

IRON SHIP.

No. 13010 Survey held at Newcastle Date, First Survey April 15th Last Survey October 8th 1875On the "Otaki" sailing shipMaster A. Mc Innis

TONNAGE under Tonnage Deck } 885.08
Ditto of Third, Spar, or Awning Deck. }
Ditto of Poop, 103.02
Ditto of Houses } 24.91
on Deck }
Ditto of Forecastle } 40.41
Gross Tonnage } 1053.42
Less Crew Space } 39.49
Less Engine Room }
Register Tonnage } 1013.93
as cut on Beam }

ONE, OR TWO DECKED, ~~THREE DECKED~~ VESSEL.
~~SPAR, OR AWNING DECKED VESSEL.~~
HALF BREADTH (moulded)... .. 17.00
DEPTH from upper part of Keel to top of Upper Deck Beams 22.20
GIRTH of Half Midship Frame (as per Rule) 33.93
1st NUMBER 73.13
1st NUMBER, if a **THREE-DECKED VESSEL**
[deduct 7 feet]
LENGTH 193.83
2nd NUMBER 14144
PROPORTIONS—Breadths to Length under 6
Depths to Length—Upper Deck to Keel under 9
Main Deck ditto

Built at NewcastleWhen built 1875 Launched 19th Aug 75By whom built Palmer's S & Co. (Lm)Owners New Zealand Shipping Co.Port belonging to LondonDestined Voyage New Zealand

If Surveyed while Building, Afloat, or in Dry Dock

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

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.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 x 2 3/8	8 x 2 3/8	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	34	10	34	10				
STEM, moulding and thickness	4 1/2 x 2 3/8	4 1/2 x 2 3/8	of doubling at Bilge, or increased thickness, and length applied	9	9	9	9				
STERN-POST for Rudder do. do.	4 1/2 x 2 3/8	4 1/2 x 2 3/8	fin up. part of Bilge to lr. edge of Sh'rstrake	36	11	36	11				
Distance of Frames from moulding edge to moulding edge, all fore and aft	23 in.	23 in.	Main Sheerstrake, breadth and thickness	6	6	6	6				
			of doubling at Sh'rstrake, & length applied								
FRAMES, Angle Iron, for 1/2 length amidships	5 x 3	5 x 3	from Main to Upper or Spar Dk. Sh'rstrake								
Do. for 1/4 at each end	5 x 3	5 x 3	Up or Spar Dk. Sh'rstrake, breadth & thickness								
REVERSED FRAMES, Angle Iron	3 x 3	3 x 3	Butt Straps to outside plating, breadth & thickness	10 1/2	15	8	15	9 1/2	15	8	15
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	23 x 9	23 x 9	Lengths of Plating	12 feet	10 feet						
thickness at the ends of vessel	11 1/2	11 1/2	Shifts of Plating, and Stringers	Two frame spaces							
depth at 3/4 the half-bdth. as per Rule	46	46	Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness	40	9	40	9				
height extended at the Bilges	8 x 8	8 x 8	Angle Iron on ditto	5 x 3 1/2 x 4	5 x 3 1/2 x 4						
BEAMS, Upper, Spar, or Awning Deck	3 x 3	3 x 3	Tie Plates fore and aft, outside Hatchways	11	9	11	9				
Single or double Ang. Iron, Plate or Tee Bulb Iron			Diagonal Tie Plates on Beams No. of Pairs								
Single or double Angle Iron on Upper edge	3 x 3	3 x 3	Planksheer material and scantling								
Average space	alternate frame	alternate frame	Waterways do. do.	Quarter waterway							
BEAMS, Main or Middle Deck	3 x 3	3 x 3	Flat of Upper Deck do. do.	4. Pine 14 in							
Single or double Ang. Iron, Plate or Tee Bulb Iron			How fastened to Beams	nut & screw bolts							
Single, or double Angle Iron, on Upper Edge	3 x 3	3 x 3	Stringer Plate on ends of Main or Middle Deck	24 x 4							
Average space	alternate frame	alternate frame	Beams, breadth and thickness	Is the Stringer Plate attached to the outside plating?							
BEAMS, Lower Deck, Hold, or Orlop	8 x 8	8 x 8	Angle Irons on ditto, No. 1	3 1/2 x 3 x 4							
Single or double Ang. Iron, Plate or Tee Bulb Iron			Tie Plates, outside Hatchways	8 x 7							
Single or double Angle Iron on Upper Edge	3 x 3	3 x 3	Diagonal Tie Plates on Beams, No. of pairs								
Average space	alternate frame	alternate frame	Waterways materials and scantlings								
KEELSONS Centre line, single or double plate, box, or intercostal, plates	14 x 11	14 x 11	Flat of Middle Deck do. do.	4. Pine 3 in							
" Rider Plate	11 x 11	11 x 11	How fastened to Beams	nut & screw bolts							
" Butt Plate to intercostal Keelson	5 x 3 1/2	5 x 3 1/2	Stringer Plates on ends of Lower Deck, Hold, or Orlop Beams	29 x 8	29 x 8						
" Angle Irons	5 x 3 1/2	5 x 3 1/2	Is the Stringer Plate attached to the outside plating?	yes							
" Double Angle Iron Side Keelson	5 x 3 1/2	5 x 3 1/2	Angle Irons on ditto, No. 2	3 1/2 x 3 1/2 x 8	3 1/2 x 3 1/2 x 8						
" Side intercostal Plate	6	6	Stringer or Tie Plates, outside Hatchways	11 x 8	11 x 8						
" do. Angle Irons			Flat of Lower Deck	4. Pine 3 in							
" Attached to outside plating with angle iron			Ceiling betwixt Decks, thickness and material	13. Red wood 2 1/2 in							
BILGE Angle Irons	5 x 3 1/2	5 x 3 1/2	in hold do. do.								
" do. Butt Iron			Main piece of Rudder, diameter at head	5	5						
" do. Intercostal plates riveted to plating for length			do. at heel	3	3						
BILGE STRINGER Angle Irons	5 x 3 1/2	5 x 3 1/2	Can the Rudder be unshipped afloat?	yes							
Intercostal plates riveted to plating for length			Bulkheads No. 1 Thickness of	6/16							
SIDE STRINGER Angle Irons			Height up	Upper deck							

