

# IRON SHIP.

19890

No. 13804 Survey held at Newcastle

Date, First Survey 4<sup>th</sup> May

Last Survey 14<sup>th</sup> Dec

1877

On the Iron S. Steamer "Indus"

Master Tyson

TONNAGE under

1829.00

ONE, OR TWO DECKED, THREE DECKED VESSEL.

SPAR, OR AWNING DECKED VESSEL.

Built at Newcastle

Bitto of this S. Spar, or Awning Deck.

HALF BREADTH (moulded) 17.0

Bitto of Poop, or Raised Or. Dr.

DEPTH from upper part of Keel to top of Upper Deck Beam 26.66

Bitto of Houses on Deck

GIRTH of Half Midship Frame (as per Rule) 39.08

Bitto of Forecastle

1st NUMBER 82.74

Gross Tonnage

1906.64

1st NUMBER, if a THREE-DECKED VESSEL

Less Crew Space

60.28

Length 283.5

Less Engine Room

610.12

2nd NUMBER 21472

Register Tonnage as cut on Beam

1236.24

PROPORTIONS—Breadths to Length 8.3

Depths to Length—Upper Deck to Keel 10.6

Main Deck ditto 14.4

When built 1877 Launched Oct-23<sup>rd</sup>

By whom built C. J. Tyson & Co.

Owners The Mercantile S. S. Co. Ltd

Port belonging to London

Destined Voyage Bombay

Surveyed while Building, Afloat, or in Dry Dock.

LENGTH

Feet. Inches.

BREADTH

Feet. Inches.

DEPTH top of Floors to Upper

Feet. Inches.

Power of

Horse.

Nº. of Decks with flat laid

on deck as per Rule 283 6

Moulded 34 0

Deck Beams 24 8 1/2

Do. do. Main Deck Beams 17 8 1/2

Engines 200

2

Nº. of Tiers of Beams 3

Dimensions of Ship per Register, length, 285.2 breadth, 34.2 depth, 24.6

KEEL, depth and thickness

Inches in Ship. 9 1/2 x 2 1/2

Inches per Rule. 9 1/2 x 2 1/2

STEM, moulding and thickness

9 x 2 1/2

9 x 2 1/2

STERN-POST for Rudder do. do.

9 x 4 1/2

9 x 5

for Propeller

9 x 5 1/2

24

Distance of Frames from moulding edge to

24

(Class 100A)

moulding edge, all fore and aft

FRAMES, Angle Iron, for 1/2 length amidships

5 3 8

5 3 8

Do. for 1/2 at each end

5 3 7

5 3 7

REVERSED FRAMES, Angle Iron

3 3 7

3 3 7

FLOORS, depth and thickness of Floor Plate

23 1/2 9

23 1/2 9

at mid line for half length amidships

7

7

thickness at the ends of vessel

11 3/4

11 3/4

depth at 1/2 the half-bdth. as per Rule

47

47

height extended at the Bilges

BEAMS, Upper, Spar, or Awning Deck

7 7 7

7 7 7

Single or double Angle Iron, Plate or Tee Bulb Iron

3 3 6

3 3 6

Single or double Angle Iron on Upper edge

48

48

Average space

BEAMS, Main, or Middle Deck

5 1/2 3 8

5 1/2 3 8

Single or double Angle Iron, Plate or Tee Bulb Iron

24

24

Single, or double Angle Iron, on Upper Edge

8 1/2

8 1/2

Average space

5 6 10 frame spaces

5 6 10 frame spaces

BEAMS, Lower Deck, Hold, or Orlop

3 3 7

3 3 7

Single or double Angle Iron, Plate or Tee Bulb Iron

18

18

Single or double Angle Iron, on Upper Edge

12

12

Average space

KEELSONS Centre line, single or double plate,

5 1/2 4 9

5 1/2 4 9

box, or Intercoastal, Plates

22 1/2 8

22 1/2 8

Rider Plate

5 1/2 4 9

5 1/2 4 9

Bulk Plate to Intercoastal Keelson

2 2 1/2 8

2 2 1/2 8

Angle Irons

5 1/2 4 9

5 1/2 4 9

Double Angle Iron Side Keelson

3 3 7

3 3 7

Side Intercoastal Plate

5 1/2 4 9

5 1/2 4 9

do. Angle Irons

5 1/2 4 9

5 1/2 4 9

Attached to outside plating with angle iron

BILGE Angle Irons

5 1/2 4 9

5 1/2 4 9

do. Bulk Iron

8

8

do. Intercoastal plates riveted to

5 1/2 4 9

5 1/2 4 9

plating for length

BILGE STRINGER Angle Irons

5 1/2 4 9

5 1/2 4 9

Intercoastal plates riveted to plating for

8

8

length. Bulk iron

SIDE STRINGER Angle Irons

5 1/2 4 9

5 1/2 4 9

Transoms, material. Knight-heads. Hawse Timbers.

Iron

Iron

Windlass Iron patent

Pall Bitt

Iron

The FRAMES extend in one length from

Steel

to Gunwale

The REVERSED ANGLE IRONS on floors and frames extend

from middle line to

M. D. S. Angle iron

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected?

