

23 Decks.

IRON OR STEEL STEAMER.

Received at London **WED 18 MAY 1910**

Date of completion of report **29th Apr. 1910.** Port of **Nagasaki** No. **690**
Survey held at **Nagasaki** Date, First Survey **Feb. 18 1910** Last Survey **Apr. 27 1910**
On the **Twin S.S. PANAMA MARU** Rig **Schooner**
TONNAGE under **4958.08** **2 THREE DECKED VESSEL.** Master **Y. Ogata**
Do. between Tonnage Dk. & 1st Dk. **CLAS + 100 A.I.** Year of appointment **1910**
Do. between Tonnage Dk. & 2nd Dk. **25.5**
Do. between Tonnage Dk. & 3rd Dk. **33.55**
Do. between Tonnage Dk. & 4th Dk. **54.67**
Do. of Poop **120.84**
Do. of Bridge House **577.32**
Do. of Forecastle **86.71**
Do. of Houses on Dk. **222.15**
Do. of excess of Hatchways **79.55**
Do. above Crown of Engine Room **6057.65**
Gross Tonnage **363.46**
Less Crew Space **5694.19**
Less above Crown of Engine Room **1938.45**
TONNAGE FOR FEES **3755.74**
Less Engine Room
Less Navigation Spaces

Register Tonnage as cut on Beam **3755.74** Destined Voyage **Sacoma** If Surveyed while Building, Afloat, or in Dry Dock Building
LENGTH on Deck as per Rule **398** Breadth **57** Depth, Actual **32** Top of Floors to top of Upper Dk. Beams **29** No. of Decks with flat laid **2**
Do. do. do. do. Main Dk. Beams **21** No. of Tiers of Beams **2**
Do. do. do. do. do. do. **10 1/4** Round of Upper Dk. Beam, Actual **12 3/4** ins.
Japanese measurements Dimensions of Ship per Register, Length **408.04** breadth **49.70** depth **29.81** Moulded depth, ft. **32** ins. **6** To Upper Dk.

FRAMING.				FORGINGS or CASTINGS.			
FRAME, Angles, or Bars for 1/2 length amidships				KEEL, Bar or Side Plates, depth and thickness			
Do. for 1/2 at each end	6	3 1/2	10	6	3 1/2	10	
Do. in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	10	3 1/2	3 1/2	10	
" " at intermdt. Bkts.	25	25	25	25	25	25	
Spacing of Frames from centre to centre	8	3 1/2	10	8	3 1/2	10	
REVERSED FRAME, Angles	10 1/2	8 1/2	10 1/2	8 1/2	10 1/2	8 1/2	
DEEP FRAMING, depth of girder	45	8	45	8	45	8	
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	4	4	10	4	4	10	
" in way of Engines and Boilers	4 1/2	4 1/2	12	4 1/2	4 1/2	12	
" thickness at the ends of vessel	2	8	2	8	2	8	
" depth at 1/2 the half breadth, as per Rule	3 1/2	3 1/2	9	3 1/2	3 1/2	9	
" height extended at the Bilges	37	10	37	10	37	10	
FLOORS & BRACKETS in Cell Dble Bottoms state if flanged (top & bottom)	4	4	10	4	4	10	
" Spacing	3 1/2	3 1/2	9	3 1/2	3 1/2	9	
CENTRE GIRDER, in Double bottom, depth and thickness	4	4	10	4	4	10	
" Angles, Top	4 1/2	4 1/2	12	4 1/2	4 1/2	12	
" Bottom	2	8	2	8	2	8	
SIDE GIRDERS, number on each side & thickness state if flanged (top and bottom)	3 1/2	3 1/2	9	3 1/2	3 1/2	9	
" Angles	37	10	37	10	37	10	
MARGIN PLATE, depth (exclusive of flange) and thickness	4	4	10	4	4	10	
" Angles to Outside Plating	3 1/2	3 1/2	9	3 1/2	3 1/2	9	
" Floors	78	78	78	78	78	78	
" Height of Floors at the Bilges	45	10	45	10	45	10	
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	8	3	10	8	3	10	
" in Engine and Boiler space	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
Remainder in Holds	25	25	25	25	25	25	
BEAMS, Upper Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
" Angles on upper edge	25	25	25	25	25	25	
" Spacing	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
BEAMS, Middle Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
" Angles on upper edge	25	25	25	25	25	25	
" Spacing	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
" Angles on upper edge	25	25	25	25	25	25	
" Spacing	8 1/2	3 1/2	11	8 1/2	3 1/2	11	
BEAMS, Hold, or Orlop, Plate or Tee Bulb	9	3 1/2	11	9	3 1/2	11	
" Angles on upper edge	50	50	50	50	50	50	
" Spacing	6 1/2	3	9	6 1/2	3	9	
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb	6 1/2	3	9	6 1/2	3	9	
" Angles on upper edge	25	25	25	25	25	25	
" Spacing	25/8	50	25/8	50	25/8	50	
PILLARS, In 'tween Deck, size and spacing	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	
" Hold	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	15" 6 1/2"	
" Quarter 'tween Dks., in Hold	7	6 spaces	7	6 spaces	7	6 spaces	
WEB-FRAMES, In Fore Body, No. and spacing	4	15	10	4	15	10	
" No. of Side Stringers	15	10	15	10	15	10	
WEB-FRAMES, In E. & A. Space, No. & spacing	24	10	24	10	24	10	
" No. of Side Stringers	6.8 spaces	6.8 spaces	6.8 spaces	6.8 spaces	6.8 spaces	6.8 spaces	
WEB-FRAMES, In After Body, No. and spacing	24	10	24	10	24	10	
" No. of Side Stringers	6 1/2	4 1/2	14	6 1/2	4 1/2	14	
Size of Angles or Tee Bars to Web-Frames	6 1/2	4 1/2	14	6 1/2	4 1/2	14	
BRACKET PLATES to Stringers between Web Frames, depth and thickness	24	10	24	10	24	10	

