

IRON SHIP.

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 19/11/74

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 } 1123.78
as cut on Beam }

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 68.88
LENGTH 208.75
2nd NUMBER 15839
PROPORTIONS—Breadths to Length 5
Depths to Length—Upper Deck to Keel 9
Main Deck ditto 9

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
X 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

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 x 2 1/16	8 1/2 x 2 1/2	FLAT KEEL PLATES, breadth and thickness	30	11
STEM, moulding and thickness	8 x 2 1/2	8 x 2 1/2	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	30	11
STERN-POST for Rudder do. do.	8 x 2 1/2	8 x 2 1/2	of doubling at Bilge, or increased thickness, and length applied	30	11
for Propeller	23 in.	23 in.	fm up. part of Bilge to l. edge of Sh'rstrake	30	11
Distance of Frames from moulding edge to moulding edge, all fore and aft	23 in.	23 in.	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	40	12
FRAMES, Angle Iron, for 3/4 length amidships	4 1/2 x 3 8	4 1/2 x 3 8	Up. or Spar Dk Sh'rstrake, brdth & thickness	40	12
Do. for 1/4 at each end	4 1/2 x 3 7	4 1/2 x 3 7	Butt Straps to outside plating, breadth & thickness	42	9
REVERSED FRAMES, Angle Iron	4 1/2 x 3 7	4 1/2 x 3 7	Lengths of Plating	42	9
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	3 1/2 x 9	3 1/2 x 9	Shifts of Plating, and Stringers	42	9
thickness at the ends of vessel	3 1/2 x 9	3 1/2 x 9	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	42	9
depth at 3/4 the half-bdth. as per Rule	3 1/2 x 9	3 1/2 x 9	Angle Iron on ditto	42	9
height extended at the Bilges	3 1/2 x 9	3 1/2 x 9	Tie Plates fore and aft, outside Hatchways	42	9
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3 6	3 x 3 6	Diagonal Tie Plates on Beams No. of Pairs	42	9
Single or double Angle Iron on Upper edge	3 x 3 6	3 x 3 6	Planksheer material and scantling	42	9
Average space	3 x 3 6	3 x 3 6	Waterways do. do.	42	9
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3 6	3 x 3 6	Flat of Upper Deck do. do.	42	9
Single, or double Angle Iron, on Upper Edge	3 x 3 6	3 x 3 6	How fastened to Beams	42	9
Average space	3 x 3 6	3 x 3 6	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	42	9
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3 6	3 x 3 6	Is the Stringer Plate attached to the outside plating?	42	9
Single or double Angle Iron on Upper Edge	3 x 3 6	3 x 3 6	Angle Irons on ditto, No.	42	9
Average space	3 x 3 6	3 x 3 6	Tie Plates, outside Hatchways	42	9
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	3 x 3 6	3 x 3 6	Diagonal Tie Plates on Beams, No. of pairs	42	9
Rider Plate	3 x 3 6	3 x 3 6	Waterways materials and scantlings	42	9
Bulb Plate to Intercoastal Keelson	3 x 3 6	3 x 3 6	Flat of Middle Deck do. do.	42	9
Angle Irons	3 x 3 6	3 x 3 6	How fastened to Beams	42	9
Double Angle Iron Side Keelson	3 x 3 6	3 x 3 6	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	42	9
Side Intercoastal Plate	3 x 3 6	3 x 3 6	Is the Stringer Plate attached to the outside plating?	42	9
do. Angle Irons	3 x 3 6	3 x 3 6	Angle Irons on ditto, No.	42	9
Attached to outside plating with angle iron	3 x 3 6	3 x 3 6	Stringer or Tie Plates, outside Hatchways	42	9
BILGE Angle Irons	3 x 3 6	3 x 3 6	Flat of Lower Deck	42	9
do. Bulb Iron	3 x 3 6	3 x 3 6	Ceiling betwixt Decks, thickness and material in hold do. do.	42	9
do. Intercoastal plates riveted to plating for length	3 x 3 6	3 x 3 6	Main piece of Rudder, diameter at head do. at heel	42	9
BILGE STRINGER Angle Irons	3 x 3 6	3 x 3 6	Can the Rudder be unshipped afloat?	42	9
Intercoastal plates riveted to plating for length	3 x 3 6	3 x 3 6	Bulkheads No. 1 Thickness of	42	9
SIDE STRINGER Angle Irons	3 x 3 6	3 x 3 6	Height up	42	9

Transoms, material. Knight heads. Hawse Timbers. Iron
Windlass Harfield & 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 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 3/4 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 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 1/2 length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 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? Secured down ends & rivetted 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 Stockton & Co. & Plates by the Skerries Iron works Co. & Barlington
Manufacturer's name or trade mark, John Comp. & Co.

The above is a correct description.
Builder's Signature, John Blumer & Co. Surveyor's Signature, James Blumer

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		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.
N ^o .	SAILS.	CABLES, &c.	137	1 3/4	55 2/20	270-1 1/2	55 2/20	1	310.0	29.7.2.0	30.0.0	28 1/2
	Fore Sails,	Chain ...	135	1 3/4	55 2/20	270-1 1/2	Bowers ...	1	30.3.8	29.5.2.0		
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	3 links of each 15 fathoms tested to breaking (State Machine where Tested, Date, and name of Superintendent.)									
	Fore Topmast Stay Sails	Hmpn Strm Cbl	Chain of 77 3/20 tons marked L.P.H.N. & signed M. K. Reade. dated 10 th 16 th Sept ^r 1874									
	Main Sails,	Hawser Chain	90	1 1/2			Stream ...	1	12.0.0		12.0.0	
	Main Top Sails,	Towlines	90	1 1/2			Kedges ...	1	6.0.0		6.0.0	
	and	Warp ...	90	1 1/2					3.0.0		3.0.0	
		quality <u>good</u>										

Standing and Running Rigging Wire & Chain 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? How secured in ordinary weather?

What arrangements for deadlights in bad weather? How secured in ordinary weather?

Coal Bunker Openings.—How constructed? How are lids secured? Height above deck? How secured in ordinary weather?

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 coverings & Headledges

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

If of extraordinary size, state how framed and secured? How secured in ordinary weather?

What arrangement for shifting beams? How secured in ordinary weather?

Hatches, If strong and efficient? How secured in ordinary weather?

Order for Special Survey No. <u>244</u>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<u>Built under S. Sand Surveyed 1874 March 20 24 28 31 April 7 11 15 18 22 24 27</u>
Date <u>10th January 1874</u>		2nd. On the plating during the process of riveting	<u>29 March 2 4 12 14 16 19 22 27 29 June 7 11 13 17 20 22 25 July 6 8 10 16 22 24 28 29 August 2 7 10</u>
Order for Ordinary Survey No. <u>34</u>		3rd. When the beams were in and fastened, and before the decks were laid....	<u>22 25 26 28 29 Sept 1 4 10 11 14 23 25 29</u>
Date <u>10th January 1874</u>		4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. <u>34</u> in builder's yard.		5th. 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 in length; in lieu of the Bulb plate at the centre line Keelson, a plate 8 x 3/16 is fitted, with double angle Irons 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 open 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. I. of bilges and paint above one of Lallow

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

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

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

(Travelling Expenses)
(if any) £

Committee's Minute 20th October 1874

Character assigned 100 A. I.

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