

# With or Without Disconnected Erections.

## STEEL STEAMER.

Received at London Office

TUE. 13 NOV. 1917

State if Report is also sent on the Machinery of the Vessel *yes*

Date of completion of report *18 Sept. 1917*  
Survey held at *Nagasaki*

Port of *Nagasaki*

No. *1143*

Date, First Survey *Sept. 7, 1916*

Last Survey *Sept. 14*

1917

On the (State if Single, Twin, or Triple Screw) *Single screw "TOYO MARU" N°2*

Rig *Schooner*

**TONNAGE under Tonnage Deck...**  
Do. between Tonnage Dk. and 3rd and 4th Dk. *2608.36*  
Total under Upper Dk. *63.30*

CLASS *+100 A-1*

FEET.

Master *O. Hayakawa*

Year of appointment

(1) As Master in service of owner of present vessel: 1910  
(2) As Master of this vessel: *Sept. 1917*

Do. of Poop *160.19*  
Do. of R.Q.Dk. *56.35*  
Do. of Bridge House *88.17*  
Do. of Forecastle *24.46*  
Do. of Houses on Dk. *17.28*  
Do. of excess of Hatchways *3018.11*  
Do. above Crown of *118.85*  
Tonnage *17.28*  
Do. of Space *2851.98*  
Do. of Crown of *948.52*  
Do. of Room *25.79*  
Do. of GE FOR FEES. *49.74*  
Do. of Engine Room *1827.93*  
Do. of Navigation Spaces *1827.93*  
Do. of Tanks *1827.93*  
Do. of Water Tonnage *1827.93*  
Do. of Beam *1827.93*

Breadth (greatest moulded) *44.25*

Depth, at middle of length from top of keel to top of upper deck beams at side *27.00*

Transverse Number *71.25*

Length on deck from fore part of stem to after part of stern post *311.0*

Longitudinal Number *22158.75*

Depth "d," at middle of length (See Secs. 2 & 13) *16.25*

Proportions—Depths to Length—Upper Deck Beam at side to top of keel *11.52*

" " Long Bridge Deck Beam at side to top of keel *9.01*

Destined Voyage *✓*

If Surveyed while Building, Afloat, or in Dry Dock *Building*

Built at *Nagasaki*

When built *Sept. 1917* Launched *8 July 1917*

By whom built *Matsuo Iron Works, Nagasaki*

Owners *S. Sawayama*

Managers

(Where necessary to be entered in Reg. Book.)

Residence *Nagasaki*

Port belonging to *Nagasaki*

Length on Deck	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH, ACTUAL—	Feet.	Inches.	No. of Decks with flat laid
per Rule	311	0	Moulded	44	3	Top of Floors to top of Upper Dk. Beams	24	8	2
						Do. do. do. Second Dk. Beams	16	9	No. of Tiers of Beams 2

Dimensions of Ship per Register, Length *311.0* breadth *44.25* depth *27.0*. Moulded depth, ft. *34* ins. *6* To Bridge Dk. Round of Upper Dk. Beam, Actual) *11* ins.

