

IRON SHIPS.

No. 3418 Survey held at Dunbarton Date, First Survey 6th April Last Survey 22 Dec^r 1871

On the Screen for 'India' Master P. Sillars

Tonnage under Tonnage Deck } 1323.11
 Ditto of Spar Deck, or Awning Deck } 7
 Ditto of Poop, or Ratted Or. Dk. } 10.0
 Ditto of Houses on Deck } 10.0
 Ditto of Forecastle } 1333.11
 Gross Tonnage } 1333.11
 Crew Space, as per Rate } 40.41
 Register Tonnage for Fees } 1323.11
 Engine Room } 426.70
 Register Tonnage, as a Steamer, cut on Beam } 228

ONE OR TWO DECKED, SPAR, OR AWNING DECKED VESSELS. Half Moulded Breadth... Total Depth of three or more Decks... Total Girth of Half Mid-ship Frame... 3rd Number... Length... 1st Number... Length... 2nd Number... Length... 4th Number... Breadths to Length... (1070 Rules.)

Built at Dunbarton
 When built 1871 Launched 1.12.71
 By whom built W. Denny & Bros
 Owners Portuguese Government
 Port belonging to Lisbon
 Destined Voyage Clas - Lisbon
 If 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	Inches in Ship	Inches required per Rule	Inches in Ship	Inches required per Rule
Keel, if bar iron, depth and thickness	10 x 2 1/2	10 x 2 1/2						
Do. if centre through plate, depth and thickness								
Stem, if bar iron, moulding and thickness	9 x 2 1/2	9 x 2 1/2						
Stern-post for Rudder do. do.	9 x 5	9 x 5						
Stern-post for Propeller do. do.	9 x 5	9 x 5						
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24						
Frames, size of Angle Iron, for 2/3 length amidships	5 3/8	5 3/8	3	3	8	8	8	8
Do. for 1/3 at each end	5 3/8	5 3/8	3	3	7	7	7	7
Reversed Frames, size of Angle Iron	3 1/2	3 1/2	3	3	8	8	8	8
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	22	22	10	10	2 1/4	2 1/4	10	10
Do. at the ends	4 1/2	4 1/2	8	8			8	8
Do. do. do. at Bilge Keelson	10	10					10	10
Do. height extended at the Bilges	44	44			4 3/4	4 3/4		
Beams, Upper, Spar, or Awning Deck (No.) single or double Angle Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2	7	7	7	7	7	7
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	5	5	2 3/4	2 3/4	5	5
Average space	4 1/2	4 1/2			4 1/2	4 1/2		
Beams, Main or Middle Deck (No.) single or double Angle Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2	7	7	7	7	7	7
Single or double Angle Iron on Upper Edge	3	3	5	5	2 1/2	2 1/2	5	5
Average space	4 1/2	4 1/2			4 1/2	4 1/2		
Beams, Lower Deck, Hold or Orlop (No.) single or double Angle Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2	7	7	7	7	7	7
Single or double Angle Iron on Upper Edge	3	3	5	5	2 1/2	2 1/2	5	5
Average space	4 1/2	4 1/2			4 1/2	4 1/2		
Keelson Centre line, single or double plate, box, or Intercostal, size of Plates	20	20	9	9	2 1/2	2 1/2	9	9
Do. Bulb Plate to Intercostal Keelson	8	8	9	9	1 1/2	1 1/2	9	9
Do. Size of Angle Irons	5 1/2	5 1/2	4	4	9	9	9	9
Do. Side Intercostal Keelson, size of Plates	24	24	9	9			9	9
Do. Angle Irons on tops of Floors	5 1/2	5 1/2	4	4	9	9	9	9
Do. Bilge Keelson, Bulb Iron	5 1/2	5 1/2	4	4	9	9	9	9
Do. do. Intercostal plates riveted								
at fore part of vessel to plating for 2/3 length	10 1/2	10 1/2	8	8			8	8
Do. do. Angle Irons	5 1/2	5 1/2	4	4	9	9	9	9
Side Stringers (No. 2 pairs) size of Angle Irons	5 1/2	5 1/2	4	4	9	9	9	9
Do. Intercostal plates riveted to plating for length								

Transoms, material Iron or, if none, in what manner compensated for.
 Knight-heads None Hawse Timbers Wood checks
 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 board deck and to upper deck 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 1/2 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 () thick, or clencher, double or single riveted; with rivets 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 1/2 in. thick, double or single Riveted; with Rivets 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 5 1/2 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
 What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Blackburn
 Manufacturer's name or trade mark, Consell Blochain
 We certify that the above is a correct description of the several particulars therein given.
 Builder's Signature, W. Denny & Bros Surveyor's Signature, H. M. ...

8600-0530011

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 96528m
 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? Most single pieces
 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 Reels)

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, No.	Weight. Ex. Stock.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	150	1 7/8	44 tons	300 1/8	42 10/20	St. No. T.M. 5082	23.3.25	23.17.2.0	23 1/2	23 1/20
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	150	1 7/8	44			5083	23.2.0	23.10.0.0	23 1/2	23 1/20
	Fore Topmast Stay Sails	Hempen Stream Cable	90	1		90.1.		5084	20.0.21	20.13.1.14	19.3.25	20 1/20
	Main Sails,	Hawser		10		10.			11.0.0		10	
	Main Top Sails,	Towlines ...		8.		10.			5.0.0		5	
	and	Warp		6.		6			2.3.0		2 1/2	
		All of equal quality.	60.	9.								

Her Standing and Running Rigging Strong sufficient in size and good quality. She has Six Long Boats and The present state of the Windlass Capstan Empatent and Rudder good Pumps good
Engine Room Skylights.—How constructed? In 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 4/11 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 4/11

Order for Special Survey No. 744 DATES of
 Date July 22/71 Surveys held
 Order for Ordinary Survey No. 155 while building
 Date as per Section 18.
 No. 155 in builder's yard. Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under
- 2nd. On the plating during the progress of riveting Special Survey
- 3rd. When the beams were in and fastened, and before the decks were laid between
- 4th. When the ship was complete, and before the plating was finally coated or cemented 6th April
- 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 spaces $5\frac{1}{2} \times 3\frac{1}{2} \times \frac{7}{16}$ 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 $12 \times \frac{7}{16}$ flat of deck $2\frac{1}{2}$ space

Certificates of test of cables. endorsed, "that twelve links were selected by me out of 300 fathoms of which this is half and broke at 65 tons 10 Cwt"
 Signed J. Ferguson

She has a low Monkey forecasse and a Chat 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 M.A.V. 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 100 A 1

W. Thompson
 Please direct to the Certificate Office to Mr. H. Denny 100 Abchurch Lane.
 I concur in the opinion that this vessel should be classed 100 A 1.
 29/12/71

Lloyd's Register
 2019
 Foundation