KEELSONS & STRINGERS.			
CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate	6 1/2	4 1/2	14
" Rider Plate	6 1/2	4 1/2	14
" Bulb Plate to Intercoastal Keelson	6 1/2	4 1/2	14
" Horizontal Plates on Floors	6 1/2	4 1/2	14
" Angles	6 1/2	4 1/2	14
SIDE KEELSON, Angles	6 1/2	4 1/2	14
" Bulb or Plate above floors, for length	6 1/2	4 1/2	14
" Intercoastal Plate, for length	6 1/2	4 1/2	14
" Attached to outside Plating with Angle	6 1/2	4 1/2	14
BILGE KEELSON, Angles	6 1/2	4 1/2	14
" Bulb or Plate above floors, for length	6 1/2	4 1/2	14
" Intercoastal Plate for length	6 1/2	4 1/2	14
" Attached to outside Plating with Angle	6 1/2	4 1/2	14
BILGE STRINGER Angles	6 1/2	4 1/2	14
" Bulb Plate for length	6 1/2	4 1/2	14
" Intercoastal Plate for length	6 1/2	4 1/2	14
" Attached to outside Plating with Angle	6 1/2	4 1/2	14
4 SIDE STRINGERS Angles	6 1/2	4 1/2	14
" Bulb or Intercoastal Plate, for whole lng.	6 1/2	4 1/2	14
" Attached to outside plating with Angle	6 1/2	4 1/2	14
Upper Deck Stringer Plates, br'dth & thickness	6 1/2	4 1/2	14
" Angle on ditto	6 1/2	4 1/2	14
" Tie Plates, outside Hatchways	6 1/2	4 1/2	14
" Deck * Iron or Steel, for whole lng.	6 1/2	4 1/2	14
" Wood Deck, Material & thickness	6 1/2	4 1/2	14
Middle Deck Stringer Plate, br'dth & thickness	6 1/2	4 1/2	14
" Angles on ditto, No. 2	6 1/2	4 1/2	14
" Tie Plates outside Hatchways	6 1/2	4 1/2	14
" Diagonal Tie Plates, No. of pairs	6 1/2	4 1/2	14
" Deck * Iron or Steel, for whole lng.	6 1/2	4 1/2	14
" Wood Deck, Material & thickness	6 1/2	4 1/2	14
Lower Deck Stringer Plate, br'dth & thickness	6 1/2	4 1/2	14
" Angles on ditto, No. 2	6 1/2	4 1/2	14
" Tie Plates, outside Hatchways	6 1/2	4 1/2	14
" Deck * Material and thickness, Steel	6 1/2	4 1/2	14
Hold, or Orlop Stringer Plate, br'dth & thckn's	6 1/2	4 1/2	14
" Angles on ditto, No.	6 1/2	4 1/2	14
" Tie Plates outside Hatchways	6 1/2	4 1/2	14
" Deck, Material and thickness	6 1/2	4 1/2	14
Poop Deck Stringer Plate, breadth & thickness	6 1/2	4 1/2	14
" Angle on ditto	6 1/2	4 1/2	14
" Tie Plates	6 1/2	4 1/2	14
" Deck, Material and thickness, O.P.	6 1/2	4 1/2	14
Bridge Deck Stringer Plate, br'dth & thickness	6 1/2	4 1/2	14
" Angle on ditto	6 1/2	4 1/2	14
" Tie Plates	6 1/2	4 1/2	14
" Deck, Material and thickness, Steel	6 1/2	4 1/2	14
Forecastle Deck Stringer Plate, b'dth & th'kns	6 1/2	4 1/2	14
" Angle on ditto	6 1/2	4 1/2	14
" Tie Plates	6 1/2	4 1/2	14
" Deck, Material and thickness, Steel	6 1/2	4 1/2	14

