

Decks.

IRON OR STEEL STEAMER.

No. 11,995

State if Report is also sent on the Machinery of the Vessel.

Completion of report 16th Feb 1897

Port of Glasgow

Received at London Office FEB 19 1897

held at Glasgow

Date, First Survey, 25th May 1896Last Survey 15th Feb 1897

Name of Vessel "INDRA"

Rig Schooner 2 masts

Master F. L. Burkill

Year of appointment (1) As Master in service of owner of present vessel—1896 (2) As Master of this vessel—1896

Built at Glasgow

When built 1896-7 Launched 30 Dec 1896

By whom built C. J. Funnell & Co

Owners Indra Steam Ship Co Ltd

Managers T. B. Royden

Residence Liverpool

Port belonging to Liverpool

THREE DECKED VESSEL.

CLASS 100A.1 Steel

FEET.

Half Breadth (moulded) 25.5
Depth from upper part of Keel to top of Upper Deck Beams 35.0
Girth of Half Mainship Frame (as per Rule) 55.96
deduct 7 feet 7.0
1st Number 109.46
Length 428.0
2nd Number 468.48
Proportions—Breadth to Length 8.38
Depth to Length—Upper Deck to top of Keel 12.23
Main Deck ditto 16.46

Destined Voyage Colombo via Cardiff If Surveyed while Building, Afloat, & in Dry Dock

AGE under
Tonnage Dk.
and 4th Dk.
Total under Upper Dk. 5609.0
No. of Poop 106.61
of Bridge House 90.63
of Forecastle 122.45
of Houses on Dk. 122.45
of excess of Hatchways above Crown of Engine Room 114.79
Gross Tonnage 6056.91
Less Crew Space 143.19
Less above Crown of Engine Room 24.79
TONNAGE FOR DEES 5798.93
Less Engine Room 1938.21
Less Navigation Spaces 52.48
Register Tonnage 3923.03
as on Beam

LENGTH on Deck as per Rule 428.0 Feet. Inches. BREADTH Moulded 57.0 Feet. Inches. DEPTH top of Floor to Upper Deck Beams 31.0 Feet. Inches. Power of Engines 22.0 Horse. No. of Decks with flat laid 2 No. of Tiers of Beams 2 Round up of Beam, Upper Dk. 12 ins.

