576

7/7/82

Steel ~~IRON~~ SHIP.

No. 5465 Survey held at Dumbarton Date, First Survey 5 July 1881 Last Survey 30 June 1882

On the S.S. "Wairarapa" 2 masts Schooner rigged

TONNAGE under Tonnage Deck	1565.15
Ditto of Third, Spar, or Awning Deck	
Ditto of ~~Poop, or~~ Raised Qr. Dk.	98.65
Ditto of Houses on Deck	78.00
Ditto of Forecastle	44.43
Gross Tonnage	1786.23
Less Crew Space	103.82
	1682.41
Less Engine Room	659.52
Register Tonnage as cut on Beam	1022.89

ONE, ~~OR TWO~~ DECKED, THREE DECKED VESSEL, SPAR, ~~OR AWNING-DECKED VESSEL.~~

	Feet.
Half Breadth (moulded)	18.00
Depth from upper part of Keel to top of Upper Deck Beams	25.60
Girth of Half Midship Frame (as per Rule)	39.25
1st Number	82.85
1st Number, if a 3-Decked Vessel ... deduct 7 feet	7.00
	75.85
Length	283.33
2nd Number	21490
Proportions— Breadths to Length	7.87
Depths to Length—Upper Deck to Keel	11.06
Main Deck ditto	16.09

Master H. W. H. Chatfield.

Built at Dumbarton

When built 1881-82 Launched 18 May /82

By whom built Denny & Bros.

Owners Union S.S. Co. of New Zealand

Residence Dunedin

Port belonging to Dunedin

Destined Voyage Dunedin.

If Surveyed while Building, Afloat, or in Dry Dock, While Building & afloat.

LENGTH on deck as per Rule ... Feet 283 Inches 4 | BREADTH—Moulded ... Feet 36 Inches 0 | DEPTH top of Floors to Upper Deck Beams Feet 23 Inches 6; Do. do. Main Deck Beams Feet 18 Inches 6 | Power of Engines ... Horse ~~300~~ | Nº. of Decks with flat laid 3; Nº. of Tiers of Beams 3

Dimensions of Ship per Register, length, 284.2 breadth, 36.3 depth, 23.7 moulded depth 25 ft.

	Inches in Ship			Inches per Rule (app. m. ...)		
KEEL, depth and thickness						
STEM, moulding and thickness	9×2½			9×2½		
STERN-POST for Rudder do. do. / for Propeller	10×5			10×5		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 ins			24 ins (Class 100 A)		
	Inches In Ship	Inches In Ship	32ths In Ship	Inches per Rule	Inches per Rule	32ths per Rule
FRAMES, Angle ~~Iron~~, for ¾ length amidships	5	3	13	5	3	13
~~Do. for ⅛ at each end~~ In cellular bottom	3	3	12	3	3	12
	5	3½	16	5	3½	16
REVERSED FRAMES, Angle ~~Iron~~	3	3	12	3	3	12
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	23½		16	23½		16
thickness at the ~~ends of vessel~~ Dou. bot.			10			10
depth at ¾ the half-bdth. as per Rule			10			10
height extended at the Bilges	47			47		
BEAMS, Upper, ~~Spar, or Awning~~ Deck ~~Single or d'ble~~ Ang. ~~Iron, Plate or~~ Tee Bulb ~~Iron~~ ~~Single or double Angle Iron on Upper edge~~	7½		12	7½		12
Average space	48 ins			48 ins		
BEAMS, ~~Main, or~~ Middle Deck ~~Single or d'ble Ang. Iron, Plate or~~ Tee Bulb ~~Iron~~ ~~Single, or double Angle Iron, on Upper Edge~~	8½		13	8½		13
Average space	48 ins			48 ins		
BEAMS, Lower Deck— forward ~~Single or d'ble~~ Ang. ~~Iron, Plate or~~ Tee Bulb ~~Iron~~ ~~Single or double Angle Iron on Upper Edge~~	7½		12	7½		12
Average space	48 ins			48 ins		
BEAMS, ~~Hold, or Orlop~~ Lower deck aft ~~Single or d'ble Ang. Iron, Plate or Tee Bulb Iron~~ ~~Single or double Angle Iron on Upper Edge~~	6	3	13	6	3	13
Average space	48 ins			48 ins		
KEELSONS Centre line, single ~~or double~~ plate, ~~box, or~~ Intercostal, Plates	21½		15 / 15	21½		15 / 15
Rider Plate	12		18	12		18
~~Bulb Plate to Intercostal Keelson~~ & cellular bottom system						
Angle ~~Irons~~	5½	4	15	5½	4	15
Double Angle ~~Iron~~ Side Keelson	5½	4	15	5½	4	15
Side Intercostal Plate			13			13
do. ~~Angle Irons~~ Bulb	8½		13	8½		13
Attached to outside plating with angle ~~iron~~	3	3	11	3	3	11
BILGE Angle Irons	5½	4	15	5½	4	15
do. Bulb Iron	8½		13	8½		13
do. Intercostal plates riveted to plating for Boiler space length			13			13
BILGE STRINGER Angle ~~Irons~~	5½	4	15	5½	4	15
Intercostal plates riveted to plating for Boiler space length			13			13

