

# IRON SHIP.

No. 1044 Survey held at Sunderland Date, First Survey September 2<sup>nd</sup> Last Survey December 17<sup>th</sup> 1873

On the Sailing Ship "Rakara" Yard Number 30 Master Henry Rose

TONNAGE under 892.55

Tonnage Deck 105.77

Ditto of Third, Spar, or Awaiting Deck 20.38

Ditto of Poop 38.30

Ditto of Houses on Deck 1057.00

Gross Tonnage 35.31

Less Crew Space 1021.69

Less Engine Room

Register Tonnage as cut on Beam

~~ONE OR TWO DECKED, THREE DECKED VESSEL.~~

~~SEMI-OR TWINNING DECKED VESSEL.~~

HALF BREAth (moulded) 16.95

DEPTH from upper part of Keel to top of Upper Deck Beams 21.30

GIRTH of Main Midship Frame (as per Rule) 32.66

1st NUMBER 70.91

1st NUMBER if a THREE-DECKED VESSEL

deduct 1.15

LENGTH 198.75

2nd NUMBER 14093

PROPORTIONS—Breadths to Length 5

Depths to Length—Upper Deck to Keel 9

Main Deck ditto 2

Built at Sunderland

When built 1873 Launched 19 Nov 73

By whom built J. W. Plumer & Co.

Owners New Zealand Shipping Co.

Port belonging to London

Destined Voyage New Zealand

If Surveyed while Building, Afloat, & in Dry Dock.

LENGTH on deck as per Rule 198 Feet. 9 Inches. BREADTH—Moulded 33 Feet. 10 Inches. DEPTH top of Floors to Upper Deck Beams 19 Feet. 3 Inches. Do. do. Main Deck Beams 19 Feet. 3 Inches. Power of Engines — Horse. No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 210.2 breadth, 34 depth, 19.25

KEEL, depth and thickness 8 x 2 3/8 Inches in Ship. 8 x 2 3/8 Inches per Rule.  
STEM, moulding and thickness 7 1/4 x 2 3/8  
STERN-POST for Rudder do. do. 7 1/4 x 2 3/8  
for Propeller 23 in  
Distance of Frames from moulding edge to moulding edge, all fore and aft 23 in (Class 100 A)

FRAMES, Angle Iron, for  $\frac{1}{2}$  length amidships 4 1/2 3 7 4 1/2 3 7  
Do. for  $\frac{1}{2}$  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 22 9 22 9  
thickness at the ends of vessel 11 11  
depth at  $\frac{1}{2}$  the half-bdth. as per Rule 11  
height extended at the Bilges twice midships depth

BEAMS, Upper, Spar or Awaiting Deck 8 8 8 8  
Single or double Angle Iron, Plate or Tee Bulb Iron 3 3 6 3 3 6  
Average space alternate frames

BEAMS, Main or Middle Deck 8 8 8 8  
Single or double Angle Iron, Plate or Tee Bulb Iron 3 3 6 3 3 6  
Average space alternate frames

BEAMS, Lower Deck, Main or Upper 8 8 8 8  
Single or double Angle Iron, Plate or Tee Bulb Iron 3 1/2 3 6 3 3 6  
Average space alternate frames

KEELSONS Centre line, single or double plate, 7 7 7  
do. or Intercoastal, Plates 7 7 7  
" Rider Plate 7 7 7  
" Bulb Plate to Intercoastal Keelson 7 7 7  
" Angle Irons 5 3 7 full 5 3 1/2 7  
" Double Angle Iron Side Keelson 5 3 7 full 5 3 1/2 7  
" Side Intercoastal Plate 5 3 7 full 5 3 1/2 7  
" do. Angle Irons 5 3 7 full 5 3 1/2 7  
" Attached to outside plating with angle iron

BILGE Angle Irons 5 3 7 full 5 3 1/2 7  
" do. Bulb Iron 5 3 7 full 5 3 1/2 7  
" do. Intercoastal plates riveted to plating for length

BILGE STRINGER Angle Irons 5 3 7 full 5 3 1/2 7  
Intercoastal plates riveted to plating for length

SIDE STRINGER Angle Irons

Transoms, material. Knight heads. Hawse Timbers. Iron

Windlass Iron Pall Bitt Iron

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend near middle line to Lower deck stringers 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 1/4 in. diameter, averaging 5 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1 1/4 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1 1/4 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of two Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1 1/4 thicker than the plates they connect.

