

IRON SHIP.

23388

No. 2600 Survey held at Belfast Date, First Survey 1st October 1878 Last Survey 30th April 1879

On the S. S. "Maharaja" Master J. H. Brown

TONNAGE under Tonnage Deck 1537.23 ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
Ditto of Third, Spar, or Awning Deck.
Ditto of Poop, or Raised Qr. Dk.
Ditto of Houses on Deck.
Ditto of Forecastle.
Gross Tonnage 1665.71
Less Crew Space.
Less Engine Room.
Register Tonnage as out on Beam 1046.43

HALF BREADTH (moulded) 15.75
DEPTH from upper part of Keel to top of Upper Deck Beam 24.20
GIRTH of Half Midship Frame (as per Rule) 36.50
1st NUMBER 76.45
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
LENGTH 304.33
2nd NUMBER 23266
PROPORTIONS—Breadths to Length 9.6
Depths to Length—Upper Deck to Keel 12.5
Main Deck ditto

Built at Belfast
When built 1879 Launched 26th March 1879.
By whom built Harland & Wolff
Owners Asiatic Steam Nav. Co. Ltd.
Port belonging to Liverpool
Destined Voyage India - Coasting trade
Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 304 4 BREADTH Moulded 31 6 DEPTH top of Floors to Upper Deck Beams 22 2/2 Power of Engines 190 No. of Decks with flat laid 2 No. of Tiers of Beams 2

Dimensions of Ship per Register, length, 305.8 breadth, 31.7 depth, 22.25

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 x 3 1/8	10 x 2 3/4	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	36 12	36 12
STEM, moulding and thickness	9 x 3 1/8	10 x 2 3/4	of doubling at Bilge, or increased thickness, and length applied	3 shakes at bilge 1/16	52 1/16 thicker
STERN-POST for Rudder do. do.	10 1/2 x 5 1/2	10 x 5 1/2	fm up. part of Bilge to l. edge of Sh'rstrake	5 shakes = 11	11
for Propeller	9 1/2 x 6		Main Sheerstrake, breadth and thickness	36 12	
Distance of Frames from moulding edge to	24	(Class 100 F)	of d'bling at Sh'rstrake, & length applied	36 12	
moulding edge, all fore and aft			from Mn. to Up. or Spar Dk. Sh'rstrake.	36 12	
FRAMES, Angle Iron, for 1/2 length amidships	5 3 8	5 3 8	Up. or Spar Dk Sh'rstrake, brdth & thickness	40 15	40 15
Do. for 1/2 at each end	5 3 7	5 3 7	Butt Straps to outside plating, breadth & thickness	11 1/2 7 11 1/2 6	11 1/2 6 11 1/2 6
REVERSED FRAMES, Angle Iron	3 1/2 3 8	3 1/2 3 8	Lengths of Plating	12 1/2 10 1/2	10 1/2 10 1/2
FLOORS, depth and thickness of Floor Plate	24 x 9	24 x 9	Shifts of Plating, and Stringers	4 1/2 4 1/2	4 1/2 4 1/2
at mid line for half length amidships	Eng'd 10 10	Eng'd 10 10	Gunwale Plate on ends of Awning, Spar, or	30 10	30 10
thickness at the ends of vessel	12	12	Upper Deck Beams, breadth and thickness	30 10	30 10
depth at 1/2 the half-bdth. as per Rule	48	48	Angle Iron on ditto	6 x 4 x 9	6 x 4 x 9
height extended at the Bilges	48	48	Tie Plates fore and aft, outside Hatchways	7	7
BEAMS, Upper, Spar, or Awning Deck	7 x 8	7 x 8	Diagonal Tie Plates on Beams No. of Pairs, doubled in Wake	7	7
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	Butterley	Butterley	Planksheer material and scantling	1/2 1/2	1/2 1/2
Single or double Angle Iron on Upper edge	48	48	Waterways do. do.	Butterley	Butterley
Average space	48	48	Flat of Upper Deck do. do.	Teak 3	3
BEAMS, Main, or Middle Deck	8 1/4 x 8	8 x 8	How fastened to Beams	Lat. nut & screw bolts	
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	Butterley	Butterley	Stringer Plate on ends of Main or Middle Deck	40 9	39 9
Single, or double Angle Iron, on Upper Edge	48	48	Beams, breadth and thickness	40 9	39 9
Average space	48	48	Is the Stringer Plate attached to the outside plating?	yes	
BEAMS, Lower Deck, Hold, or Orlop	3	3	Angle Irons on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	3	Tie Plates, outside Hatchways	15 10	15 x 10
Single or double Angle Iron on Upper Edge	3	3	Diagonal Tie Plates on Beams, No. of pairs	-	-
Average space	3	3	Waterways materials and scantlings	-	-
KEELSONS Centre line, single or double plate,	20 x 13	19 x 13	Flat of Middle Deck do. do.	-	-
box, or Intercoastal, Plates	13 x 13	13 x 13	How fastened to Beams	nut & screw bolts	3 pine 3
" Rider Plate	8 x 8	8 x 8	Stringer Plates on ends of Lower Deck, Hold or	-	-
" Bulb Plate to Intercoastal Keelson 1/2 length	6 4 9	6 4 9	Orlop Beams	-	-
" Angle Irons	-	-	Is the Stringer Plate attached to the outside plating?	-	-
" Double Angle Iron Side Keelson	-	-	Angle Irons on ditto, No.	-	-
" Side Intercoastal Plate	-	-	Stringer or Tie Plates, outside Hatchways	-	-
" do. Angle Irons	-	-	Flat of Lower Deck	-	-
" Attached to outside plating with angle iron	-	-	Ceiling between Decks, thickness and material	2 1/2 fir	2 1/2
BILGE Angle Irons	6 4 9	6 4 9	in hold do.	2 1/2 fir	2 1/2
" do. Bulb Iron for 1/2 length	8 x 8	8 x 8	Main piece of Rudder, diameter at head	7 3/4	7 3/4
" do. Intercoastal plates riveted to	6 4 9	6 4 9	do. at heel	3 3/4	3 3/4
plating for 1/2 length	8 x 8	8 x 8	Can the Rudder be unshipped afloat?	yes	
BILGE STRINGER Angle Irons	6 4 9	6 4 9	Bulkheads No. 7	7	7
Intercoastal plates riveted to plating for	8 x 8	8 x 8	Height up to upper d'ble, aff. on to main d'ble	7	7
length bulb for 1/2 length	6 4 9	6 4 9	How secured to sides of ship	between double frame angles	
SIDE STRINGER Angle Irons	6 4 9	6 4 9	Size of Vertical Angle Irons	5 x 3 x 8	and distance apart 30 ins.
Bulb for 1/2 length	8 x 8	8 x 8	Are the outside Plates doubled two spaces of Frames in length?	yes	
Transoms, material. Knight-heads. Hawse Timbers.	Iron	Iron			
Windlass Iron patent Pall Bitt					