STIFFENERS.			
BULKHEADS.	Number in Vessel	Thickness	Single or Double Frames
W. T. BULKHEADS	7	8-7	Double Up. Bk.
PARTITION	1		
LONGITUDINAL			

Are the outside Plates doubled two spaces of Frames in length? **yes**
Are the Sluice Valves and Watertight Doors in efficient working order? **yes**

PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		UPPER EDGES.				BUTTS.								
	AMIDSHIP.		FORWARD.		AFT.		Ordinary or Joggled?		RIVETS.		DOUBLE OR TREBLE.		RIVETS.		IF LAPPED.				
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Single or Double.	Breadth of Lap.	Diam.	Spacing or to cr.	Diam.	Spacing or to cr.	Breadth.	Thickness.	Breadth.	For what Length.			
FLAT PLATE KEEL (If Bar Keel, state Riveting.)	36	18	14	18	36	18	Double	6 3/4	1 1/2	4	Y. whole	1 1/2	3 1/2	2 1/2	6 1/4	-	-		
GARBOARD OR A STRAKE	48	14	13	14	48	14	"	6	1	4	"	1	3 1/2	-	-	10 1/2	N.		
B "	46	12	10	14	46	12	"	5 1/2	7/8	3 1/2	"	"	3 1/2	-	-	9	"		
C "	54	12	10	14	54	12	"	"	"	"	"	"	"	-	-	"	"		
D "	46	12	10	14	46	12	"	"	"	"	"	"	"	-	-	"	"		
E "	48	12	10	14	48	12	"	"	"	"	"	"	"	-	-	"	"		
F "	46	13	10	15	46	13	"	"	"	"	"	"	"	-	-	"	"		
G "	46	13	11	15	46	13	"	"	"	"	"	"	"	-	-	"	"		
H "	54	13	10	15	54	13	"	"	"	"	"	"	"	-	-	"	"		
J "	46	13	10	13	46	13	"	"	"	"	"	"	"	-	-	"	"		
K "	53	13	10	13	53	13	"	"	"	"	"	"	"	-	-	"	"		
L "	45	13	10	13	45	13	"	"	"	"	"	"	"	-	-	"	"		
M "	54	13	10	13	54	13	"	"	"	"	"	"	"	-	-	"	"		
N "	46	13	10	10	46	13	"	"	"	"	"	"	"	-	-	"	"		
O "	54	13	10	10	54	13	"	"	"	"	"	"	"	-	-	"	"		
P "	46	14	11	11	46	14	"	"	"	"	"	"	"	-	-	"	"		
Q "	54	12			54	12	"	5 1/2	7/8	3 1/2	"	1	3 1/2	-	-	10 1/2	"		
R "	51	13			51	13	"				Quad.	7/8	3 1/2	-	-	12	"		
S "																			
DOUBLING OF FLAT PLATE KEEL	1/2 in. 14/20																		
Length of Bilges	23 ft. ends of bridge 15/20																		
Thickness of Sheerstrakes	8/20																		
Thickness of Strake below	13/20																		
POOP SIDES	8/20																		
BRIDGE SIDES	13/20																		
FORECASTLE SIDES	8/20																		

