

THURSDAY 1 31/12/84

# IRON SHIP.

(Received at London Office, 15/12/84)

No. 3103 Survey held at *Belfast*

Date, First Survey *Oct 10 1883* Last Survey *31<sup>st</sup> Dec 1884*

On the *Iron Screw Steamer "River Indus"*

TONNAGE under Tonnage Deck *3179*  
Ditto of Third Spar, Aft of Mast *217.07*  
of Deep, or of Houses on Deck *13.00*  
Ditto of Forecastle *4.14*  
Gross Tonnage *3451.72*  
Less Crew Space *91.84*  
Less Engine Room *2359.88*  
Register Tonnage as cut on Beam *1104.88*  
*2258.23*

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAN, OR AWNING-DECKED VESSEL.  
Half Breadth (moulded) *21.5*  
Depth from upper part of Keel to top of Upper Deck Beams *30.3*  
Girth of Half Midship Frame (as per Rule) *44.1*  
1st Number *98.9*  
1st Number, if a 3-Decked Vessel deduct 7 feet *4.*  
Length *328.2*  
2nd Number *30161.5*  
Proportions— Breadths to Length *7.6*  
Depths to Length—Upper Deck to Keel *10.8*  
Main Deck ditto *14.5*

Master *Murray*  
Built at *Belfast*  
When built *1884* Launched *1884*  
By whom built *Workman, Clark & Co.*  
Owners *James Little & Co.*  
Residence *Glasgow*  
Port belonging to *Glasgow*  
Destined Voyage *Bombay*  
If Surveyed while Building, Afloat, or in Dry Dock. *Specially surveyed while Building*

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	N <sup>o</sup> . of Decks with flat laid	N <sup>o</sup> . of Tiers of Beams
on deck as per Rule	<i>328</i>	<i>2</i>	Moulded...	<i>43</i>		top of Floors to Upper Deck Beams	<i>20</i>	<i>3</i>	Engines ...			
Do. do. Main Deck Beams												
Dimensions of Ship per Register, length, breadth, depth	<i>331.8</i>		<i>43.25</i>			<i>29.6</i>						
KEEL, depth and thickness	<i>11</i>	<i>3</i>										
STEM, moulding and thickness	<i>11</i>	<i>3</i>										
STERN-POST for Rudder do. do.	<i>10</i>	<i>4</i>										
" " for Propeller	<i>10</i>	<i>4</i>										
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24</i>											
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships	<i>5 1/2</i>	<i>3 1/2</i>		<i>5 1/2</i>	<i>3 1/2</i>		<i>5 1/2</i>	<i>3 1/2</i>				
Do. for $\frac{1}{2}$ at each end	<i>5 1/2</i>	<i>3 1/2</i>		<i>5 1/2</i>	<i>3 1/2</i>		<i>5 1/2</i>	<i>3 1/2</i>				
REVERSED FRAMES, Angle Iron	<i>4</i>	<i>3 1/2</i>		<i>4</i>	<i>3 1/2</i>		<i>4</i>	<i>3 1/2</i>				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>28</i>			<i>10</i>			<i>28</i>					
" thickness at the ends of vessel	<i>14</i>			<i>8</i>			<i>14</i>					
" depth at $\frac{3}{4}$ the half-bdth. as per Rule	<i>14</i>			<i>8</i>			<i>14</i>					
" height extended at the Bilges	<i>56</i>			<i>16</i>			<i>56</i>					
BEAMS, Upper, Spar, or Awning Deck	<i>9</i>			<i>9</i>			<i>9</i>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>3 1/2</i>	<i>3</i>		<i>3 1/2</i>	<i>3</i>		<i>3 1/2</i>	<i>3</i>				
Single or double Angle Iron on Upper edge	<i>40</i>			<i>40</i>			<i>40</i>					
Average space	<i>10 1/2</i>			<i>10</i>			<i>10 1/2</i>					
BEAMS, Main, or Middle Deck	<i>10 1/2</i>			<i>10</i>			<i>10 1/2</i>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>3 1/2</i>	<i>3 1/2</i>		<i>3 1/2</i>	<i>3 1/2</i>		<i>3 1/2</i>	<i>3 1/2</i>				
Single or double Angle Iron, on Upper Edge	<i>40</i>			<i>40</i>			<i>40</i>					
Average space	<i>11 1/2</i>			<i>11</i>			<i>11 1/2</i>					
BEAMS, Lower Deck	<i>5</i>	<i>4</i>		<i>5</i>	<i>4</i>		<i>5</i>	<i>4</i>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>11</i>			<i>10 1/2</i>			<i>11</i>					
Single or double Angle Iron on Upper Edge	<i>40</i>			<i>40</i>			<i>40</i>					
Average space	<i>10 1/2</i>			<i>10</i>			<i>10 1/2</i>					
BEAMS, Hold, or Orlop	<i>14</i>			<i>14</i>			<i>14</i>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>14</i>			<i>14</i>			<i>14</i>					
Single or double Angle Iron on Upper Edge	<i>14</i>			<i>14</i>			<i>14</i>					
Average space	<i>14</i>			<i>14</i>			<i>14</i>					
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	<i>29</i>			<i>14</i>			<i>29</i>					
" Rider Plate	<i>14</i>			<i>14</i>			<i>14</i>					
" Bulb Plate to Intercoastal Keelson	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
" Angle Irons	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
" Double Angle Iron Side Keelson	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
" Side Intercoastal Plate	<i>14</i>			<i>14</i>			<i>14</i>					
" do. Angle Irons	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
" Attached to outside plating with angle iron	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
BILGE Angle Irons	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
" do. Bulb Iron	<i>10 1/2</i>	<i>10 1/2</i>		<i>10 1/2</i>	<i>10 1/2</i>		<i>10 1/2</i>	<i>10 1/2</i>				
" do. Intercoastal plates riveted to plating for $\frac{3}{4}$ length	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
BILGE STRINGER Angle Irons	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
Intercoastal plates riveted to plating for $\frac{3}{4}$ length	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				
WIDE STRINGER Angle Irons	<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>		<i>6 1/2</i>	<i>4 1/2</i>				