FRAMING.						PILLARS.					
NAME, Angles, or E or L Bars amidships	In Ship.	In Ship.	In Ship.	per Rule Or as Approved.	per Rule Or as Approved.	PILLARS, In 'tween Deck, size and spacing	Inches in Ship.	Spacing in Ship.	Inches in Ship.	per Rule Or as Approved.	per Rule Or as Approved.
Do. in peaks	8 1/2	3 1/2	50	8 1/2	3 1/2	" " Hold	23 1/4 - 49"	23 1/4 - 49"	23 1/4 - 49"	23 1/4 - 49"	23 1/4 - 49"
Do. in way of Double Bottoms at Solid Floors	5 1/2	3 1/2	34	5 1/2	3 1/2	" " Quarter 'tween Dks.	6 3/4 x 7/16 - 49"	6 3/4 x 7/16 - 49"	6 3/4 x 7/16 - 49"	6 3/4 x 7/16 - 49"	6 3/4 x 7/16 - 49"
" " at intermdt. Bkts.	3 1/2	3 1/2	36	3 1/2	3 1/2	" " in Hold	5 x 5/8 x 50	5 x 5/8 x 50	5 x 5/8 x 50	5 x 5/8 x 50	5 x 5/8 x 50
acing of Frames from centre to centre amidships	24 1/2			24 1/2		KEELSONS & STRINGERS.	Inches in Ship.	Inches in Ship.	Inches in Ship.	per Rule Or as Approved.	per Rule Or as Approved.
" " length to Collision bulkhead	24			24		CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercostal Plate					
" " in peaks	7	3 1/2	50	7	3 1/2	" " Rider Plate					
EVERSED FRAME, Angles	3 1/2	3 1/2	36	3 1/2	3 1/2	" " Flat Plate Keel Angles					
Do. in way of Double Bottoms at Solid Floors	10 1/2 - 8 1/2			10 1/2	8 1/2	" " Horizontal Plates on Floors					
" " at intermdt. Bkts.	36 - 46			36	46	" " Angles or Bulb Angles					
FRAMING, depth of girder	38			38		SIDE KEELSONS, Number					
DOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	39	36		39	36	" " Angles or Bulb Angles					
" " in way of Engine and Boiler Spaces	20			20		" " Plate above floors, for length					
" " thickness at the ends of vessel	24 1/2			24 1/2		" " Intercostal Plate, for length					
" " depth at 1/2 the half breadth, as per Rule	39	36		39	36	" " Attached to outside Plating with Angle					
" " height extended at the Bilges	39	36		39	36	BILGE KEELSON, Angles					
DOORS in Cell. Double Bottoms	20			20		" " Intercostal Plate for length					
" " state if flanged (top & bottom)	39	48		39	48	" " Attached to outside Plating with Angle					
" " Spacing of Solid floors	5	5	50	5	5	SIDE STRINGERS, Number	two		two		
CENTRE GIRDER, in Dbl. bottom, dpth. & thcknss.	4	4	58	4	4	" " Angle	6 1/2	3 1/2	46	6 1/2	3 1/2
" " Angles, Top	5	5	50	5	5	" " Intercostal Plate, for whole length			42		42
" " Bottom	3 1/2	3 1/2	36	3 1/2	3 1/2	" " Attached to outside plating with Angle	flanged		flanged		
" " to Floors	30	42		30	42	Upper Deck Stringer Plate, br'dth & thickness (clear of Bridge)	49	52	49	52	
BRACKETS at intermdt. frmg., width & thcknss	34			34		" " " " br'dth & thickness (in way of Bridge)	49	48	49	48	
SIDE GIRDERS, number on each side & thickness	3 1/2	3 1/2	36	3 1/2	3 1/2	" " " " Angle (clear of Bridge)	4 1/2 x 4 1/2	54	4 1/2 x 4 1/2	54	
" " state if flanged (top and bottom)	30	42		30	42	" " Tie Plate at sides of Hatchways					
" " Angles (top and bottom)	3 1/2	3 1/2	36	3 1/2	3 1/2	" " Deck * Iron or Steel, for length					
" " to Floors	3 1/2	3 1/2	36	3 1/2	3 1/2	" " Thickness (clear of Bridge)	40	30	40	30	
MARGIN PLATE, depth (exclusive of flange) and thickness	3 1/2	3 1/2	36	3 1/2	3 1/2	" " (in way of Bridge)	40	30	40	30	
" " Angle to Outside Plating	3 1/2	3 1/2	36	3 1/2	3 1/2	" " Wood Deck, Material & thickness					
" " Floors	3 1/2	3 1/2	36	3 1/2	3 1/2	Second Deck Stringer Plate, br'dth & thickness	44	42	44	42	
" " Brackets at intermdt. frmg., width & thcknss	34			34		" " Angles on ditto, No. 2	9 x 3 1/2 x 52	9 x 3 1/2 x 52	9 x 3 1/2 x 52	9 x 3 1/2 x 52	
" " Height of Outside Brackets above at bilge	44	52		44	52	" " Tie Plates outside Hatchways					
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	44	52		44	52	" " Deck * Iron or Steel, for length			30		30
" " in Engine and Boiler space	36			36		" " Wood Deck, Material & thickness					
" " Remainder in Holds	7 1/2	3	42	7 1/2	3	Third Deck Stringer Plate, br'dth & thickness					
BEAMS, Upper Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	24 1/2			24 1/2		" " Angles on ditto, No.					
" " In way of Long Bridge	8	3	44	8	3	" " Tie Plates, outside Hatchways					
" " Spacing	24 1/2			24 1/2		" " Deck * Material and thickness					
BEAMS, Second Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	24 1/2			24 1/2		Fourth and Fifth Deck Stringer Plate, br'dth & thickness					
" " Spacing	24 1/2			24 1/2		" " Angles on ditto, No.					
BEAMS, Third and Fourth Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	8 1/2	3	50	8 1/2	3	" " Tie Plates outside Hatchways					
" " Angles on upper edge	15			15		" " Deck, Material & thickness					
" " Spacing	49			49		Poop Deck Stringer Plate, breadth & thickness	30	32	30	32	
BEAMS, Poop Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	49			49		" " Angle on ditto	3 x 3	32	3 x 3	32	
" " Angles on upper edge	7	3	40	7	3	" " Tie Plates	15	32	15	32	
" " Spacing	24 1/2			24 1/2		" " Deck, Material and thickness			3		3
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	9	5 1/2	44	9	5 1/2	Bridge Deck Stringer Plate, br'dth & thickness	49	52	40	52	
" " Angles on upper edge	3 1/2	3	375	3 1/2	3	" " Angle on ditto	4 1/2 x 4 1/2	54	4 1/2 x 4 1/2	54	
" " Spacing	49			49		" " Tie Plates					
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	9	5 1/2	44	9	5 1/2	" " Deck, Material and thickness					
" " Angles on upper edge	3 1/2	3	375	3 1/2	3	Forecastle Deck Stringer Plate, br'dth & thickness	30	32	30	32	
" " Spacing	49			49		" " Angle on ditto	3 x 3	32	3 x 3	32	
						" " Tie Plates	8 - 6"	30	15		32
						" " Deck, Material and thickness					

