

IRON SHIP.

1543 Rev 29/11/70

No. 2030 Survey held at Newcastle Date, First Survey June 12th Last Survey Nov 3rd 1875

On the sailing ship "Hurunui" Master T. B. Boyd

TONNAGE under Tonnage Deck } <u>885.08</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third, Spar, or Awning Deck } <u>103.02</u>	SPAR, OR AWNING DECKED VESSEL.
Ditto of Poop } <u>25.84</u>	HALF BREADTH (moulded) <u>17.00</u> Feet.
Ditto of Houses on Deck } <u>40.41</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>22.20</u>
Ditto of Forecastle } <u>40.41</u>	GIRTH of Half Midship Frame (as per Rule) <u>33.93</u>
Gross Tonnage } <u>1054.35</u>	1st NUMBER <u>73.13</u>
Less Crew Space } <u>41.34</u>	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
Less Engine Room } <u>1013.01</u>	LENGTH <u>193.83</u>
Register Tonnage as cut on Beam } <u>1013.01</u>	2nd NUMBER <u>14174</u>
	PROPORTIONS—Breadths to Length <u>under 6</u>
	Depths to Length—Upper Deck to Keel <u>under 9</u>
	Main Deck ditto <u>—</u>

Built at Newcastle
 When built 1875 Launched 16th Sept^r
 By whom built Palmers S & Co. (Linn)
 Owners New Zealand Shipping Co.
 Port belonging to London
 Destined Voyage New Zealand
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ...	Feet. <u>193</u> Inches. <u>10</u>	BREADTH—Moulded ...	Feet. <u>34</u> Inches. <u>0</u>	DEPTH top of Floors to Upper Deck Beams ...	Feet. <u>20</u> Inches. <u>3 1/2</u>	Power of Engines ...	Horse. <u>—</u>	N ^o . of Decks with flat laid	<u>2</u>
				Do. do. Main Deck Beams ...				N ^o . of Tiers of Beams	<u>2</u>

Dimensions of Ship per Register, length, 204.1 breadth, 34.2 depth, 20.0

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness ...	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8
STEM, moulding and thickness ...	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8
STERN-POST for Rudder do. do. for Propeller ...	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8	7/4 x 2 3/8
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	23 in	23 in	23 in	23 in	23 in	23 in
FRAMES, Angle Iron, for 3/4 length amidships ...	5	3	8	5	3	8
Do. for 1/2 at each end ...	5	3	7	5	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 ...	23	9	23	9	23	9
thickness at the ends of vessel ...	7	7	7	7	7	7
depth at 3/4 the half-bdth. as per Rule ...	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2
height extended at the Bilges ...	46	46	46	46	46	46
BEAMS, Upper, Upper Deck Single or double Angle Iron, Plate or Bulb Iron ...	8	8	8	8	8	8
Single or double Angle Iron on Upper edge ...	3	3	6	3	3	6
Average space ...	alternate frame					
BEAMS, Main, or Middle Deck Forecastle Single or double Angle Iron, Plate or Bulb Iron ...	3 x 3 x 7/16	6 x 3 x 7/16	6 x 3 x 7/16	6 x 3 x 7/16	6 x 3 x 7/16	6 x 3 x 7/16
Single, or double Angle Iron, on Upper Edge ...	alternate frame					
Average space ...	alternate frame					
BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Bulb Iron ...	8	8	8	8	8	8
Single or double Angle Iron on Upper Edge ...	3	3	6	3	3	6
Average space ...	alternate frame					
KEELSONS Centre line, single or double plate, box or intercostal plates ...	14	11	14	11	14	11
" Rider Plate ...	11	11	11	11	11	11
" Bulb Plate to Intercostal Keelson ...	5	3 1/2	7	5	3 1/2	7
" Angle Irons ...	5	3 1/2	7	5	3 1/2	7
" Double Angle Iron Side Keelson ...	5	3 1/2	7	5	3 1/2	7
" Side Intercostal Plate Wash Plates ...	6	6	6	6	6	6
" do. Angle Irons ...	attached to outside plating with angle iron					
" Attached to outside plating with angle iron ...	attached to outside plating with angle iron					
BILGE Angle Irons ...	5	3 1/2	7	5	3 1/2	7
" do. Bulb Iron ...	attached to outside plating with angle iron					
" do. Intercostal plates riveted to plating for length ...	attached to outside plating with angle iron					
BILGE STRINGER Angle Irons ...	5	3 1/2	7	5	3 1/2	7
Intercostal plates riveted to plating for length ...	attached to outside plating with angle iron					
SIDE STRINGER Angle Irons ...	attached to outside plating with angle iron					