The FRAMES extend in one length from *Keel* to *gunwale* Riveted through plates with  $\frac{3}{4}$  in. Rivets, about  $\frac{1}{2}$  apart.  
The REVERSED ANGLE IRONS on floors and frames extend from middle line to *gunwale* and to *throughout* 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  $\frac{1}{4}$  in. diameter, averaging  $\frac{1}{2}$  ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets  $\frac{1}{4}$  in. diameter, averaging  $\frac{1}{2}$  ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets  $\frac{1}{4}$  in. diameter averaging  $\frac{1}{2}$  ins. from centre to centre.  
Butts of *all* Strakes at Bilge for  $\frac{1}{2}$  length, treble riveted with Butt Straps  $\frac{1}{2}$  thicker than the plates they connect.  
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets  $\frac{1}{4}$  in. diameter, averaging  $\frac{1}{2}$  ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets  $\frac{1}{4}$  in. diameter, averaging  $\frac{1}{2}$  ins. from cr. to cr.  
Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.  
Butts of Main Sheerstrake, treble riveted for  $\frac{1}{2}$  length amidships. Butts of Upper or Spar Sheerstrake, treble riveted  $\frac{1}{2}$  length amidships.  
Butts of Main Stringer Plate, treble riveted for  $\frac{1}{2}$  length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for  $\frac{1}{2}$  length.  
Breadth of laps of plating in double riveting *6 1/2* Breadth of laps of plating in single riveting *4*  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *treble double* No. of Breasthooks, *2* Crutches, *2*  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Best*  
Manufacturer's name or trade mark. *James, Purvis & Co. Ltd. Glasgow*  
The above is a correct description.  
Builder's Signature, *James Purvis* Surveyor's Signature, *James Purvis*  
Surveyor to Lloyd's Register of British and Foreign Shipping.