The FRAMES extend in one length from middle line to gunwale & rail alternately Riveted through plates with 7/8 in. Rivets, about 7 apart.
The REVERSED ANGLE IRONS on floors and frames extend across middle line to upper deck and to main d'ble 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 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.
Butts of Three Strakes at Bilge for half 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 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted.
Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 3/4 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 amidships.
Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 5

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Quadruple, treble & double riveted
Waterway, how secured to Beams gutter (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? turned knees No. of Breasthooks, two Crutches, two
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good
Manufacturer's name or trade mark, Frames Mossend, plates Foxhead & Consett, beams Butterley

The above is a correct description.
Builder's Signature, Harland & Wolff Surveyor's Signature, J. W. Scullard
Surveyor to Lloyd's Register of British and Foreign Shipping.

120-384-0214

Workmanship. Are the butts of plating planed or otherwise fitted? *Hammered*

23338 *Iron*

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? *no*

Masts, Bowsprit, Yards, &c., are *Iron & 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 *Iron masts for auxiliary purposes only.*

The masts of this vessel were built in accordance with the drawing submitted & app'd for sister ship 'Shahjehan', the iron of which they are built was tested & found satisfactory. For dimensions &c of Masts and app'd drawing see Belfast report No 2581.

NUMBER for EQUIPMENT 23,266						
N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.
		Chain	135	1 3/4	55 2 1/2 2 1/2 0	270-1 1/16
			135	1 3/4	55 2 1/2 2 1/2 0	55 5/8
Day's proving house Ketherton						
D. F. Lewis supt. 23 & 27 Oct 1878						
	Fore Sails,					
	Fore Top Sails,					
	Fore Topmast Stay Sails					
	Main Sails,					
	Main Top Sails,					
		Warp				
		quality				

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* life Long Boat and *two* others

The Windlass is *Good* Capstan *Good* and Rudder *good* Pumps *good*

Engine Room Skylights.—How constructed? *Leak* How secured in ordinary weather? *Always shipped.*

What arrangements for deadlights in bad weather? *Deadlights fitted in top of skylight.*

Coal Bunker Openings.—How constructed? *Two in side of boiler casing* How are lids secured? *Screws* Height above deck? *12 1/2*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Bulwarks in wake of cargo hatches and gangways fitted with iron stanchions and rails.*

Cargo Hatchways.—How formed? *Plates and angles*

State size Main Hatch *11-6 x 9-10; 11-6 x 9-10* Forehatch *7-6 x 6-0 1/2; 12-7 x 9-10* Quarterhatch

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Oak shifting beams and oak fore supports*

Hatches, If strong and efficient? *Yes.*

Order for Special Survey No. <i>79</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>October 1-28; Nov 6, 14, 21, 29; Dec 3-6; Jan 1-7-13</i>
Date <i>10 July 1878</i>		2nd. On the plating during the process of riveting	<i>17-23, 29; Feb. 12, 25; March 4-11-18, 21, 26</i>
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>April 2, 4, 7, 10, 15, 17, 23, 25-28-30-1879.</i>
No. <i>124</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This two decked vessel has been built in accordance with the drawings submitted & approved see secretary's letters of the 4th & 25th July 1878 and in other respects to the requirements of the Rules for the 100 A Grade.*

She has a turtle back forecabin not enclosed 48ft in length, beams 4 x 3 x 7/16 plated at the sides and partially decked with 2 1/2" oak. Windlass fitted under.

There are three houses on deck, forward house 32 x 21ft, next 38 x 21. There two being before & abaft for and engine casing with a continuous 2 1/2" oak flat over forming a hurricane deck, beams 5 x 3 x 7/16 extending to the ship's side, frames being carried up to take them. There is a chark house on this deck composed of wood. The engine room skylight & boat's davits are fitted on this deck. The materials of which this ship is constructed are very good and the workmanship is of a superior character. There is a ballast tank in fore hold, divided by a bulkhead at the middle line, and one on each side of shaft passage in aft hold and of the same height.

These tanks have been tested by water pressure to the height of the load line and found to be satisfactory.

State if one, two, or three, decked vessel, or if spar, or running deck, and the length 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.*

The amount of the Entry Fee ... £ 5 : 0 : 0 } is received by me, *JWS*

Special ... £ 66 : 13 : 0 } 30/4 1879

Man Certificate *machinery* *gratis* *1/4 " 4 " 6 2*

Committee's Minute

6th May, 1879,

Character assigned

100A

100A

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This vessel appears eligible to be classed as recurring in 100A Lloyd's Register two decked iron deck 1879