	Inches. In Ship.	16ths. In Ship.	Inches. required	16ths. required
Flat Keel Plates, breadth and thickness ...	34	10	34	10
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...	9	9	9	9
fm up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of plating at Sh'rstrake, & length applied from Main to Upper or Spar Deck Sh'rstrake. Upper Spar Deck Sh'rstrake, breadth & thickness ...	36	11	36	11
Butt Straps to outside plating, breadth & thickness	10 1/2	15 8/16	12 9/16	14 8/16
Lengths of Plating ...	12 feet	10 feet	Two frame spaces	
Shifts of Plating, and Stringers ...	Two frame spaces			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ...	40	9	40	9
Angle Iron on ditto ...	5 x 3 1/2	7	5 x 3 1/2	7
Tie Plates fore and aft, outside Hatchways ...	11	9	11	9
Diagonal Tie Plates on Beams, No. of Pairs, Plankboer material and scantling ...	Gutter waterway			
Waterways do. do. ...	Yellow Pine 4 in rut + screw bolts			
Flat of Upper Deck do. do. ...	rut + screw bolts			
How fastened to Beams Proop & Forecastle Deck Stringer Plate on ends of Proop & Forecastle Deck Beams, breadth and thickness ...	24	7	24	7
Is the Stringer Plate attached to the outside plating? ...	yes			
Angle Irons on ditto, No. 1 ...	3 1/2	3 x 7	3 1/2	3 x 7
Tie Plates, outside Hatchways ...	8	7	8	7
Diagonal Tie Plates on Beams, No. of pairs, Waterways materials and scantlings ...	Yellow Pine 3 in			
Flat of Middle Deck do. do. ...	rut + screw bolts			
How fastened to Beams ...	rut + screw bolts			
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ...	29	8	29	8
Is the Stringer Plate attached to the outside plating? ...	yes			
Angle Irons on ditto, No. 2 ...	3 1/2	3 1/2 x 8	3 1/2	3 1/2 x 8
Stringer or Tie Plates, outside Hatchways ...	11	8	11	8
Flat of Lower Deck ...	Yellow pine 3 in			
Ceiling betwixt Decks, thickness and material ...	13-Red wood 2 1/2 in			
in hold do. do. ...	13-Red wood 2 1/2 in			
Main piece of Rudder, diameter at head ...	5	5	5	5
do. at heel ...	3	3	3	3
Can the Rudder be unshipped afloat? ...	yes			
Bulkheads No. 1 Thickness of ...	9/16	9/16	9/16	9/16
Height up deck top ...	double frame			
How secured to sides of ship ...	double frame			
Size of Vertical Angle Irons 3 x 3 x 7/16 and distance apart ...	30 ins.			
Are the outside Plates doubled two spaces of Frames in length? ...	yes			

Transoms, material. Knight-heads. Hawse Timbers. Iron
 Windlass Emerson & Walker Pall Bitt C. 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 from middle line to Main and to Lower Deck 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 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 3/8 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 3/8 ins. from centre to centre.
 Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/16 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 3/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 3/8 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 amidships.
 Breadth of laps of plating in double riveting 4 1/4 Breadth of laps of plating in single riveting —

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? —
 Waterway, how secured to Beams riveted (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? solid knees riveted to frames No. of Breasthooks, 4 Crutches, 4
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Ordinary ship iron
 Manufacturer's name or trade mark, Palmers S & Co. (Linn) Hunter, Plates, Lowmoor

The above is a correct description.
 Builder's Signature, John P. Wilson Surveyor's Signature, Geo. Cooper
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 15431 From
 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
 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? few

Masts, Bowsprit, Yards, &c., are New to 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
 Main Mast Iron 45.6 x 24 Plates 7/16 to 9/16 - Stems double Butts triple
 Fore " 45.6 x 24 do. do. do. do.
 Mizzen R. Pine 69 x 21 do. 3/16 to 7/16 do. do.
 Bowsprit Iron 39 x 30 do. do. do. do.
 do. doubled & fitted with diaphragm plates 2' x 3/16 Butts straps on outside of masts and bowsprit in way of knight heads

Sketch of masts, stems, &c. as "Orari" Report No. 12964

NUMBER for EQUIPMENT 15119		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
N ^o . SAILS. Double cut of principal sails	CABLES, &c.	270	1 1/4	5 1/4	270 - 1 1/4	5 1/4	Bowers	1	27-3-4	26-19-2-21	27-3-0	26 1/2 20
	Chain			BS 71 3/4		BS 71 3/4		1	27-3-3	26-19-2-21	27-3-0	
	Fore Sails,							1	24-3-20	24 3/4	23-2-0	23 10 20
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,											
Main Top Sails,												
	Storm Cbl	90	1 5/8		90 - 1 5/8		Stream	1	11-1-6		11-0-0	
	Hawser	90	11		90-9		Kedges	1	5-2-0		5-2-0	
	Towlines	90	9		90-5 1/2							
	Warp	90	6 &c.									
	quality											

Standing and Running Rigging wire & rope sufficient in size and good in quality. She has one Long Boat and five others
 The Windlass is good Capstan good and Rudder good Pumps good & sufficient

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? Ports & Scuppers

Cargo Hatchways.—How formed? Plates and Angles

State size Main Hatch 15.4 x 10 Forehatch 4.8 x 6 Quarterhatch 4.8 x 8

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

What arrangement for shifting beams? Web plate and fore & after

Hatches, If strong and efficient? yes

Order for Special Survey No. 10848 Date 28 May 1875

Order for Ordinary Survey No. 324 in builder's yard. Date 13.16.27. Oct 1.8.11.20.26.29. Nov 1.3.

General Remarks (State quality of workmanship, &c.) This is a full rigged sailing ship built in accordance with the approved midsection (similar to "Orari" R. No. 12964)

She has full poop 58 ft long & Top fallant Forecastle 30 ft long - Scantlings as above -

Her lower & lower topsail Yards on fore & main mast, are of iron 9/16 to 7/16 thick, with lapped joints treble riveted.

She is provided with spare lower Yard, spare topmast top-fallant masts & jib-boom.

The Workmanship and material throughout are alike satisfactory.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.
 How are the surfaces preserved from oxidation? Inside Cement and paint Outside Paint & Compo.

I am of opinion this Vessel should be Classed + 100 A1.

The amount of the Entry Fee ... £ 5 : : : is received by me, F. Young
 Special Certificate ... £ 50 : : : 24 Nov 1875
 Certificate ...

(Travelling Expenses, if any, £ 2.2.0).
 Committee's Minute 30th November 1875

Character assigned 100 A1
JP A + E P
 This vessel appears eligible to be classed 100 A.1. as recommended by Lloyd's Register of Shipping. 29/11/75

I have taken the following particulars from the Logbook of the vessel "Orari" built at the yard of Messrs. ...