\* If Iron or Steel Deck, state if above or part, and if Wood Deck is laid thereon.

\* If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.



[illegible]



EQUIPMENT No. 23108				LETTER U				ANCHORS.				TONNAGE U.D.K. OR PLATING No. FOR TRAWLERS			
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 31.			
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Description of Anchor.
139	1st Bower ...	46	1	0	Stocks			40	0	2	14	45	0	0	Halls C. S. Lead
150	2nd "	42	3	14	"			37	15	2	14	45	0	0	"
151	3rd "	42	2	0	"			37	10	0	0	38	0	0	"
	4th "														"
	Collective weight.	131	2	14								128	0	0	
122	Stream .....	11	3	24	3	0	1	13	17	2	0	12	0	0	Common
123	Kedge.....	5	2	14	1	2	5	7	18	1	21	5 1/2	0	0	"

Particulars of **Drop Test** of Cast Steel Anchors, viz. :—  
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower 27.0.16 A.L.T. 139. 29/5/17  
2nd " 26.1.27 A.L.T. 150 22/5/17  
3rd " 26.1.10 A.L.T. 151 4/6/17  
4th "

#### CHAIN CABLES.

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and Size per Table 31.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	HAWSERS AND WARPS.			
	Length.	Diam.	Statutory.	Breaking.	Supplied.	Per Rule.	Length.	Diam.				Material.	Length and size supplied.	Breaking Test of Steel Wire Towline.	Length and Size per Table 31.
	Fathoms.	Ins.	Tons.	Tons.	Cwts. qrs. lbs.	Cwts. qrs. lbs.	Fathoms.	Ins.					Fathoms.	Ins.	Ins.
250	276 1/2	2	72	100.8	573.0.27	573.0.27	270	1 1/2	Steel	Crake C. Wks.	Crake 4/17 Jones	Special ply TOWLINE	120	4	47.9
												Marmale HAWSERS & WARPS	2-90	7	2-90
Iron Stream Chain or Steel Wire	90	4 1/2		61.7			90	4 1/4	Special ply	Crake S. K.	Kokura 24/17 O'Brien	" "	2-90	6	2-90

#### Boats

3

#### Pumps, Number

1 Downston 5/8

#### Steering Gear, Steam

Mitsubishi

#### Steering Gear, Hand

Scrum

Diameter of Barrel 5/8

State whether they are in efficient working order *yes*

#### Capstan

None

#### Windlass is

Low Steam Machine

#### Engine Room Skylights.—How constructed?

Steel & bulb eyes

What arrangements for deadlights in bad weather? *none*

#### Coal Bunker Openings.—How constructed?

Steel coamings

How are lids secured? *Iron bands*

Height above deck? *18" above bridge*

Number of **Scuppers**, and numbers and dimensions of **Freeing Ports, &c.** *3 fore & 3 aft each side, 3 fore & 3 aft each side 3-5 x 1-5*