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

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

Edges of Main Sheerstrake, double 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 3/4 Breadth of laps of plating in single riveting —

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

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

Beams of the various Decks, how secured to the sides? Turned down ends and riveted to frame angles and other plates No. of Breasthooks, 5 Crutches, 4 & 1 transom

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs by J. Tyzack & Co.

Manufacturer's name or trade mark, Mates by Bolckow, Vaughan & Co.

The above is a correct description.

Builder's Signature, John Plumer & Co.

Surveyor's Signature, James Gibson

Lloyd's Register Foundation  
IRON 456 - 0018



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

Planned

12164 Iron

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?

A very few

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

NUMBER for EQUIPMENT 15002

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain ...	270	1 1/16	51 1/2	1 1/16	51 1/2	Bowers ...	1	27.3.14	27.0.2.14	27.3.0	26 1/2
	Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)	30	1 1/16	51 1/2	1 1/16	51 1/2	Stream ...	1	27.3.14	27.0.2.14	27.3.0	26 1/2
	Fore Topmast Stay Sails	Hempen Stream Cable	90	1 1/16	51 1/2	1 1/16	51 1/2	Kedges ...	1	24.3.0	24.0.2.14	24.2.10	23 1/2
	Main Sails,	Hawser chain	90	1 1/16	51 1/2	1 1/16	51 1/2						
	Main Top Sails,	Towlines	90	1 1/16	51 1/2	1 1/16	51 1/2						
		Warp ...	90	1 1/16	51 1/2	1 1/16	51 1/2						
		quality good											

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has 2 Long Boat and 4 others

The Windlass is Emerson & Mather's Capstan and Rudder good Pumps Metal & good

Engine Room Skylights.—How constructed?

How secured in ordinary weather?

What arrangements for deadlights in bad weather?

Coal Bunker Openings.—How constructed?

How are lids secured?

Height above deck?

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? 4 Ports & 3 Scuppers on each side

Cargo Hatchways.—How formed? Iron plate Comings and Headledges

State size Main Hatch 15' 6" x 11' 2" x 13' in deep Forehatch 5' 11" x 5' 6" x 24' in high Quarterhatch 6' 2" x 5' 12" x 24' in high

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? One shifting casing in main Hatchway

Hatches, If strong and efficient?

Yes

Order for Special Survey No. 2436

Date 18th September 1893

Order for Ordinary Survey No.

Date

No. 30 in builder's yard.

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. Built under J. S. Turner's 1893
- 2nd. On the plating during the process of riveting. Sep 2. 10. 12. 15. 17. 23. 25. 29 Oct 4. 6. 8. 10. 15. 17. 21. 24. 30 Nov 1.
- 3rd. When the beams were in and fastened, and before the decks were laid. 3. 4. 10. 12. 14. 17. 20. 25 Dec 1. 4. 9. 10. 11. 12. 15. 17
- 4th. When the ship was complete, and before the plating was finally coated or cemented.
- 5th. After the ship was launched and equipped.

General Remarks, This vessel is constructed with a full Poop 49' 10" in length, & altho not quite one-fourth the length of the vessel, I have prevailed upon the Builders to fit clamp plates 18 ins wide & 8/16 in thickness, between decks in way of the Poop front, for about 25 feet in length; and she has a top-gallant Forecastle about 25 feet in length. The Bulk plates to lower deck Beams are 1/2 inch less in depth than required by the rules, but the vertical flanges of the double angles on top of S. are 1/2 inch deeper than required; It will be seen that the angle iron's forming the Keelsons and Bilge stringers in hold are 5 x 3, in lieu of 5 x 3 1/2 as required by rule, and are scant 8/16 in thickness instead of 7/16, the Builders attention was directed to this, but as most of them were in the Yard, a few only have been rolled of the thickness marked on the tracing, namely 8/16.

The lands of the shell plating are double rivetted all fore and aft, & she has two panting Beams fitted abt the collision bulkhead, in addition to the usual deep hooks & Catches.

State if one, two or three decked vessel, or if spar or arming decked, and lengths of poop, fore-castle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Portland Cement to above upper turn Outside 3 Coats of paint and 1 Coat of Zinc & white lead up to load line

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 ... £ 50 : 11 : -

Certificate ...

(Travelling Expenses)

(if any) £

Committee's Minute 23rd Dec 1893

Character assigned 100 A. I.

This vessel approved for service by the Committee of Lloyd's Register of Shipping 23rd Dec 1893

