

# STEEL IRON SHIP.

MONDAY 28 MARCH 1888  
(Received at London Office)

No. 14562 Survey held at *Sunderland* Date, First Survey *July 21st 1884* Last Survey *21st March 1888*  
On the *Steel S.S. "MIIKE MARU"* No. 144 in *Builder's Book*

**TONNAGE** under Tonnage Deck *3011.69*  
Ditto of Third, Spar, or Awning Deck *3.64*  
Ditto of Poop, or Raised Qr. Dk. *11.40*  
Ditto of Houses on Deck *74.16*  
Ditto of Forecastle *34.10*  
Gross Tonnage *3197.80*  
Less Crew Space *92.29*  
Net Tonnage *3105.51*  
Engine Room *1023.30*  
Gross Tonnage as cut on Beam *2082.21*

**ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING DECKED VESSEL.**  
Half Breadth (moulded) *20.10 1/2*  
Depth from upper part of Keel to top of Upper Deck Beams *23.0 1/2*  
Girth of Half Midship Frame (as per Rule) *38.10*  
1st Number *82-9*  
1st Number, if a 3-Decked Vessel deduct 7 feet.  
Length *318-4*  
2nd Number *26342*  
Proportions—Breadths to Length *7.62*  
Depths to Length—Upper Deck to Keel *13.81*  
Main Deck ditto *13.81*

Master *Jas. H. Pyne 87-88*  
Built at *Sunderland*  
When built *1888* Launched *13th Feb 1888*  
By whom built *Mr. R. Thompson & Son*  
Owners *Nippon Yusen Kaisha S.S. Co.*  
Residence *Japan*  
Port belonging to *Tokio*  
Destined Voyage *Middlesbro*  
If Surveyed while Building, Afloat, or in Dry Dock. *While Building & Afloat.*

LENGTH on deck as per Rule	Feet.	Inches.	BREADTH—Moulded	Feet.	Inches.	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet.	Inches.	Power of Engines	Horse.	No. of Decks with flat laid	No. of Tiers of Beams
<i>318</i>	<i>4</i>		<i>41</i>	<i>9</i>		<i>27.5</i>	<i>37</i>	<i>10</i>	<i>250</i>		<i>Two</i>	<i>Three</i>
Dimensions of Ship per Register, length, <i>320.0</i> breadth, <i>42.0</i> depth, <i>27.5</i>												
<b>KEEL</b> , depth and thickness <i>10 x 1 1/2</i> <i>10 x 2 3/4</i> <b>STEM</b> , moulding and thickness <i>10 x 2 3/4</i> <i>10 x 2 3/4</i> <b>STERN-POST</b> for Rudder do. do. <i>10 x 6</i> <i>10 x 6</i> " " for Propeller <i>10 x 6</i> <i>10 x 6</i> Distance of Frames from moulding edge to moulding edge, all fore and aft <i>24</i> <i>24</i> <b>FRAMES</b> , Angle Iron, for 1/2 length amidships <i>5 3 1/2 8</i> <i>5 3 1/2 8</i> Do. for 1/2 at each end <i>5 3 1/2 7</i> <i>5 3 1/2 7</i> <b>REVERSED FRAMES</b> , Angle Iron <i>3 1/2 3 1/2 8</i> <i>3 1/2 3 1/2 8</i> <b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships <i>7/16</i> thick as per approved <i>Midship section</i> " thickness at the ends of vessel <i>7/16</i> " depth at 1/2 the half-bdth. as per Rule <i>7/16</i> " height extended at the Bilges <i>7/16</i> <b>BEAMS, Upper, Spar, or Awning Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron <i>8 1/2 8</i> <i>8 1/2 8</i> Single or double Angle Iron on Upper edge <i>3 3 6</i> <i>3 3 6</i> Average space <i>48"</i> <i>48"</i> <b>BEAMS, Main, or Middle Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron <i>10 10</i> <i>10 10</i> Single or double Angle Iron on Upper Edge <i>3 1/2 3 1/2 7</i> <i>3 1/2 3 1/2 7</i> Average space <i>48"</i> <i>48"</i> <b>BEAMS, Lower Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron <i>11 11</i> <i>11 11</i> Single or double Angle Iron on Upper Edge <i>5 4 9</i> <i>5 4 9</i> Average space <i>48"</i> <i>48"</i> <b>KEELSONS</b> Centre line, single or double plate, box, or intercostal plates <i>See profile</i> " Rider Plate <i>Centre through plate 48 x 1/2</i> " Bulb Plate to Intercostal Keelson <i>as per approved section</i> " Angle Irons <i>30 9</i> <i>30 9</i> " Double Angle Iron Side Keelson <i>4 4 9/16</i> <i>4 4 9/16</i> " Side Intercostal Plates <i>7</i> <i>7</i> " do. Angle Irons <i>3 1/2 3 1/2 7</i> <i>3 1/2 3 1/2 7</i> " Attached to outside plating with angle iron <i>3 1/2 3 1/2 7</i> <i>3 1/2 3 1/2 7</i> <b>BILGE</b> Angle Irons <i>Cellular double bottom</i> " do. Bulb Iron <i>See approved section</i> " do. Intercostal plates riveted to plating for length <i>See approved section</i> <b>BILGE STRINGER</b> Angle Irons <i>6 4 9</i> <i>6 4 9</i> Intercostal plates riveted to plating for 1/3 length <i>9 for 1/3 length</i> <b>SIDE STRINGER</b> Angle Irons <i>6 4 9</i> <i>6 4 9</i>												