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.?
Siemens Marten.
Palmer, Consett, Colville, Beardmore
Dorman Long, Consett, South Durham.
John Hill.
 Has the Steel been tested as required by the Rules? *yes.*

FRAMES extend in one length from *Centre to Margin & Margin to Upper Prop. Bridge & Table*. State if ordinary or joggled *ordinary.*
 REVERSED FRAMES on floors and frames extend from *Centre to Margin, Margin to Upper Prop. & Table*. State if ordinary or joggled *ordinary.*
 If the S. angle alternately. *Off peak, all up. S. & T. to Margin & Table & alternately.*

MASTS, SPARS, &c.												
	Material.	Total Length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.		
			At Partners.	Heel.	Hoists.	Head.		Number.	Size.	Seams.	Butts.	
LOWER MASTS.....	Fore	<i>Steel</i>	<i>90</i>	<i>27 x 8 1/2</i>	<i>21 x 8</i>	<i>19 1/2 x 7</i>	<i>17 1/2 x 6</i>	<i>2</i>	<i>4</i>	<i>5 1/2 x 10</i>	<i>Single</i>	<i>Y. & D.</i>
	Main	<i>"</i>	<i>90</i>	<i>25 1/2 x 9 1/2</i>	<i>21 1/2 x 8</i>	<i>18 1/4 x 7</i>	<i>18 1/2 x 6</i>	<i>2</i>	<i>3</i>	<i>3 x 3 x 7</i>	<i>"</i>	<i>" " "</i>
	Mizen.....	<i>"</i>										
Bowsprit.....												
Topmasts, Yards and Remainder of Spars..... <i>Wood</i> .												
Rigging, Material and Size, Shrouds <i>4 at 4" steel wire</i>												
Sails, <i>one</i> Suit of Sails, and the following spars <i>Stays 4" steel wire</i>												

EQUIPMENT No. 48670 LETTER Z										ANCHORS.									
Number of Certificate.	Anchors.	WEIGHT, EX STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY TABLE 22.			Description of Anchor.	Makers.	Where and when tested and Superintendent.			
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.	qrs.				lbs.		
62480	1st Bower	64	0	14	50	12	2	0	63	3	0	Halls C.S. head.	Ningloy	Rutherford 7/6/09	Gunn				
62481	2nd "	64	0	14	"	"	"	"	63	3	0	" " "	"	"	"				
62482	3rd "	54	3	3	"	"	"	"	64	2	0	" " "	"	"	"				
	4th "																		
	Collective weight	183	0	3					182	0	0								
62487	Stream	18	0	1	4	2	7	19	2	0	21	17	2	0	Iron Stock	" 15/6/09 "			
62488	Kedge	7	2	1	2	0	3	9	15	3	21	7	2	0	" "	" " "			
If Patent state Name of Patentee.																			

CHAIN CABLES.											HAWSERS AND WARPS						
Number of Certificate.	Length and size supplied.		Test per Certificate. Statue. Tons. Ings.	WEIGHT OF CHAIN CABLE.		Length and Size per Table 22.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and Size supplied.		Breaking Test of Steel Wire Towline.	Length and Size per Table 22.		
	Length.	Diam.		Supplied.	Per Table 22.	Length.	Diam.					Length.	Cir.		Length.	Cir.	
43495	135	2 1/4	11220	27	5	241	0.24	Steel	Ningloy	Rutherford 7/6/09	TOWLINE & WIRE HAWSERS & WARPS	130	8	62.75	120	8	
43502	135	2 1/4	"	"	"	342	0.16	270	2 1/4	"	"	90	8	"	90	8	
	270					683	1.12	682	1 1/2			90	8	"	90	8	
From Stream Cable Steel Wire	90	4 1/4	62.5					90	4 1/4	wire	Smith	Sheffield	90	7	90	7	

