve links were selected by me out of 30 fathoms of which this is half and broke at 65 tons 10 Cwt"  
Signed J. Vezemna

She has a low Monkey forecasse and a short Bridge-house

In what manner are the surfaces preserved from oxidation? Inside Cement & Paint Outside Paint &c

I am of opinion this Vessel should be Classed MAV 2 Decks

The amount of the Entry Fee .....£ 5: is received by me,

Special .....£ 58: 1: 6  
Certificate .... Printed

(Travelling Expenses)

(if any) £ 7: 7:

Committee's Minute 29th December 1871

Character assigned MAV

Lloyd's Register  
I concur in the opinion that this vessel should be Classed MAV  
29/12/71