#### Ceiling in Holds, thickness and material

2 1/2 pine

**Cargo Battens**, thickness and material *2" pine 3-25 x 2-5*

#### Cargo Hatchways.—How formed?

Steel coamings solid covers

**Hatches**, If strong and efficient? *yes*

State size **No. 1 Hatch** (Forward) *22-5 x 16*

**No. 2 Hatch** *28-7 x 16*

**No. 3 Hatch** *24-6 x 16*

**No. 4 Hatch** *22-5 x 16*

Number of **Web Plates, Shifting Beams** and **Fore and Afters** to each Hatch. *Nº1=4. Nº2=5. Nº3=4. Nº4=4*

**No. of Breasthooks** *6*

**No. of Crutches** *2*

#### Bulwarks, height above deck and description

3-9 steel 6 x 38 bulb stays

Main Rail, material and size *6 x 38 bulb angle*

The foregoing is a correct description.

Builder's Signature (here only)

For Matsuo Iron works & Dockyard.

Surveyor's Signature

G. D. Aitken

Surveyor to Lloyd's Register of Shipping.

**Correspondence.**—State dates and initials of letters respecting this case (Reference should be made in any correspondence connected with the case)

1916—Nº 25 Jan. Nº 25 May.

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

*planed*

Is the riveted work properly closed? *yes*

Are the liners between the frames 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*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *yes*

Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)? *yes*

State results of tests *Satisfactory*

Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? *yes*

State results of tests *Satisfactory*

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

The workmanship & materials are good.  
\* All floors connected to margin by double angles owing to bracket angles on outside being fitted on opposite side. Subverticals fore of 3/4" in flange and also angle to floors. Lightning holes in frame brackets Nº1 & 3 holds too large 2 feet of angle fitted over same as compensation.  
This vessel has been built in accordance with the approved plans and in conformity with the Rules for the class contemplated.

Plans of — 2 Sections  
2 Shell exp  
2 Decks  
1 Profiles  
1 Fitting  
1 B&E

Sent under separate cover  
2 Fitting Rpts enclosed

The Surveyor should state the Number of Report and Name of any Sister Vessel.

Plans to be forwarded with F.E. Report showing vessel as built.

The amount of Entry Fee ... £ 5 : 0 : 0

Special Survey Fee ... £ 144 : 9 : 0

Travelling Expenses, if any £ : :

Fees applied for,

17/3/1917

Received by me,

25/9/19

Certificate to be sent to *Nagasaki* Date of issue *16.11.17*

State whether the Vessel has been built under Special Survey *yes*

I am of opinion this Vessel should be Classed *+100 A.I.*

With, or without Freeboard, as condition of Class *without*

G. D. Aitken

Surveyor to Lloyd's Register of Shipping.

#### Committee's Minute

FRI. 16 NOV. 1917

#### Character assigned

*100A1*

*as 6 P*

*+ Lmb 917*

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W1096-0078 1/2



GENERAL REMARKS—(continued).

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 21 ft., R.Q.D. \_\_\_\_\_ ft., Bridge 27.6 ft., Forecastle 41.5 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as should appear in the Register Book) 2 Sk. stl (except No. 2 hold)  
 Official No. Later; Signal Letters Later. State if Machinery is fitted aft No  
 How are the surfaces preserved from oxidation? Inside Paint & cement. Bitumastic in Outside Paint  
hunks & lot of boiler tank.

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors Cellular

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	<u>87</u>	<u>163.7</u>	Fore peak tank,	<u>17</u>	<u>82.5</u>
Double bottom, under Engines and Boilers,	<u>53</u>	<u>156.2</u>	After peak tank,	<u>16</u>	<u>78.5</u>
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	<u>124</u>	<u>302.3</u>	Other tanks, if fitted,		
Total capacity of double bottom		<u>622.2</u>	(If necessary, furnish further information by sketch.)		

\* The wells are not to be included in the lengths of the tanks.

State whether the above have been tested as required by the Rules. Yes

Order for Special Survey No.

Date 26/1/16

No. 57 in builder's yard.

DATES of Surveys held while building

1916 Sept 7. 22. Oct 5. 6. Nov — Dec 4. 23 1917 Jan 17. Feb 15. 23. Mar 22. Apr 10.  
 May 1. 2. 10. 14. 17. 23. June 6. 14. 22. 27. 29. July 2. 6. 8. 10. 27. 28. Aug 1. 9. 13. 14.  
24. 25. Sept 3. 4. 5. 10. 11. 13. 14.

Surveyor's Signature G. D. Aitken

Total No. of Visits 41

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