Boats *7 Life. 1 Dingy*
 Pumps, Number *12* Diameter of Barrel *6 1/2* State whether they are in efficient working order *yes.*
 Windlass is *Steam. Milton Keir.* Capstan *Steam. Milton Keir.*
 Engine Room Skylights.—How constructed? *Steel & bulls eyes.*
 What arrangements for deadlights in bad weather? *None.*
 Coal Bunker Openings.—How constructed? *Steel coaming.* How are lids secured? *Iron bands.* Height above deck? *2 1/2 above 1/2 Dk.*
 Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. *3 each side fore & aft. 4 each side fore & aft. 3-9 x 1-3*
 Ceiling in Holds, thickness and material *2 1/2 Pine* Cargo Battens, thickness and material *2 Pine*
 Cargo Hatchways.—How formed? *Steel coamings & solid covers* Hatches, If strong and efficient? *yes.*
 State size No. 1 Hatch (Forward) *28 x 16* No. 2 Hatch *27 x 16* No. 3 Hatch *21 x 16* No. 4 Hatch *21 x 16*
 Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch *2 Web & 3 fore & afters to each Hatch*
 No. of Breasthooks *7* No. of Crutches *3*
 Bulwarks, height above deck and description *Steel 4'-0" 6" bulb stays 6" apart* Main Rail, material and size *6" Lysae bar*
 The above is a correct description of the above works.
 Builder's Signature (Here only) *J. Smith* Surveyor's Signature *G. D. Aitken*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1B.

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case).
M. 22 Oct 07. M. 30 Oct 07. M. 7 Dec 07.

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. 23, par. 24)? *yes.* State results of tests *Satisfactory*
 Have all the gutterways been tested as required by the Rules (Sec. 23, par. 25)? *yes.* State results of tests *Satisfactory*
 General Remarks (State quality of workmanship, &c.)

The workmanship & materials are good.

This vessel has been built in accordance with the approved plans, and in conformity with the Rules for the class contemplated.

Plans of Sections, Profiles & decks, also Fittings are being sent under separate cover.

Not a sister vessel.
 The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *34.3* ft., R.Q.D. or Break *-* ft., Bridge Dk. *15.2* ft., Forecastle *44.2* 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 it should appear in the Register Book) *2 Sts (S&T) & 4 up framing & 100 frames & 100 in fore hold.*
 Official No. *13084*; Signal Letters *LMHJ* State if Machinery is fitted aft *Yes.*
 How are the surfaces preserved from oxidation? Inside *Paint & Amal.* Outside *Paint.*

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

Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	131	370	Fore peak tank,	22.5	122
Double bottom, under Engines and Boilers,	79	298	After peak tank,	10.5	39
Double bottom, if under Engines only,	✓		Deep tank, aft, of Engines	36.5	565
Double bottom, if under Boilers only,	✓		Deep tank, forward,	✓	
Double bottom, forward,	157	402	Other tanks, if fitted,	✓	
Total capacity		1070	(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	No.	Where and when tested and Superintendent.
1709	Feb. 10. Mar. 2. 3. 10. 11. 17. 19. 22. 23. 25. 29. 30. Apr. 2. 8. 7. 10. 15. 19. 21. 22. May. 3. 4. 5. 6. 7. 10. 11. 12. 13. 14. 15. 18. 20. 21. 22. 24.	200	in builders yard.

The amount of Entry Fee ... £ 5 : : Fees applied for, 19
 Special Survey Fee ... £ 25 : : Received by me, 19
 Travelling Expenses, if any £ : :
 State whether the Vessel has been built under Special Survey *yes.*
 I am of opinion this Vessel should be Classed *+100 A.L.*
 With, or without Freeboard, as condition of Class *without*

Committee's Minute
 Character assigned
 Surveyor to Lloyd's Register of British and Foreign Shipping.

G. D. Aitken
 Surveyor to Lloyd's Register of British and Foreign Shipping.
 10081
 Lloyd's Reg. + hmc 4. 10
 M.