FRAMING.				FORGINGS OR CASTINGS.			
Inches in Ship	Inches in Ship	10ths or 20ths in Ship	Inches per Rule Or as Approved	Inches in Ship	Inches in Ship	10ths or 20ths in Ship	Inches per Rule Or as Approved
FRAME, Angles, or L or T Bars for 1/2 length amidships				KEEL, Bar or Side Plates, depth and thickness			
Do. for 1/2 at each end	6 1/2	3 1/2	10 1/2	STEM, moulding and thickness	12 x 3 1/8	12 x 3 1/8	12 x 3 1/8
Do. in way of Double Bottoms at Solid Floors	6 1/2	3 1/2	9 1/2	STERN-POST for Rudder do. do.	12 x 7 3/4	12 x 7 3/4	12 x 7 3/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	3 1/2	3 1/2	10 1/2	MAIN PIECE of Rudder, diameter at head	10 1/2	10 1/2	10 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	3 1/2	3 1/2	10 1/2	RUDDER, how constructed	8 1/2 x 7	8 1/2 x 7	8 1/2 x 7
REVERSED FRAME, Angles	8	3 1/2	10 1/2	Can the Rudder be unshipped afloat?	Yes		
DEEP FRAMING, depth of girder	11 1/2		11 1/2	KEELSONS & STRINGERS.			
LOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	4 1/2	4	10 1/2	CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate			
in way of Engines and Boilers	4 1/2	4	10 1/2	Rider Plate			
thickness at the ends of vessel	4 1/2	4	10 1/2	Bulb Plate to Intercoastal Keelson			
depth at 1/2 the half breadth, as per Rule	4 1/2	4	10 1/2	Horizontal Plates on Floors			
height extended at the Bilges	4 1/2	4	10 1/2	Angles			
FLOORS & BRACKETS in Cell Dble Bottoms	4 1/2	4	10 1/2	SIDE KEELSON, Angles			
Distance apart	26		26	Bulb or Plate above floors, for			
CENTRE GIRDER, in Double bottom, depth and thickness	4 1/2	4	10 1/2	Intercoastal Plate for			
Angles, Top	4 1/2	4	10 1/2	Attached to outside Plating with Angle			
Bottom	4 1/2	4	10 1/2	BILGE KEELSON, Angles			
SIDE GIRDERS, number and thickness	9 x 10		9 x 10	Bulb or Plate above floors, for			
Angles	3 1/2	3 1/2	10 1/2	Intercoastal Plate for			
MARGIN PLATE, depth (exclusive of flange) and thickness	3 1/2	3 1/2	10 1/2	Attached to outside Plating with Angle			
Angles	4	4	10 1/2	BILGE STRINGER Angles			
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	3 1/2	3 1/2	10 1/2	Bulb Plate for			
in Engine and Boiler space	3 1/2	3 1/2	10 1/2	Intercoastal Plate for			
Remainder in Holds	3 1/2	3 1/2	10 1/2	Attached to outside Plating with Angle			
BEAMS, Upper Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb	9	3	12	SIDE STRINGER Angles			
Angles on upper edge	9	3	12	Bulb or Intercoastal Plate, for			
Average space	26		26	Attached to outside plating with Angle			
BEAMS, Middle Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb	9	3	13	Upper Deck Stringer Plates, br'dth & thickness	67	13	67
Angles on upper edge	9	3	13	Angle on ditto	5 x 5 x	11	5 x 5 x
Average space	26		26	Tie Plates fore and aft, outside Hatchways			
BEAMS, Lower Deck, Single Angle, Bulb, Angle, Plate or Tee Bulb	9	3	13	Deck * Iron or Steel, for	9 x 8		9 x 8
Angles on upper edge	9	3	13	Wood Deck. Material & thickness			
Average space	26		26	Middle Deck Stringer Plate, br'dth & thickness	67	11	67
BEAMS, Hold, or Orlop, Plate or Tee Bulb	9	3	13	Angles on ditto, No.	4 x 4 x	9	4 x 4 x
Angles on upper edge	9	3	13	Tie Plates outside Hatchways			
Average space	26		26	Diagonal Tie Plates on Bms. No. of prs.			
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	3	13	Deck * Iron or Steel, for	8 x 7		8 x 7
Angles on upper edge	9	3	13	Wood Deck. Material & thickness			
Average space	26		26	Lower Deck Stringer Plate, br'dth & thickness			
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	3	13	Angles on ditto, No.			
Angles on upper edge	9	3	13	Tie Plates, outside Hatchways			
Average space	26		26	Deck * Material and thickness			
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	3	13	Hold, or Orlop Stringer Plate, br'dth & thckn's			
Angles on upper edge	9	3	13	Angles on ditto, No.			
Average space	26		26	Tie Plates outside Hatchways			
PILLARS, In 'tween Deck, size and spacing	3 1/2	52	3 1/2	Deck. Material and thickness			
Hold	3 1/2	52	3 1/2	Poop Deck Stringer Plate, breadth & thickness	27	7	27
Quarter 'tween Dks.	3 1/2	52	3 1/2	Angle on ditto	3 1/2 x 3 1/2	7	3 1/2 x 3 1/2
in Hold	3 1/2	52	3 1/2	Tie Plates	11	7	11
WEB-FRAMES, In Fore Body, No. and spacing	42	10	42	Deck. Material and thickness	3		3
br'dth. & thickness	42	10	42	Bridge Deck Stringer Plate, br'dth & thickness	40	9	40
of Side Stringers	42	10	42	Angle on ditto	3 1/2 x 3 1/2	9	3 1/2 x 3 1/2
WEB-FRAMES, In E. & B. Space, No. & spacing	6	3 1/2	6	Tie Plates	12	9	12
br'dth. & thickness	6	3 1/2	6	Deck. Material and thickness	3		3
WEB-FRAMES, In After Body, No. and spacing	6	3 1/2	6	Forecastle Deck Stringer Plate, br'dth & th'kns	27	7	27
br'dth. & thickness	6	3 1/2	6	Angle on ditto	3 1/2 x 3 1/2	7	3 1/2 x 3 1/2
No. of Side Stringers	6	3 1/2	6	Tie Plates	11	7	11
Size of Angles or Tee Bars to Web-Frames	6	3 1/2	6	Deck. Material and thickness	3		3
BRACKET PLATES to Stringers between Web Frames, depth and thickness	6	3 1/2	6				

