

IRON SHIP.

13378

No. 10956 Survey held at Sunderland Date, First Survey March 20th 1874 Last Survey September 29th 1874

On the Ship "Waimate" Yard Number 34 Master Mc 19/1/74

Official Number

TONNAGE under Tonnage Deck } 2016.20
 Ditto of Third, Spar, or Awning Deck }
 Ditto of Poop, or Raised Qr. Dk. } 91.86
 Ditto of Houses on Deck } 14.96
 Ditto of Forecastle } 3.3.71
 Gross Tonnage } 1156.73
 Less Crew Space } 32.95
 Less Engine Room }
 Register Tonnage as cut on Beam } 1123.78

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 17.45
 DEPTH from upper part of Keel to top of Upper Deck Beams 22.95
 GIRTH of Half Midship Frame (as per Rule) 35.48
 1st NUMBER 75.88
 1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet
 LENGTH 208.75
 2nd NUMBER 15839
 PROPORTIONS—Breathths to Length 5
 Depths to Length—Upper Deck to Keel 9
 Main Deck ditto

Built at Sunderland
 When built 1874 Launched Augst 74
 By whom built Messrs. Blumer & Co.
 Owners New Zealand Shipping Co.
 Port belonging to London
 Destined Voyage New Zealand via London
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 208 9 BREADTH—Moulded ... 34 11 DEPTH top of Floors to Upper Deck Beams ... 20 11 Power of Engines ... — Horse ... — N^o. of Decks with flat laid two N^o. of Tiers of Beams two

Dimensions of Ship per Register, length, 219.7 breadth, 35.1 depth, 20.75

	Inches in Ship.			Inches per Rule.		
	Inches	Inches	16ths	Inches	Inches	16ths
KEEL, depth and thickness	9	2 1/16	8	8 1/2	2 1/2	2
STEM, moulding and thickness	8	2 1/2	8	8	2 1/2	8
STERN-POST for Rudder do. do.	8	2 1/2	8	8	2 1/2	8
Distance of Frames from moulding edge to moulding edge, all fore and aft	23 in (Class 100A)					
FRAMES, Angle Iron, for 3/4 length amidships	4 1/2	3	8	4 1/2	3	8
Do. for 1/4 at each end	4 1/2	3	7	4 1/2	3	7
REVERSED FRAMES, Angle Iron	3	3	7	3	3	7
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	—	2 3/4	9	—	2 3/4	9
thickness at the ends of vessel	—	—	7	—	—	7
depth at 3/4 the half-bdth. as per Rule	—	11	—	—	11 3/4	—
height extended at the Bilges	to a fair taper					
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	8	8	—	8	8
Single or double Angle Iron on Upper edge	3	3	6	3	3	6
Average space	alternate frames					
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	—	—	—	—
Single, or double Angle Iron, on Upper Edge	—	—	—	—	—	—
Average space	—					
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	8 1/2	8	—	8 1/2	8
Single or double Angle Iron on Upper Edge	3	3	6	3	3	6
Average space	alternate frames					
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	—	—	8	—	—	8
Rider Plate	—	7	7	Bulb	8	8
Bulb Plate to Intercostal Keelson	—	—	—	—	—	—
Angle Irons	5	3 1/2	9	5	3 1/2	9
Double Angle Iron Side Keelson	5	3 1/2	9	5	3 1/2	9
Side Intercostal Plate	—	—	8	—	—	8
do. Angle Irons	—	—	—	—	—	—
Attached to outside plating with angle iron	not required					
BILGE Angle Irons	5	3 1/2	9	5	3 1/2	9
do. Bulb Iron	—	7	7 for 65 feet	—	—	—
do. Intercostal plates riveted to plating for length	as compensation for floor being 3/4 inch shallow at this part.					
BILGE STRINGER Angle Irons	5	3 1/2	9	5	3 1/2	9
Intercostal plates riveted to plating for length	—					
SIDE STRINGER Angle Irons	—	—	—	—	—	—

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	—	—	—	—
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	30	11	30	11
fm up. part of Bilge to lr. edge of Sh'rstrake	—	—	—	—
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	40	12	40	12
Up. or Spar Dk Sh'rstrake, brdth & thickness	—	—	—	—
Butt Straps to outside plating, breadth & thickness	2 1/2	8	2 1/2	8
Lengths of Plating	6 spaces			
Shifts of Plating, and Stringers	2 x 3 spaces			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	42	9	42	9
Angle Iron on ditto	4	3 1/2	4	3 1/2
Tie Plates fore and aft, outside Hatchways	10	9	10	9
Diagonal Tie Plates on Beams No. of Pairs	Nil			
Planksheer material and scantling	Gutter gunwale			
Waterways do. do.	—			
Flat of Upper Deck do. do.	4 J. Pins 4 in			
How fastened to Beams	Screw bolts & nuts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	—	—	—	—
Is the Stringer Plate attached to the outside plating?	—			
Angle Irons on ditto, No.	—	—	—	—
Tie Plates, outside Hatchways	—	—	—	—
Diagonal Tie Plates on Beams, No. of pairs	—	—	—	—
Waterways materials and scantlings	—	—	—	—
Flat of Middle Deck do. do.	—	—	—	—
How fastened to Beams	—	—	—	—
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	27	8	27	8
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	4	4	4	4
Stringer or Tie Plates, outside Hatchways	10	8	10	8
Flat of Lower Deck	3	in	3	in
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2	in	2 1/2	in
Main piece of Rudder, diameter at head do. at heel	5 1/2	—	5 1/2	—
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 1 Thickness of	—	—	—	—
Height up	Upper deck			
How secured to sides of ship	Between double frames			
Size of Vertical Angle Irons and distance apart	3	3	3	3
Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight heads. Hawse Timbers. Iron

