

STEEL IRON SHIP.

(Received at London Office.)

14 JUN. 88

1888

No. 8590 Survey held at Glasgow

Date, First Survey 12 Aug 87

Last Survey 8th June

On the S.S. *Taikiō Maru*

TONNAGE under Tonnage Deck	1705.48	ONE, OR TWO-DECKED, THREE-DECKED VESSEL,
Ditto of Third, Span, on Deck	801.33	SPAR, OR AWNING-DECKED VESSEL.
Ditto of Poop, or Raised Qr. Dk.	2506.81	Half Breadth (moulded) 20.35
Ditto of Houses on Deck	205.63	Depth from upper part of Keel to top of Upper Deck Beams 22.35
Ditto of Forecasts		Girth of Half Midship Frame (as per Rule) 37.85
Gross Tonnage	2712.12	St Number 80.7
Less Crew Space	2538.13	1st Number if a 3-Decked Vessel 28.7
Less Engine Room	211.57	Length 323.33
Register Tonnage cut on Beam	1358.06	2nd Number 26092
		Proportions—Breadths to Length... .. 7.88
		Depths to Length—Upper Deck to Keel... .. 14.46
		Main Deck ditto

Master *Wilson Walker 70-88*
 Built at *Glasgow*
 When built *1887-88* Launched *14 Mar 88*
 By whom built *Lou. & Glas. S. & Eng. Co.*
 Owners *Nippon Yusen Kaisha (Lim)*
 Residence *Yokohama, Japan*
 Port belonging to *Tokio*
 Destined Voyage *Yokohama*
 If Surveyed while Building, Afloat, or in Dry Dock.
While Building, afloat, in Dry Dock.

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid
on deck as per Rule ...	323	4	Moulded...	41	0	top of Floors to Upper Deck Beams ...	26	6	Engines ...	440	3
Do. do. Main Deck Beams ...											Nº. of Tiers of Beams 3
Dimensions of Ship per Register, length, 325 breadth, 41.2 depth, 18.95											
KEEL, depth and thickness	Side Base 2		Inches in Ship.		Inches per Rule.						
STEM, moulding and thickness...	Iron		10 x 2 3/4		10 x 2 3/4						
STERN-POST for Rudder do. do.	Iron		10 1/2 x 6 1/2		10 1/2 x 6 1/2						
" " for Propeller	Iron		24 ins		24 ins						
Distance of Frames from moulding edge to moulding edge, all fore and aft	Iron		24 ins		24 ins						
FRAMES, Angle Iron, for 3/4 length amidships	Iron		5' 3 1/2"		8' 3 1/2"						
Do. for 1/2 at each end	Iron		3 1/2"		3 1/2"						
REVERSED FRAMES, Angle Iron	Iron		3 1/2"		3 1/2"						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	Iron		50		7						
" thickness at the ends of vessel	Iron		Cellular double		Bottom see app						
" depth at 3/4 the half-bdth. as per Rule	Iron		Sketch of mid. section		Bottom see app						
" height extended at the Bilges	Iron		8 1/2"		8 1/2"						
BEAMS, Upper, Spar, or Awning Deck	Iron		3		3						
Single or double Angle Iron, Plate or Tee Bulb Iron	Iron		48 ins		48 ins						
Average space...	Iron		10		10						
BEAMS, Main, or Middle Deck	Iron		3 1/2"		3 1/2"						
Single or double Angle Iron, Plate or Tee Bulb Iron	Iron		48 ins		48 ins						
Average space...	Iron		10		10						
BEAMS, Lower Deck	Iron		3 1/2"		3 1/2"						
Single or double Angle Iron, Plate or Tee Bulb Iron	Iron		48 ins		48 ins						
Average space...	Iron		10		10						
BEAMS, Hold, or Orlop	Iron		3 1/2"		3 1/2"						
Single or double Angle Iron, Plate or Tee Bulb Iron	Iron		48 ins		48 ins						
Average space...	Iron		10		10						
KEELSONS Centre line, single or double plate, Iron, or Intercoastal, Plates	Iron		50		10						
" Rider Plate	Iron		36		9						
" Bulb Plate to Intercoastal Keelson	Iron		Cellular double		Bottom see app						
" Angle Irons	Iron		Sketch of mid. sec		Bottom see app						
" Double Angle Iron Side Keelson	Iron		7		7						
" Side Intercoastal Plate	Iron		6		4						
" do. Angle Irons	Iron		9		9						
" Attached to outside plating with angle iron	Iron		6		4						
BILGE Angle Irons	Iron		7		7						
" do. Bulb Iron	Iron		6		4						
" do. Intercoastal plates riveted to plating for length	Iron		9		9						
BILGE STRINGER Angle Irons	Iron		6		4						
Intercoastal plates riveted to plating for 3/5 length	Iron		9		9						
SIDE STRINGER Angle Irons	Iron		6		4						

Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
26	6	Engines ...	440	3	3
Moulded depth 21 ft 6 ins					
Flat Keel Plates, breadth and thickness ...					
PLATES in Garboard Strakes, br'dth & thickness					
" From Garboard to upper part of Bilges ...					
" Of 1/2" at Bilge, or increased thickness, and length applied 200 ft					
" From up. prt of Bilge to l. edge of Sh'rstrake ...					
" Main Sheerstrake, breadth and thickness ...					
" Or 1/2" at Sh'th. & l. edge applied 19 1/2 ft					
" From M. n. to Up. or Spar Dk. Sh'rstrake ...					
" Up. or Spar Dk Sh'rstrake br'dth & thickness ...					
Butt Straps to outside plating, breadth & thickness					
Lengths of Plating 8 frames					
Shifts of Plating, and Stringers 2 - - -					
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ...					
Angle Iron on ditto ...					
Tie Plates fore and aft, outside Hatchways					
Diagonal Tie Plates on Beams No. of Pairs 3 - - -					
Flat of Up. Spar, or Awning Dk. 3" Oak					
How fastened to Beams Double fastened, not seen bolts galv					
Stringer Plate on ends of Main or Middle Deck					
Beams, breadth and thickness ...					
Is the Stringer Plate attached to the outside plating? Yes Yes					
Angle Irons on ditto, No. ...					
Tie Plates, outside Hatchways ...					
Diagonal Tie Plates on Beams, No. of pairs Complete steel 36					
Flat of Middle Deck* do. do. 2 1/2" Covered with 20					
How fastened to Beams Double fastened, not seen bolts galv					
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ...					
Is the Stringer Plate attached to the outside plating? Yes Yes					
Angle Irons on ditto, No. ...					
Stringer or Tie Plates, outside Hatchways					
Flat of Lower Deck 4" Yellow Pine					
Ceiling betwixt Decks, thickness and material Iron Spinning					
" in hold do. do. 2 1/2" P. P. 2 1/2"					
Main piece of Rudder, diameter at head 8 1/2					
do. at heel 7 3/4					
Can the Rudder be unshipped afloat? Yes					
Bulkheads No. 6 No. per Rule 5-750					
" Thickness of 7/8"					
" Height up 4 to upper 5 ft & 2 to main 5 ft see app 1 Profile					
How secured to sides of ship Don. pro					
Size of Vertical Angle Iron 5 x 3 1/2 x 8 and distance apart 30 ins.					
Are the outside Plates doubled two spaces of frames 3 1/2 x 3 1/2 x 8 - 4 ft apart					

The FRAMES extend in one length from *middle line* to *Bilge & thence to gunwale*
 The REVERSED ANGLE IRONS on floors and frames extend from *middle line to Bilge & thence to gunwale*
 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 5.58 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 3.14 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3.14 ins. from centre to centre.
 Butts of all Strakes *all* Bilge for 3/4 length, treble riveted with Butt Straps 5/8 in. thicker than the plates they connect.
 Edges from Bilge to Main Sheerstrake, worked clencher, double *single* riveted; with rivets 7/8 in. diameter, averaging 3.14 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3.14 ins. from cr. to cr.
 Edges of Main Sheerstrake, double *single* riveted. Upper Sheerstrake, double *single* riveted.
 Butts of Main Sheerstrake, treble riveted for 3/4 length amidships. Butts of Upper Spar Sheerstrake, treble riveted 3/4 length amidships.
 Butts of Main Stringer Plate, treble riveted for 3/4 length amidships. Butts of Upper Spar Stringer Plate, treble riveted for 3/4 length.
 Breadth of laps of plating in double riveting 6 1/2 ins. Breadth of laps of plating in single riveting *all straps double*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Yes* No. of Breasthooks, *5* Crutches, *2*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Steel C- (12, 13, 14, 15)*
 Manufacturer's name or trade mark, *Carpenter & Co. Sundries - Consell, Messrs*
 The above is a correct description.
 Builder's Signature, *James W. Munn* Surveyor's Signature, *C. J. Dodd*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

8590 gl.

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 facing surfaces? *Yes*Do any rivets break into or through the seams or butts of the plating? *A very few*

Masts, Bowsprit, Yards, &c., are *Iron* 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. *The masts have been constructed in with the approved tracings attached herewith and with the instructions contained in Secy's letter of the 11th Nov. 1887. Iron used - Corsett - which was tested as required by the Rules and found satisfactory.*

NUMBER & LETTER for SAILS.		EQUIPMENT.		CABLES, &c.		Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
N ^o .		Chain	Fathoms	Inches					Bower					
		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)							Anchor					
Fore Sails,		Iron Stream Chain	150	1 1/2	94.5	300-1 1/2	Spec-15.13			23217	36.0.0.33.1.2.0	36 1/2	St. Leger	
Fore Top Sails,		or Steel Wire ..	150	"	87.5		D. E. Lewis			8-1.2.0				Heberton
Fore Topmast Stay Sails,		or Hempen Strm } Cable	42	180.40	180.31		Heberton			17090	37.0.23.33.18.3.0	total		
		Towline, Hemp.	90	4 1/2		90-4 1/2				23174	31.3.2.30.0.2.14	104	J. Hartness	
Main Sails,		or Steel Wire ..	90	4 1/2		120.4					105.0.2			Cumberland
		Hawser	90	3 1/4		90-10								and
		Warp	90	3 1/4		98-8 1/2								H. J. & Boulds
Main Top Sails, and		quality	300	36"	120-4 1/2					23218	11-1.2.63.15 1/4	11 1/4		
										Anchor	23214	3-2.2.28.0.2.14	5 1/2	
										Kedge	23215	2-3-1.63.5 1/2	2 3/4	
										2nd Kedge				