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PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.						PER RULE OR AS APPROVED.		EDGES.				BUTTS.						
	AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		Single or Double.	Breadth of Lap.	RIVETS.		Double or Treble and for what Length.	RIVETS.		STRAPS.		If L.	
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Diam.	Spacing or to cr.			Diam.	Spacing or to cr.		Breadth.	Thickness.				
FLAT PLATE KEEL.....	36	21	14	14	36	21			Double	6	1	4 1/3	Treble	1	3 1/2	19	13 x 12	5 1/2	
GARBOARD OF A STRAKE...	36	17	13	13	36	17			Double	6	1	4 1/3	Treble	1	3 1/2			10 1/2	
State actual thickness in way of Double Bottom.																			
B		12	10	10		12			Double	5 1/2	7/8	3 5/7	Double + 2nd	7/8	3 1/8			9 x 12	
C		12	10	10		12			Double	5 1/2	7/8	3 5/7	do	7/8	3 1/8			9 x 12	
D		12	10	10		12			Double	5 1/2	7/8	3 5/7	do	7/8	3 1/8			9 x 12	
E		12	10	10		12			Double	6	1	4 1/3	do	1	3 1/2			10 1/2 x 14	
F		14	11	11		14			Double	6	1	4 1/3	do	1	3 1/2			10 1/2 x 14	
G		14	11	11		14			Double	6	1	4 1/3	Treble	1	3 1/2			10 1/2	
H		14	11	11		14			Double	6	1	4 1/3	Double + 2nd	3 1/2				10 1/2 x 14	
J		13	10	10		13			Double	5 1/2	7/8	3 5/7	Treble	7/8	3 1/8			9	
K		13	10	10		13			Double	5 1/2	7/8	3 5/7	Treble	7/8	3 1/8			9	
L		13	10	10		13			Double	5 1/2	7/8	3 5/7	Treble	7/8	3 1/8			9	
M		13	10	10		13			Double	5 1/2	7/8	3 5/7	Treble	7/8	3 1/8			9	
N		13	10	10		13			Double	5 1/2	7/8	3 5/7	Treble	7/8	3 1/8			9	
O		16	10	10		16			Double	6	1	4 1/3	Double + Treble	1	3 1/2			14 x 11 1/2	
Sheer Strake P	46	22	12	12	46	20							Treble	1	3 1/2	19	13 x 11	5 1/2	
Q																			
R																			
DOUBLING OF FLAT PLATE KEEL																			
Length and thickness of Bilges																			
Length and thickness of Sheerstrakes																			
Length and thickness of Strake below																			
POOP SIDES						7			Single	3	3/4	3	Double	3/4	2 5/8			5	
BRIDGE SIDES		10 x 8				10 x 8			Single	3	3/4	3	Double	3/4	2 5/8			5	
FORECASTLE SIDES						7			Single	3	3/4	3	Double	3/4	2 5/8			5	
Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.?										Upper Deck Butts, treble riveted for whole length amidship.									
Siemens Process, Clydebridge, Lanarkshire										Stringer Plate Straps, single, double or overlapped for whole length amidship.									
Halliwell, Duffell, Fensell, Jarrow										Middle Deck Butts, treble riveted for whole length amidship.									
Gossard										Stringer Plate Straps, single, double or overlapped for whole length amidship.									
Iron plates, Stockton										Butts of Bilge & Side Stringers and Tie Plates, treble or double riveted?									
										Inner Bottom Plating, riveting of Edges, Double + Single Butts, Double									
										Centre Girder Butts, Double riveted									
										Keelson Butts, Double riveted.									
										Frames, riveted through Plates with 7/8 in. Rivets, about 6 1/2 apart.									
										Rivets, state whether Iron or Steel. Iron									
FRAMES extend in one length from middle line to margin plate 1/2 from margin plate to gunwale																			
REVERSED FRAMES on floors and frames extend from margin plate to upper deck for 1/2 in. after peak. To middle & upper deck alternately before & abaft 1/2 in. To middle & forecastle deck alt. Double across floors in S.B. 1/2																			