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? *very few*

Masts, Bowsprit, Yards, &c., are *all* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantling, 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 Metal and if stamped with Maker's name.  
State also Length and Diameter of Lower Masts and Bowsprit *Rigged as a Barquentine with three masts.*

*Masts, as Auxiliary to Steam Power. Fore & Main masts of Iron. Lengths 100-4 and 100-10 respectively. Constructed with three plates, the round and three angles 3 1/2 x 3 x 7/8. Mizzen Mast of Pine 11 1/2 feet to rounds and 21 feet to top. Fore Yard 40m 40-4 x 1 1/2. Two plates in the round 9 to 13. Masts and yards double and fore yard 35-6 (w). Riggers and Riggers, and plates tested as required by the Rules.*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Machine Tested & Suprntd.
SAILS.							Bower Anchors (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
Fore Sails,	Chain	150	2 1/2	10 1/2	300 x 2	2 1/2						
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	150	2 1/2	10 1/2	300 x 2	2 1/2						
	Iron Stream Chain	150	2 1/2	10 1/2	300 x 2	2 1/2						
	or Steel Wire	150	2 1/2	10 1/2	300 x 2	2 1/2						
	or Hempen Strm	150	2 1/2	10 1/2	300 x 2	2 1/2						
Fore Top Sails,	Cable	150	2 1/2	10 1/2	300 x 2	2 1/2						
Fore Topmast Stay Sails,	Towline, Hemp.	150	2 1/2	10 1/2	300 x 2	2 1/2						
Main Sails,	or Steel Wire	150	2 1/2	10 1/2	300 x 2	2 1/2						
	Hawser	150	2 1/2	10 1/2	300 x 2	2 1/2						
Main Top Sails,	Warp	150	2 1/2	10 1/2	300 x 2	2 1/2						
and	quality	150	2 1/2	10 1/2	300 x 2	2 1/2						

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Two* Life Boats and *two* others.  
The Windlass is *Patent & good* Capstan *good* and Rudder *good* Pumps *good*  
Engine Room Skylights.—How constructed? *of Oak on iron* How secured in ordinary weather? *Bolts and nuts*  
What arrangements for deadlights in bad weather? *Solid top with bulls' eyes.*  
Coal Bunker Openings.—How constructed? *plates & angles* How are lids secured? *Solid hatches* Height above deck? *15 ins.*  
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Seven scuppers, six freeing ports and four spring pipes each side.*  
Cargo Hatchways.—How formed? *of plates and angles, Comings 36 ins above deck.*  
State size Main Hatch *26-0 x 42-0* Fore hatch *16-0 x 12-0* Quarter hatch *20-0 x 12-0* two in  
If of extraordinary size, state how framed and secured? *Two web plates in main hatch, one in each of*  
What arrangement for shifting beams? *Other hatchways and fore & afters in all - both main & upper*  
Hatches, If strong and efficient? *yes solid*

Order for Special Survey No. *1st* Date *Sept 27th 83*  
Order for Ordinary Survey No. *2nd* Date *Oct 1st 83*  
No. *25* in builder's yard.  
State dates of letters respecting this case *Sept 27th, Nov 22nd & 24th 1883, and Jan 30th 1884*

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the accompanying approved sketches of Midship and Longitudinal sections, double bottom, decks in way of Engines & Boilers space, Elevation in way of Engines & Boilers, Mast plan, and pumping plan; compliance with the Secretary's letters dated as above, and the rules in all other respects have been adhered to; she is a two decked vessel built to the three decked rule, and to scantlings per Tables on grade higher than her dimensions give; she has a Forecath 39' 0" Bridge 74' 0" and a short poop, as a covering for After wheel 10' 0" long a double bottom under Engines & Boilers 58' 0" long water capacity in the 268; in after holds 94' 0" long water capacity in tons 344; and a peak tank, water capacity in tons 100, all tested as required by the rules. The materials used in her construction and the workmanship are good.*

State if one, two, or three decked vessel, and the lengths of poop, bridge, forecath, or raised quarter deck. (If double bottom, state particulars on separate form.)  
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 : : : is received by me, *James Surpin*  
Special .....£ 111 : 6 : : 11.12. 1884  
(to be sent as per margin). Certificate *gratis* : : :  
(Travelling Expenses, if any, £ : : :)  
Committee's Minute *FRIDAY 2 JAN 1885 18*  
Character assigned *100 A 1*  
*2 Dks & 1 Tr. Bns*

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