The **FRAMES** extend in one length from *flange plate to flange plate to gunwale* Riveted through plates with *7/8* in. Rivets, about *7* apart.  
The **REVERSED ANGLE IRONS** on floors and frames extend *from* middle line to *Main deck* and to *Spar deck*, alternately except in way of after deck house & Bridge house where they extend to spar deck on every frame; and on alternate frames to fore-castle deck.  
**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 1/8* in. diameter, averaging *5 1/2* ins. from centre to centre.  
" Edges of Garboards and to upper part of Bilge, worked clench, 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 all Strakes at Bilge for *3/4* length, treble riveted, with Butt Straps *for 1/2 length* thicker than the plates they connect. *2/3* thicker at ends.  
" Edges from Bilge to Main Sheerstrake, worked clench, 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 *3/4* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *3/4* length amidships.  
" Butts of Main Stringer Plate, treble riveted for *3/4* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *3/4* length.  
" Breadth of laps of plating in double riveting *5 1/2 x 6* Breadth of laps of plating in single riveting *5 1/2 x 6*  
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble & double* No. of Breasthooks, *seven* Crutches, *four*  
What description of *Iron* is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Consolidated Steel & Iron Co.*  
Manufacturer's name or trade mark, *Plates: Bolchov Baughan & Co. Angles: Bolchov Baughan & Co. For Iron, Stockton Malleable Iron Co.*  
The above is a correct description.  
Builder's Signature, *Robert Thompson & Sons* Surveyor's Signature, *Mr. Johnstone George Harrison*  
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 *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 *Fore Mast 84' 8" in length 26" in diameter*  
*Main Mast 79.6 do. do. 24 1/2 do. do.*

The scantlings and arrangements as per the accompanying sketch, the plates supplied by The Stockton Malleable Iron Co. which satisfactorily withstood the prescribed bending tests.