MASTS, SPARS, &c.																			
Material. Total Length.										DIAMETER AND THICKNESS.									
										At Partners. Heel. Hounds. Head.									
Fore 92' 2" Steel 26' 1/2 25' 7/8 21' 1/2 20' 1/2										2 2 3 x 2 1/2 x 9/20 Single Treble									
Main 92' 5" Steel 26' 1/2 25' 7/8 21' 1/2 20' 1/2										2 2 3 x 3 1/2 x 9/20 do do									
Mizen																			
Bowsprit																			
Topmasts, Yards and Remainder of Spars Steel & Pine																			
Rigging, Material and Size, Shrouds Steel Wire Fore & Main 4 1/2										Stays Steel Wire Fore stay 5, Main 4 1/2									
Sails. One Suit of working Sails, and the following spare sails.																			
EQUIPMENT No. 5378 LETTER A1										ANCHORS.									
Number of Certificate. Anchors.										WEIGHT, EX STOCK.									
										Cwts. qrs. lbs. Cwts. qrs. lbs.									
3963 1st Bower										59 3 6 48 1 1 58 0 0									
3962 2nd "										59 2 0 48 1 0 58 0 0									
4059 3rd "										44 3 24 11 0 27 39 6 0 45 0 0									
4060 Collective weight										205 0 18 202 0 0									
4117 Stream										16 3 20 4 1 6 18 2 3 7 16 3 0									
4118 Kedge										18 2 16 2 0 12 10 15 0 0 8 2 0									
2nd Kedge																			
CHAIN CABLES.										HAWSERS AND WARPS.									
Number of Certificate. Fathoms. Size.										Test per Certificate. Tons.									
										Supplied. Per Rule.									
2197 134 2 7/8 134 3/4 2 7/8										270-25 1/2									
2198 136 2 7/8 136 3/4 2 7/8										270-25 1/2									
Iron Stream Chain or Steel Wire										90-5 Steel Wire									
Boats 4 Boats (2 Lifeboats & 2 others)																			
Pumps, Number 7 in holds & one in peak										Diameter of Barrel and Tail Pipe In holds 4 1/2 x 5, tail pipe 2 1/2 in peak 3 x 1 1/2									
Windlass is Clarke Chapman & Co's Patent										Capstan									
Engine Room Skylights. How constructed? Teak or Steel Casings																			
What arrangements for deadlights in bad weather? Teak shutters & glass with brass guard rails																			
Coal Bunker Openings. How constructed? Plates & angles										How are lids secured? Battens									
Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. 3 Scuppers fore & 3 aft on each side										Height above deck? 12									
Ceiling in Holds, thickness and material 2 1/2 W.P.										Ceiling 'tween Decks, thickness and material 2" W.P.									
Cargo Hatchways. How formed? Plates & angles										Hatches, If strong and efficient? 2 1/2 3 1/2									
State size No. 1 Hatch (Forward) 21' 8" x 14' 0" x 27'										No. 2 Hatch 30' 3" x 14' 0" x 27'									
No. 3 Hatch 25' 11" x 14' 0" x 27'										No. 4 Hatch 19' 6" x 14' 0" x 27'									
Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch 2 webs in No 1, 3 webs in No 2, 2 webs in No 3																			
2 webs in No 4 Hatch. Three fore & afters in each hatch										No. of Breasthooks Eight									
No. of Crutches deep floors																			
Bulwarks, height above deck and description Open rails										Main Rail, material and size									
The above is a correct description.										Surveyor's Signature Thomas Warren									
Builder's Signature (here only) G. Connell										Surveyor to Lloyd's Register of British and Foreign Shipping.									

