

IRON OR STEEL SHIP.

(Received at London Office)

12 FEB 1890

No. *3257* Survey held at *Hayle* Date of writing Report *28 Jan* Port of *Falmouth*
 On the *Steel Screw Steamer "Tongshan"* Date, First Survey *4 May 89* Last Survey *26 Jan* 1890
 Rig *Schooner*

TONNAGE under
 Tonnage Deck *1625.00*
 between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.
 Total under Upper Dk. *40.28*
 Do. of Poop *40.76*
 Do. of Raised Qr. *7.91*
 Dk. or Break
 Do. of Bridge Houses
 Do. of Houses on Deck
 Do. of excess of Hatchways
 Do. of Forecastle *50.77*
 Gross Tonnage *1764.73*
 Less Crew Space *75.87*
 Less Engine Room *564.71*
 Register Tonnage *7.91*
 out on Beam *1116.23*

ONE, OR TWO DECKED, THREE DECKED VESSEL,
 SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) *18.25*
 Depth from upper part of Keel to top of Upper Deck Beams *16.58*
 Girth of Half Midship Frame (as per Rule) *30.75*
 1st Number *65.58*
 1st Number, if a 3-Decked Vessel deduct 7 feet
 Length *264.58*
 2nd Number *17357.156*
 Proportions—Breadths to Length *7.2*
 Depths to Length—Upper Deck to Keel *11.02*
 Main Deck ditto *15.9*

Master *Joseph Blackburne*
 Year of appointment
 Built at *Hayle*
 When built *1890* Launched *24/10/89*
 By whom built *Harvey & Co Ltd*
 Owners *Thos William Richardson*
 Managers
 (If desired to be entered in Reg. Book)
 Residence *10 Austin Friars*
 Port belonging to *London*
 Destined Voyage *Cardiff*
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *264.7* Breadth—Moulded *36.6* DEPTH top of Floors to Upper Deck Beams *21.0* Do. to Main Deck Beams *13.0* Power of Engines *200* Horse. *156* N^o. of Decks with flat laid *Two* N^o. of Tiers of Beams *Two*