SIDE STRINGER ~~Angle Irons~~ Intercostal in Boiler space

	Inches In Ship	32ths In Ship	Inches per Rule	32ths per Rule
Flat Keel Plates, breadth and thickness	36	26	36	26
PLATES in Garboard Strakes, br'dth & thickness	36	20	36	20
,, From Garboard to upper part of Bilges		16 to 13		16 to 13
,, ~~Of d'bling at Bilge, or increased thickness, and length applied~~	and	18 to 15	&	18 to 15
,, From up. prt of Bilge to lr. edge of Sh'rstrake	and	16 to 13 / 18 to 15	&	16 to 13 / 18 to 15
,, ~~Main Sheerstrake, breadth and thickness~~				
,, Of d'blng at ~~Sh'stk. & lng. applied~~ main Dk for 210 ft	32×8		16 to 7	16 Iron
,, ~~From M'n. to Upr. or Spar Dk. Sh'rstrake~~	50½	23 to 16		
,, Up. or Spar Dk Sh'rstrake, brdth & thickn'ss	Doubling 10×	21/32	as app.	
Butt Straps to outside plating, breadth & thickness	19 to 9¾	26.13	19 to 9¾	26 to 13
Lengths of Plating	7 frame spaces			
Shifts of Plating, and Stringers	2 —			
Gunwale Plate on ends of ~~Awning, Spar, or~~ Upper Deck Beams, breadth and thickness	40½	15	40½	15
Angle ~~Iron~~ on ditto	4×4×15		4×4×15	
Tie Plates fore and aft, outside Hatchways; Diagonal Tie Plates on Beams No. of Pairs; Flat of Up., Spar, or Awning Dk.*	Complete Steel Deck 10-8/32 covered with 4 ½ Pine			
How fastened to Beams	Riveted & nut & screws			
Stringer Plate on ends of Main ~~or Middle~~ Deck Beams, breadth and thickness	56	16	56	16
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No. 2	4×4×15		4×4×15	
Tie Plates, outside Hatchways	14	16	14	16
~~Diagonal Tie Plates on Beams, No. of pairs~~				
Flat of Middle Deck* do. do.	3½ Pine		3½	
How fastened to Beams	nut & screw bolts			
Stringer Plates on ends of Lower Deck, ~~Hold or Orlop~~ Beams	37	15	37	15
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No. 2	4×4×15		4×4×15	
Stringer or Tie Plates, outside Hatchways	14	16	14	16
Flat of Lower Deck*	2½ pine		2½ pine	
Ceiling betwixt Decks, thickness and material	Sparring			
,, in hold do. do.	2½		2½	
Main piece of Rudder, diameter at head	7⅛			7⅛
do. at heel		4	3¾	
Can the Rudder be unshipped afloat? Yes				
Bulkheads No. 5 No. per Rule 4				

,, Thickness of 10-8/32

,, Height up Collision to up. Dk, 4 to main Dk with W.T. flat abaft after BH at main Dk

,, How secured to sides of ship double angle steels

,, Size of Vertical Angle ~~Irons~~ 3×3×6/16 and distance apart 30 ins.