14995 gls -

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with this case)
17/3/96, 27/3/96, 4/4/96, 7/4/96, 10/7/96, 13/7/96, 17/7/96, 4/8/96, M. 5/6/96 E
Workmanship. Are the butts of plating planed or otherwise fitted? Planed & fitted ✓
Is the riveted work properly closed? Yes ✓
Are the liners between the frames 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 plating? A few ✓
Are the butts of Plating, Stringers, &c., properly shifted and strapped? Yes ✓
General Remarks (State quality of workmanship, &c.)

The workmanship throughout is good. The vessel has been built in accordance with the approved plans, the Secretary's letters referred to and in general conformity with the requirements of the Rules for the class contemplated.
The hand pumps, deck & watertight doors have been tested as required & found satisfactory.

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 32½ ft., R.Q.D. or Break — ft., Bridge Dk. 143 ft., F'castle 53 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ✓

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 2 Dks Steel & deep framing ✓
Official No. — ; Signal Letters —
How are the surfaces preserved from oxidation? Inside Cement (Portland) Paint ✓ Outside Paint

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system Yes

Where fitted.	Length.		Where fitted.	Length.	
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	119	672	Fore peak tank,	—	196
Double bottom, forward,	197½	699	After peak tank,	—	76
Double bottom, under Engines and Boilers,	54	227	Midship deep tank,	—	—
Double bottom, if under Engines only,	—	129.8	Other tanks, if fitted,	—	—
Double bottom, if under Boilers only,	—	—	(If necessary, furnish further information by sketch.)	—	—

State whether the above have been tested as required by the Rules. Yes — ✓

Order for Special Survey No. 2924
Date 19 March 1896
Order for Ordinary Survey No. ✓
Date ✓
No. 235 in builder's yard.
1st. On the several parts of the frame, when in place, and before the plating was wrought 1896. May 25. 27. June 10. 16. 18. 22. 29. July 1. 7. 9. 15. 29. 31.
2nd. On the plating during the process of riveting. Aug 5. 7. 10. 13. 19. 24. 26. Sept 2. 9. 14. 23. 25. 29 Oct 1.
3rd. When the beams were in and fastened, and before the decks were laid 5. 9. 13. 16. 20. 26. 29. Nov 3. 6. 10. 12. 16. 19. 20. 24. 26. 30.
4th. When the ship was complete, and before the plating was finally coated or cemented ... Dec 2. 4. 7. 9. 11. 16. 21. 22. 24 1897. 8. 13. 14. 19. 26. Feb.
5th. After the ship was launched and equipped 5. 10. 12. 15
Total No. of Visits 62.

The amount of Entry Fee £ 5 : " : "
Special Survey Fee ... £ 109 : 19 : 6
Travelling Expenses, if any £ " : " : "
Fees applied for, 9/21 1894
Received by me, 11/21 1894

Certificate to be sent to Glasgow

I am of opinion this Vessel should be Classed 100 A. 1. Steel.
With, or without Freeboard, as condition of Class

Thomas Warren
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUES 23 FEB 1897
Character assigned 100 A 1 Steel
+ 2 Dks 2.97 2 Dks (Steel) + deep framing.
7 D.

The Surveyors are requested not to write on or below the Committee's Minute.