	Inches in Ship	Inches per Rule		Inches in Ship	Inches per Rule		Inches in Ship	Inches per Rule		Inches in Ship	Inches per Rule
Flat Keel Plates, breadth and thickness	9 x 2 1/2	9 x 2 1/2	PLATES in Garboard Strakes, br'dth & thickness	36	11	36	11	36	11	36	11
From Garboard to upper part of Bilges	8 1/2 x 2 1/2	8 1/2 x 2 1/2	Of d'bling at Bilge, or increased thickness, and length applied	10	10	10	10	10	10	10	10
From up. prt of Bilge to l. edge of Sh'rstrake	8 1/2 x 5	8 1/2 x 5	Main Sheerstrake, breadth and thickness	42	12	40	12	42	12	40	12
From M'n. to Up. or Spar Dk. Sh'rstrake	24	24	Of d'bling at Sh'stk. & lng. applied	8	8	8	8	8	8	8	8
From Spar Dk. Sh'rstrake, br'dth & thickness	4 x 3 1/2	4 x 3 1/2	From M'n. to Up. or Spar Dk. Sh'rstrake	40	10	40	10	40	10	40	10
Butt Straps to outside plating, breadth & thickness	16 1/4	13 1/2	Butt Straps to outside plating, breadth & thickness	16 1/4	13 1/2	16 1/4	13 1/2	16 1/4	13 1/2	16 1/4	13 1/2
Lengths of Plating	12 frame spaces	9 frame spaces	Shifts of Plating, and Stringers	38	8	38	8	38	8	38	8
Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness	4 x 4	9	Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness	4 x 4	9	4 x 4	9	4 x 4	9	4 x 4	9
Angle Iron on ditto	4 x 4	9	Angle Iron on ditto	4 x 4	9	4 x 4	9	4 x 4	9	4 x 4	9
Tie Plates fore and aft, outside Hatchways	13	10	Tie Plates fore and aft, outside Hatchways	13	10	13	10	13	10	13	10
Diagonal Tie Plates on Beams No. of Pairs	6 x 5 1/2	6 x 5 1/2	Diagonal Tie Plates on Beams No. of Pairs	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2
Flat of Up. Spar, or Awning Dk. Steel 1/2 in. increased in way of hatchways with deck	58	10	Flat of Up. Spar, or Awning Dk. Steel 1/2 in. increased in way of hatchways with deck	58	10	58	10	58	10	58	10
How fastened to Beams	Is the Stringer Plate attached to the outside plating?	Yes	How fastened to Beams	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	4 x 4	9	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	4 x 4	9	4 x 4	9	4 x 4	9	4 x 4	9
Is the Stringer Plate attached to the outside plating?	Yes	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angle Irons on ditto, No. 2 each side	4 x 4	9	Angle Irons on ditto, No. 2 each side	4 x 4	9	4 x 4	9	4 x 4	9	4 x 4	9
Tie Plates, outside Hatchways	13	10	Tie Plates, outside Hatchways	13	10	13	10	13	10	13	10
Diagonal Tie Plates on Beams, No. of pairs	6 x 5 1/2	6 x 5 1/2	Diagonal Tie Plates on Beams, No. of pairs	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2
Flat of Middle Deck* do. do. Pine	6 x 5 1/2	6 x 5 1/2	Flat of Middle Deck* do. do. Pine	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2
How fastened to Beams	Is the Stringer Plate attached to the outside plating?	Yes	How fastened to Beams	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Is the Stringer Plate attached to the outside plating?	Yes
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	4 x 3 1/2	4 x 3 1/2	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2
Is the Stringer Plate attached to the outside plating?	Yes	Yes	Is the Stringer Plate attached to the outside plating?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angle Irons on ditto, No.	4 x 3 1/2	4 x 3 1/2	Angle Irons on ditto, No.	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2
Stringer or Tie Plates, outside Hatchways	13	10	Stringer or Tie Plates, outside Hatchways	13	10	13	10	13	10	13	10
Flat of Lower Deck*	2 Pine	2 Pine	Flat of Lower Deck*	2 Pine	2 Pine	2 Pine	2 Pine	2 Pine	2 Pine	2 Pine	2 Pine
Ceiling betwixt Decks, thickness and material	2 1/2	2 1/2	Ceiling betwixt Decks, thickness and material	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
" in hold do. do.	2 1/2	2 1/2	" in hold do. do.	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Main piece of Rudder, diameter at head	6 1/4	6 1/4	Main piece of Rudder, diameter at head	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4
do. at heel	5 1/4	5 1/4	do. at heel	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4
Can the Rudder be unshipped afloat?	Yes	Yes	Can the Rudder be unshipped afloat?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bulkheads No. 5 No. per Rule 4	4	4	Bulkheads No. 5 No. per Rule 4	4	4	4	4	4	4	4	4
" Thickness of 6/20	6/20	6/20	" Thickness of 6/20	6/20	6/20	6/20	6/20	6/20	6/20	6/20	6/20
" Height up 6 Spar Deck	6	6	" Height up 6 Spar Deck	6	6	6	6	6	6	6	6
" How secured to sides of ship between two angle iron frames	4 x 3 1/2	4 x 3 1/2	" How secured to sides of ship between two angle iron frames	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2
" Size of Vertical Angle Irons 4 x 3 1/2 and distance apart 30 ins.	4 x 3 1/2	4 x 3 1/2	" Size of Vertical Angle Irons 4 x 3 1/2 and distance apart 30 ins.	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2	4 x 3 1/2
" Are the outside Plates doubled two spaces of Frames in length?	Yes	Yes	" Are the outside Plates doubled two spaces of Frames in length?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* If Iron Deck, state if whole or part, and if used deck

The FRAMES extend in one length from *flange plate to flange plate*
 The REVERSED ANGLE IRONS on floors and frames extend *from middle line to flange plate*
 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 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 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* ins. from centre to centre.
 Butts of one Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/2* in. 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* 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 *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *1/2* 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.
 Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting *2 1/2*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *3* No. of Breasthooks, *3* Crutches, *4*
 What description of *Steel* is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *The Barrow Hamble*
 Manufacturer's name or trade mark, *Steel Co Ltd*
 The above is a correct description.
 Builder's Signature, *Henry J Warren* Surveyor's Signature, *J. H. Landry*
 Surveyor to Lloyd's Register of British and Foreign Shipping

Form No. 1 for Iron

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

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*

to plate, &c., conform well to each other? *Yes*

from the faying surfaces? *Yes*

Do the holes for riveting plate to frames, butt straps, or plate

Are the rivet holes well and sufficiently countersunk in the plate and punched

Do any rivets break into or through the seams or butts of the plating? *No*

Masts, Bowsprit, Yards, &c., are *Steel* 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 *Fore mast 73.0 x 21" Main Mast 68 x 19"*