,, Are the outside Plates doubled two spaces of Frames in length? Yes

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

State clearly where plating is alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

The FRAMES extend in one length from middle line to gunwale and from Bilge to Bilge and Bilge to gunwale in cellular bottom. Riveted through plates with 7/8 in. Rivets, about 6 to 7 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper Dk in E & B. space and to Main & up. Dk 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 steel rivets 1" in. diameter, averaging 4 ins. from centre to centre.

,, Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with steel rivets 7/8 in. diameter, averaging 3½ ins. from centre to centre.

,, Butts from Keel to turn of Bilge, worked carvel, double riveted; with steel rivets 7/8 in. diameter averaging 3½ ins. from centre to centre.

,, Butts of all Strakes ~~at Bilge~~ for ½ length, treble riveted with Butt Straps 1/8 thicker than the plates they connect.

,, Edges from Bilge to Main Sheerstrake, worked clencher, double ~~or single~~ riveted; with steel rivets 7/8 in. diameter, averaging 3½ ins. from cr. to cr.

,, Butts from Bilge to Main Sheerstrake, worked carvel, treble ~~double~~ riveted; with rivets 7/8 in. diameter, averaging 3½ 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 ½ length amidships.~~ Butts of Upper ~~or Spar~~ Sheerstrake, treble riveted ½ length amidships.

,, Butts of Main Stringer Plate, treble riveted for ½ length amidships. Butts of Upper ~~or Spar~~ Stringer Plate, treble riveted for ½ length.

,, Breadth of laps of plating in double riveting 6 & 5¼ Breadth of laps of plating in single riveting —

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Tre. & dou. No. of Breasthooks, 4 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Mossend, Steel Co. of Scotland

Manufacturer's name or trade mark, Dalziel; Parkhead & Butterly.

The above is a correct description.

Builder's Signature, Wm. Denny & Brothers.

Surveyor's Signature, J. Dodd

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

ROBT. EDMD. TAYLOR & SON Commercial and General Steam Printers, 19, Old Street, Goswell Road, E.C., London.

GLS146-0476

5765 Grs.

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

Do the edges of the carvel work and of the butts fay 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? A few

Masts, ~~Bowsprit~~, Yards, &c., are Steel 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~~ There are two masts, built in accordance with the approved sketch herewith, see Secretary's letter of the 27 May 1881.

NUMBER for EQUIPMENT 25820

SAILS	No.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntdt.
Fore Sails,	One suit	Chain (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	135 / 135 ff / 26 & 31	2" / May 1882	100·8 / 72	270·1 13/16	Netherton & Tipton
Fore Top Sails,		Iron Stream Chain or Steel Wire	75 1/2 ff / 4 May	1 1/8 / 1882	22·75 / 34·125	75·1 1/8 / 90·1 1/2"	signed by D. G. Lewis
Fore Topmast Stay Sails,		or Hempen Strm Cable					&
		Towline, Hemp.	90	12"		90·9 1/2	E. R. Gill
Main Sails,		or Steel Wire	90	3 Steel Certificate produced			
		Hawser	90	7 1/2		90·7 1/2	
Main Top Sails,		Warp	90	7	90·5		
and spare		quality good	90	6	90·3 1/2		

ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntdt.
Bower Anchors (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	1	35·1·0 / 8·1·0	31·11·1·0	32 cwt total	Netherton R. G. Lewis Supt
	1	35·1·0 / 7·0·14	31·11·1·0	91 1/4	
6 May 1882					
27 — " —	1	30·2·0 / 6·0·18	29·0·0·0		
31 — " —					
6 — " —	1	10·3·0 / 2·1·7	12·13·0·14	1–10 1/2	
Stream Anchor	1	5·0·13	7·9·2·21	1–5 1/4	
Kedge (6 May 1882)		1·1·3			
2nd Kedge (31 May 1882)	1	2·1·19 / 2·23	5·0·0·0	1–2 1/2	