NUMBER for EQUIPMENT 32,579 U.		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd. NUMBER	ANCHORS. N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wt. req'd per Rule.	Machine where Tested & Suprntd.
SALES. CABLES, &c.											
N <sup>o</sup> .	Chain	300	1 1/16	94 1/2 - 67 1/2	300 - 1 1/16	6883	Bower Anchors	16907	37-1-14	34-0-2-14	36-2-0 11 Jan'y. 88
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)										
	Fore Sails, R.W.C.P.T.			26 Jan'y. 88	J. Hartness			16908	36-0-14	33-4-0-7	36-2-0 11 Jan'y. 88
	Fore Top Sails, Iron Stream Chain	90	1 1/8	34 1/2 - 22 1/2	90 - 1 1/8	6937					
	or Steel Wire ..			R.W.C.P.T.	2 <sup>nd</sup> Febr'y. 88	J. Hartness		16909	31-3-14	30-0-2-14	31-0-0 11 Jan'y. 88
	or Hempen Strm } Cable .....							ALL AT R.W.C.P.T. by J. Hartness.			
	Fore Topmast Stay Sails, Towline, Hemp.										
	or Steel Wire ..	120	4" steel		100-4"	H. H. H. H.	Stream Anchor	16905	11-1-14	13-5-0-0	11-1-0 11 Jan'y. 88
	Hawser .....	90	10" Manila		90-10"	Certified by	Kedge	16906	5-2-7	7-18-1-21	5-2-0 11 Jan'y. 88
	Warp .....	90	8 1/2 "		90-8 1/2 "	Bullivant & Co.	2nd Kedge	16963	2-3-7	5-7-2-0	2-3-0 2 Febr'y. 88
	and quality										

Standing and Running Rigging *Galv<sup>d</sup> Iron Wire* sufficient in size and *good* in quality. She has *Two* Long Boats and *three* others  
The Windlass is *Clark Chapman & Co.* Capstan *4 Steam Winches* and Rudder *good* Pumps *good*

Engine Room Skylights.—How constructed? *Teak fitted with bullseyes* How secured in ordinary weather? *bolts & nuts, and hand screws*

What arrangements for deadlights in bad weather? *Iron shutters with bullseyes.*

Coal Bunker Openings.—How constructed? *Iron Comings* How are lids secured? *with bars* Height above deck? *15"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Three water ports forward and three water ports aft 2' 6" x 1' 6"*

Cargo Hatchways.—How formed? *Of Iron ordinary form.*

State size Main Hatch *24' 0" x 14' 0"* Fore hatch *16' 0" x 12' 0"* Quarterhatches *16' 1" x 14' 0" & 16' 0" x 12' 0"*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Two web plates in main hatch, one shifting beam in each of the others.*

Order for Special Survey No. *2* *1st. On the several parts of the frame, when in place, and before the plating was wrought* *2nd. On the plating during the process of riveting* *3rd. When the beams were in and fastened, and before the decks were laid....* *4th. When the ship was complete, and before the plating was finally coated or cemented..* *5th. After the ship was launched and equipped*

Date *12 Sept. 84.* Order for Ordinary Survey No. *—* Date *—* No. *1444* in builder's yard. State dates of letters respecting this case *20<sup>th</sup> Jan'y. 4<sup>th</sup> & 11<sup>th</sup> Febr'y. 28<sup>th</sup> Mar. 18<sup>th</sup> May 1887 and 31<sup>st</sup> Jan'y. 1888.*

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

*This is a steel spar decked screw steamer built in accordance with plans forwarded and accompanying this Report, the Secretary's letters as above mentioned, and in other respects as required by the Rules. Iron rivets have been used throughout. The workmanship is good.*

*The particulars respecting steel decks and double bottom are given on the prescribed forms. The vessel is schooner rigged.*

*A Hood covering stern and connected to deck house 42' 0" long is fitted. The Bridge is 70' 0" long and the Forecastle 34' 0" long.*

*A Freeboard was assigned in accordance with Sld. Report No. 14252, and the Secretary's letter dated 5<sup>th</sup> May 1887 which was accepted by the Owners and is now marked on vessels sides in accordance with Notice No. 572 and is as follows viz: In winter 7' 8 1/2; summer 7' 4".*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed *100A1 Steel Spar deck A & C.P. and the Freeboard*

The amount of the Entry Fee .....£ 5: 0: 0 is received by me, *George Harrison* to be recorded in the Register Book.

Special .....£ 102: 13: 0 27/3/ 1888

(to be sent as per margin). Certificate (Travelling Expenses, if any, £ .....

Committee's Minute *TUES 27 MARCH 1888* 18

Character assigned *100A1 Steel Spar deck*

*100A1 Steel Spar deck* *100A1 Steel Spar deck* *100A1 Steel Spar deck*