Number for Equip- ment 22143	CABLES, &c.			Test per Certificate. Tons.	Fathoms & Inches per Rule.	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS. Number of Certificate (State if any and which Anchors are Stockless.)	Weight. Ex. Stock.	Test per Certificate	Weight req'd per Rule.	Machine where Tested and Superintendent, also Name of Anchor Maker.
	Number of Certificate.	Fathoms.	Inches.								
Letter for do. <i>R</i>	10378	135	1 3/4	77 1/8	270	<i>Lloyds Prov. House Lipton Lipton</i>	11943	30.00	28.12.2.0	30.00	<i>Lloyds</i>
N. SAILS.	10377	135	1 3/4	77 1/8			26586	30.1.4	28.7.18.0	14.30.00	<i>Brown House</i>
Fore Sails,	10387	75	1 1/16	30 3/4			11944	26.1.0	25.16.1.0	25.20	<i>Rutherford</i>
Fore Top Sails,	TOWLINE— Hemp or Steel Wire	100	3 1/2	26	90 x 3/2	<i>Warrington Jure Rope Works Ltd Liverpool</i>	Collective Weights		86.2.4		85 1/2
Fore Topmast Stay Sails,							26315	9.2.25	11.15.2.14	9.2	<i>Lloyds Prov.</i>
Main Sails,	Hempen Str'm Cable						26314	5.0.7	7.9.2.21	4.3	<i>House Rutherford</i>
Main Top Sails,	Hemp or Steel Wire						26313	2.2.9	5.2.2.2	0.2.0	<i>D. J. Lewis</i>
and quality	Hawser	90	7	90 5/8	90.9		26313	2.2.9	5.2.2.2	0.2.0	<i>D. J. Lewis</i>
<i>Good</i>	Warp	90	7	90 5/8	90.9						

Standing and Running Rigging *Wire & Hemp* sufficient in size and *Good* in quality. She has *One* Long Boat and *2* life 2 jigs 1 jolly boat

The Windlass is *Iron* Capstan *—* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Iron & Lead* How secured in ordinary weather? *Quadrant. Shrub. Cur.*

What arrangements for deadlights in bad weather? *bulls eyes*

Coal Bunker Openings.—How constructed? *Steel plate. Castings* How are lids secured? *haken Thos* Height above deck? *12 inches*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *fine scuppers on each side to*

Cargo Hatchways.—How formed? *Steel plate & angles* Hatches, If strong and efficient? *Yes*

State size Main Hatch *14.0 x 12.0 x 1.6* Fore hatch *10.0 x 10.0 x 1.6* Quarter hatch *18.0 x 12.0 x 1.6*

If of extraordinary size, state how framed and secured... *Deep web plate & three fore girders* What arrangement for shifting beams? *Steel plate*

Order for Special Survey No. *117* Dates of Surveys held while building as per Section 18. *May 4, 23, June 28, July 18, 29, Sept 11 Oct 21*

Date *11 Feb 189* 1st. On the several parts of the frame, when in place, and before the plating was wrought *24, Nov 6, 12, 28 Dec 2, 14*

Order for Ordinary Survey No. *—* 2nd. On the plating during the process of riveting *June 6, 14, 17, 23, 26 completed*

Date *—* 3rd. When the beams were in and fastened, and before the decks were laid... *—*

No. *47* in builder's yard. 4th. When the ship was complete, and before the plating was finally coated or cemented... *—*

State dates of letters respecting this case *Feb 7/89, 20, April 23, 5 July, 26 Aug 6 Sept 16 Oct 1, 10 Jan 190, 16 Jan, 13 Jan. 23 Jan.*

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

This vessel is well built in accordance with the annexed

tracings of midship section, profile & rudder & stern frame and cargo

holds, and in all respects as required by the Rules.

The Freeboard assigned by the Committee on the 23rd Jan

have been marked on the ship sides by

S. 5. 11 1/2

W. 6. 2 } to wood spar dk.

HA 6. 5 1/2 }

7. W. 4 1/2 less

Marked on in my presence.

I am of opinion she is worthy the class contemplated.

How are the surfaces preserved from oxidation? Inside *Paint & Cement* Outside *Paint*

Particulars for Record in R.B.—Length of Poop *—* ft., R.Q.D. *—* ft., Bridge Dk., *48* ft., F'castle *36* ft.; No. of Dks. (excluding spar, awn., &c.) *Two*

Material of dks. *Steel & Oak* If spar, awn-dk., &c. *Steel & Oak* Material of spar, awn-dk., &c. *Steel & Oak*; No. of tiers of beams (with and without dks. laid) *Two*

Official No. *—*; Signal Letters *—* If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee *£ 4 : 0 : 0* is received by me, *J.H.S.*

Special *£ 70 : 8 : 6* £81.2.6 1890

(No fee as per margin). Certificate ... *5*

Committee's Minute *TUES 11 FEB 1890*

Character assigned *100 A1 Steel Spander*

Subject to 7th S. 5. 11 1/2 W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2

W. 6. 2