Standing and Running Rigging wire & hemp sufficient in size and gd in quality. She has 3 Long Boat and 3 others

The Windlass is Pauls Patent Capstan good and Rudder good Pumps good

Engine Room Skylights.—How constructed? Teak on Iron Coamings How secured in ordinary weather? Bolted

What arrangements for deadlights in bad weather? Gratings & Tarpaulins

Coal Bunker Openings.—How constructed? Cast Iron How are lids secured? Bayonet fixing Height above deck? flush

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? 8 water ports, 3 mooring pipes, 2 Cargo ports, 3 gangway ports and 6 scuppers.

Cargo Hatchways.—How formed? As usual

State size **Main Hatch** 11'-9" x 10 ft Forehatch 11 1/2 ft x 10 ft Quarterhatch —

If of extraordinary size, state how framed and secured? not of an extraordinary size

What arrangement for shifting beams? none

Hatches, If strong and efficient? Yes

Order for Special Survey No. 1613 Date 20th June 1881

Order for Ordinary Survey No. — Date —

No. 259 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 — Specially Surveyed:— 1881 — July 5, 9, 14, 28; Aug 11,
2nd. On the plating during the process of riveting — 15, 18, 22, 29; Sep. 9, 12; Oct 3, 7, 14, 18, 25, 27; Nov. 1, 3, 7, 10, 14,
3rd. When the beams were in and fastened, and before the decks were laid — 18, 22, 24; Dec. 5, 12, 23, 27; 1882 Jan 12, 18, 23, 26, 30; Feb. 2,
4th. When the ship was complete, and before the plating was finally coated or cemented — 6, 9, 16, 20, 23; Mar 1, 6, 22, 29; Ap. 3, 11, 13, 14, 18, 20,
5th. After the ship was launched and equipped — 24, 27; May 3, 9, 12, 16, 19, 24, 26, 30; June 2, 7, 9, 13,

General Remarks (State quality of workmanship, &c.) 16, 19, 23, 27, 30.

The workmanship in this vessel is good and she has been built in accordance with the tracings, (7 of S. S. "Manapouri" sister vessel and 3 others) attached herewith, and in accordance with the Secretary's letters of the 2nd & 9th Dec 1880; 14th & 21st Jany; 5th Mar, 12th April, 27th May, 30th June, 5th July, & 10th Aug 1881. The steel of which this vessel has been built, was tested at the Manufacturer's Works, as set forth in the Circulars issued by the Committee.

She is built on the cellular principle, except in boiler space; that before the boiler room is divided into 2 Compartments, and the two are 114 ft long containing 183 tons of water, & that abaft is also in 2 compartments, 90 ft long containing 100 tons. She has also a fore peak tank containing 38 tons. All these tanks have been tested to a head of water as required by the Rules. The Poop is 56 ft long. Bridge 44 ft and a shade deck, with open sides & middle line houses (15 ft broad) before the Bridge 42 ft and abaft Bridge 20 ft. Forecastle 44 ft.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed ✠100 A.1. "Steel" "3 Dks (Steel)"

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, 6/7/1882

Special ... £ 67 : 1 : 0

Certificate ... 0 : 0 : 0

(to be sent as per margin) £72 : 1 : 0

July 1882

(Travelling Expenses, if any, £).

J. Dodd

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

It is submitted that this vessel has been built in accordance with the approved plans appended and appears eligible to be classed as recommended 100 A1 "Steel"

Committee's Minute Friday, 7th July, 1882

Character assigned 100 A 1 Steel LR & CP TBW 3 Dks. Steel 3 Dks Steel D. 7/7/82

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

Reference should be made to any correspondence connected with the case.