Transoms, material. Knight-heads. Hawse Timbers.

Windlass Emerson & Walker Pall Bitt C GunThe 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 Lower and to Main dk alternatelyKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? yes And butts properly shifted? yesPLATING. 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 1/8 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/8 ins. from centre to centre.Butts of 3 Strakes at Bilge for 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 1/8 ins. from cr. to cr.Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/8 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 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 1/4 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double 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 frame No. of Breasthooks, 4 Crutches, 4What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Ordinary ship ironManufacturer's name or trade mark, Palmer's S & Co. (Lm)

The above is a correct description.

Builder's Signature, John P. WilsonSurveyor's Signature, Geo P. Cooper

Surveyor to Lloyd's Register of British and Foreign Shipping.

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*

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*

15266 *Ln*

Masts, Bowsprit, Yards, &c., are *new* & in *fine* 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 44.6 x 24 Plate 7/16 to 5/8 Seams Double - Butts Triple
Fore " " 45.6 x 27 do do do do
Mizen " P. Pine 69 x 21 do 5/8 to 3/4 do do
Bowsprit Iron 34 x 30 do 5/8 to 3/4 do do
do doubled & fitted with diaphragm plate 12' x 9/16
in way of knightheads

Sketch of masts same as "Orari"
Butt straps on outside of masts & bowsprit.

NUMBER for EQUIPMENT		15119		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.							Bowers					
		Chain												
	Fore Sails,		270 1/2	1 1/4	57 1/2	270-1 1/4	51 1/2			1	27-3-16	27-1-2-7	27 3/4	26 1/2
	Fore Top Sails,		286 7/8	1 3/8	41 1/2	13.5	71 3/4			1	27-3-12	27-0-2-14	27 3/4	"
	Fore Topmast Stay Sails		286 7/8	1 3/8	41 1/2	13.5	71 3/4			1	23-3-0	23 7/8	23 1/2	23 1/2
	Main Sails,		90	1 1/2		90-15/16								
	Main Top Sails,		90	1 1/2		90-9								
	Warp		90	9		90-5 1/2								
	quality		90	6 1/2										

Standing and Running Rigging *fine* & *Rope* sufficient in size and *fine* in quality. She has *one* Long Boat and *five* other

The Windlass is *fine* Capstan *fine* and Rudder *fine* Pumps *fine* & *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?*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports & Scuppers*

Cargo Hatchways.—How formed? *Plates & angle iron*

State size Main Hatch *15.4 x 10* Forehatch *7.8 x 6* Quarterhatch *7.8 x 8*

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

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

Hatches, If strong and efficient? *yes*

Order for Special Survey No. *1075* Date *9 April 1875*
Order for Ordinary Survey No. *322* Date *10 July 1875*
No. *322* in builder's yard.

1st. On the several parts of the frame, when in place, and before the plating was wrought } *Built under Special Survey*
2nd. On the plating during the process of riveting } *10 July 1875 April 15-29 May 4-6 7 20 24 28 June 3*
3rd. When the beams were in and fastened, and before the decks were laid... } *9-12-18-22-23-25-26 July 8-14-22-28 Aug 4-7*
4th. When the ship was complete, and before the plating was finally coated or cemented... } *9-12-18-19-23-24-27-30 Sept 8-9-18-27 Oct*
5th. After the ship was launched and equipped *1-5-8*

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

This is a full rigged sailing ship built in accordance with the approved midsection (similar to "Orari" Rep. No 12964). She has full poop 58 ft long & top fallant-forecastle 30 ft long (scantlings as above). Her lower & lower topsails yards on fore & main mast are of iron 5/8 to 7/16 thick, with lapped joints treble riveted. She is provided with spare lower yard of *P. Pine*, spare topmast, top-fallant masts & jibboom of *P. Pine*. The Workmanship & material throughout are alike satisfactory.

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

How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint & Hemp*

I am of opinion this Vessel should be Classed *+ 100 A 1*

The amount of the Entry Fee ... £ 0 : 0 : 0 is received by me, *R. Young*
Special Certificate ... £ 0 : 0 : 0 ... *9 Oct 1875*

(Travelling Expenses, if any, £)

Committee's Minute *12th October 1875*

Character assigned *100 A 1*

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