Yes

And butts properly shifted?

PLATING. Garboard, double riveted to Keel, with rivets

1 1/8 in. diameter, averaging 5 1/2 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 7/8 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets

7/8 in. diameter averaging 3 7/8 ins. from centre to centre.

Butts of three Strakes at Bilge for 1/2 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 7/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted.

Upper Sheerstrake, double or single riveted.

Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships.

Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.

Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting

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

Treble & double

(Explain by Sketch, if necessary.)

Waterway, how secured to Beams

Three twisted to frames

No. of Breasthooks, 5

Beams of the various Decks, how secured to the sides?

Crutches, 5

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

Plate by Messrs. Palmer

Manufacturer's name or trade mark, Ample & Co. Newcastle

The above is a correct description.

Builder's Signature, J. C. L. Tyson

Surveyor's Signature, J. M. Overly

Surveyor to Lloyd's Register of British and Foreign Ships

Surveyor to Lloyd's Register of British and Foreign Ships

120475-0285



Workmanship. Are the butts of plating planed or otherwise fitted? *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*  
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? *A few* 19890 *Ln*

Masts, Bowsprit, Yards, &c., are *all* 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 *Two iron masts, formed with two plates in the round 9/16 to 5/16 thick, edges double, and butts treble & double riveted.*

*Foremast Length 79 1/2 feet Dia 2 3/4 in } Makers of the Iron Prof Palmer & Co:  
Mainmast - 73 - - - 2 1/2 in }*

NUMBER for EQUIPMENT 23456					Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per R
N <sup>o</sup> .	SAILS.	CABLES, &c.	Chain	270	1 3/4	55 1/8	270. 1 1/2	55 1/8	Bowers	1	30.2.20	29.2.37	30.0.0	28	
One full suit and	Fore Sails,	(State Machine where Tested, Date, & name of Superintendent.)	L. P. H. L. W. R. Parvill & Co.	13.0	77 1/8	77 1/8	77 1/8	1		30.0.15	28.11.27	30.0.0			
	Fore Top Sails,			7.9.77	1	25.2.17	25.8.0.14	25.2.0		25					
	Fore Topmast Stay Sails			90	1	90. 1 1/16									
	Main Sails,			90	11	90. 11				1	12.0.12	11.4.2.2	12.0.0		
and	Main Top Sails,			90	3	90. 7			Stream ...	1	6.0.2	7 1/4	6.0.0	3.0.0	
	Warp	90	3	90. 7			1	3.0.8	5						
		quality	good							Kedges ...	1				

Standing and Running Rigging *Wire & hemp* sufficient in size and *good* in quality. She has *2* Life Boats and *2* others  
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Iron casing 6-6 high with* How secured in ordinary weather? *bolted to angles*  
What arrangements for deadlights in bad weather? *Shutters with bulls eyes*

Coal Bunker Openings.—How constructed? *Iron casing* How are lids secured? *by hatch bars* Height above deck? *9 in*  
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Seven ports on each side*

Cargo Hatchways.—How formed? *of Iron*  
State size Main Hatch *20-0 x 11-0* Forehatch *8-0 x 8-0* Quarterhatch *20-0 x 11-0*

If of extraordinary size, state how framed and secured? *✓*  
What arrangement for shifting beams? *Net plates in large hatches & wood fore & afters in each hatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>1177</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>1877 May 4. 11. 17. 25. 30. June 6. 13. 20. July</i>
Date <i>10 Dec 1877</i>		2nd. On the plating during the process of riveting	<i>3. 5. 6. 12. 24. Aug 3. 7. 10. 15. 23. 29. 31.</i>
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	<i>Sept 4. 6. 7. 10. 17. 24. Oct 1. 5. 9. 17. Nov</i>
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>12. 21. 26. 30. Dec 4. 11. 14.</i>
No. <i>32</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.)

*This is a two decked vessel with three tiers of beams, she is built in accordance with the approved tracings, attached to the report of the S. S. "Ossian" N<sup>o</sup> 13342 to which vessel she is a sister; and with the requirements of the Rules.  
She has a complete iron main deck, and is fitted with W. B. tanks before and aft the machinery space, the fore tank is 68 feet, and the after one 82 feet in length, these tanks were satisfactorily tested to the load line in my presence; an intercostal plate 12 x 1/16 is fitted between the main and upper decks and attached to the skin with angles 3. 3. 8/16, and to the reverse bars with 5 1/2 x 4 x 9/16 angle, this intercostal extends to 12 feet before the foremost engine room bulkhead, and to 10 feet abaft the after engine bulkhead.  
The workmanship throughout is very good.*

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths 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 Two decks & three tier of beams.*

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

Special Certificate ... £ 71 : 3 : 27 Dec 1877

(Travelling Expenses, if any, £ ... )

Committee's Minute 1st January, 1878.

Character assigned *100A*

*2 Dry Stks Bury double bottom 150 ft*

*It is submitted that this vessel appears eligible to be classed 100A.1 as recommended by the Committee.*

*28 3/4 tons of Bms Iron 8 1/2 in*

*3 1/2 in*