Windlass Garfield Baxter Pall Bitt Iron

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 3 1/2 apart.

The REVERSED ANGLE IRONS on floors and frames extend near middle line to lower deck stringer and to Gunwale alternately

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 1/16 in. diameter, averaging 5 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 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 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 — length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.

Breadth of laps of plating in double riveting 4 1/2 to 5 Breadth of laps of plating in single riveting Nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double & treble throughout

Waterway, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Spaced across ends & riveted No. of Breasthooks, 5 Crutches, 49

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles by Hutton & Co. Plates by the Sherrin Iron works Co. Darlington

Manufacturer's name or trade mark, Sherrin Iron works Co. Darlington

The above is a correct description.

Builder's Signature, John Blumer & Co. Surveyor's Signature, James ...

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 very well
 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? 2 very few 13378 Iron

Masts, Bowsprit, Yards, &c., are of 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 Please see sketch attached to report

No. 10889. She is a sister vessel to the Waitangi recently built for the same owners.

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Lngh. & Size req'd pr Rule	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain ...	137	1 3/4	55 2/20	270-1 1/2	55 2/20	Bowers ...	1	310.0	29.7.2.0	30.0.0	28 1/2
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	135	1 3/4	55 2/20			(State Machine where Tested, Date, and name of Superintendent.)	1	30.3.8	29.5.2.0		
	Fore Topmast Stay Sails	Chain of 77 3/20 tons marked L.P.H.N. signed M. K. Reade. dated 10/9/16						(State Machine where Tested, Date, and name of Superintendent.)	1	25.2.2	25.6.3.0	25.2.0	25 1/2
	Main Sails,	Hmpn Strm Cbl	90	1 5/8				Stream ...	1	12.0.0		12.0.0	
	Main Top Sails,	Hawser Chain	90	1 5/8				Kedges ...	1	6.0.0		6.0.0	
	and	Towlines	90	1 5/8						3.0.0		3.0.0	
		Warp ...	90	1 5/8									
		quality <u>good</u>											

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has two Long Boats and 4 others

The Windlass is good Capstan good and Rudder good Pumps good

Engine Room Skylights.—How constructed? good How secured in ordinary weather? good

What arrangements for deadlights in bad weather? good

Coal Bunker Openings.—How constructed? good How are lids secured? good Height above deck? good

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? 5 Ports & 3 Scuppers on each side

Cargo Hatchways.—How formed? Iron plate comings & Headledges

State size Main Hatch 15' 2" x 10' 10" x 16' 6" high Forehatch 5' 6" x 4' 9" x 2 feet high Quarterhatch 5' 6" x 4' 9" x 2 feet high

If of extraordinary size, state how framed and secured? good

What arrangement for shifting beams? good

Hatches, If strong and efficient? Yes

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
2147	10 th January 1874			34		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped

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

This vessel is constructed with a full Poop about 44 1/2 feet in length, and Top-gallant Forecastle about 34 feet 6 inches in length; in lieu of the Bulb plate at the centre line keelson, a plate 8 x 7/16 is fitted, with double angle Iron on the upper edge 3 x 3 x 7/16, & a rider plate 7 x 7/16; two pairs of diagonal plates are fitted upon the lower deck beams in way of the Fore and Main Mast partners, & a double angle Iron stinger between deck 3 x 3 x 7/16 fitted all fore & aft; a donkey boiler is fitted on deck for condensing purposes, & for working the Steam winch, and the material & workmanship are good & satisfactory.

Several of the floor plates, amidships, at 3/4 the half breadth, are rather shallow; to compensate for which, Bulb plates 7 x 7/16 for about 6.5 feet in length, have been fitted between the Bilge Keelson angles, and which has been accepted by the owner.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecastle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Portland cement to upper timbers Outside 3 coats of paint & 100 A T of bilges and plating above one of Tallow

I am of opinion this Vessel should be Classed 100 A T

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,

Special ... £ 3 : 2 : 0 15 October 1874

Certificate ... HM

(Travelling Expenses) (if any) £

Committee's Minute 20th October 1874

Character assigned 100 A

This vessel appears eligible to be classed as recommended by Register 100 A. 1. 2 decks