Standing and Running Rigging *wire hemp* sufficient in size and *g^d* in quality. She has *4* Long Boat and *4* others

The Windlass is *Baxter's horizontal* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Dark on canvas on Bridge* How secured in ordinary weather? *Bolted*

What arrangements for deadlights in bad weather? *Gratings & Carpaudins*

Coal Bunker Openings. How constructed? *Cast iron & side ports* How are lids secured? *By iron fixing* Height above deck? *Flush*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Running pipes 8, Cargo ports 2*

Cargo Hatchways. How formed? *As usual*

State size Main Hatch *15' 9" x 10' 6"* Forehatch *8' x 8'* Quarterhatch *6' 6" x 4' 6"* one each side

If of extraordinary size, state how framed and secured? *one web in long hatch*

What arrangement for shifting beams?

Hatches, If strong and efficient? *gratings 3 1/8. Owner's specification*

Order for Special Survey No. *2121*

Date *11th Aug 1887*

Order for Ordinary Survey No. *1*

Date *11th Aug 1887*

No. *255* in builder's yard.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought. *12, 15, 19, 21, 23, 26, 30, Oct 5, 10, 13, 19, 21, 26, 27, 28, Nov 2, 7, 8, 11, 16*
- 2nd. On the plating during the process of riveting. *12, 15, 19, 21, 23, 26, 30, Oct 5, 10, 13, 19, 21, 26, 27, 28, Nov 2, 7, 8, 11, 16*
- 3rd. When the beams were in and fastened, and before the decks were laid. *12, 15, 19, 21, 23, 26, 30, Oct 5, 10, 13, 19, 21, 26, 27, 28, Nov 2, 7, 8, 11, 16*
- 4th. When the ship was complete, and before the plating was finally coated or cemented. *12, 15, 19, 21, 23, 26, 30, Oct 5, 10, 13, 19, 21, 26, 27, 28, Nov 2, 7, 8, 11, 16*
- 5th. After the ship was launched and equipped. *12, 15, 19, 21, 23, 26, 30, Oct 5, 10, 13, 19, 21, 26, 27, 28, Nov 2, 7, 8, 11, 16*

State dates of letters respecting this case. *12, 20, 25 Oct 27 Aug 1, 14, 17, 22 Sep. & 5 Nov 1887*

General Remarks (State quality of workmanship, &c.) *The workmanship is good, and the vessel has been built in accordance with the approved tracings, (7 of which are attached herewith but the sketch of Mid. Sec was forwarded to the Secy on the 3rd Aug) and with the instructions contained in the Secy's letters above referred to, and otherwise in accordance with the requirements of the Rules.*

This vessel is built on the Cellular double bottom system, 8' 1" tank from fore to 10.52 ft x 71 tons, 8' 2" tank is 32 ft x 71 tons, then a two feet well, then 8' 3" - 44 ft long x 102 tons, then 8' 4" - 46 ft x 102 tons, then another 2 ft well, then 8' 5" tank - 68 ft x 100 tons, Total 246 ft x 447 tons. She also has a fore peak tank containing 42 tons and an after peak tank containing 12 tons. All her tanks were tested, as req'd by the Rules, and found satisfactory. Turtle back aft 16 ft.

Then she has 5 ft with open sides extends for 198 ft, with middle line houses as shown on Profile. For 38 ft. A load line of 20 ft has been marked on the vessel's sides and should be inserted on the classification Certificate recorded in the Register Book, see Secy's letters of the 4th Aug & 1st Sep 1887.

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

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

I am of opinion this Vessel should be Classed *100 A.1. "Steel" "Load line 20 ft" "B.H. extends to m. st. in fore hold."*

The amount of the Entry Fee£ *5* is received by me, *J. J. Dodd*

Special£ *89: 5* 13/6 1888

(to be sent as per margin). Certificate ...

(Travelling Expenses, if any, £ ...)

Committee's Minute

Character assigned

100 A.1 Steel Spar sk

Load line 20 ft

2 Dks 15 ft Spar sk

B.H. extends to main

13/6 1888

FRIDAY 15 JUNE 1888

100 A.1 Steel Spar sk

Load line 20 ft

2 Dks 15 ft Spar sk

B.H. extends to main

13/6 1888

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

It is submitted that the vessel appears

worthy to be classed 100 A.1. "Steel" "Spar sk"

as recommended, with the notation

"Load line 20 ft." to be inserted in the Certificate

of classification and recorded in the Register Book

2 Dks (1 Steel) & Spar sk

Cell. D.B. (Particulars appended)

13/6 1888