

STEEL IRON SHIP.

MONDAY 7 SEPT 1885

No. 4095 Surveyed at Dumbarton Date, First Survey 28th Nov. 1884 Last Survey 21st Aug 1885
On the "Mararaoa" 2 pole masts.

TONNAGE under Tonnage Deck 2090.92
Ditto of Third, Spar, or Awning Deck.
Ditto of Poop, or Raised Or. Deck.
Ditto of Houses on Deck.
Ditto of Forecastle 45.98
Gross Tonnage 2465.67
Less Crew Space 118.74
2346.93
Less Engine Room 1098.46
Register Tonnage as out on Beam 1248.47

ONE OR TWO DECKED, THREE DECKED VESSEL.
SPAR OR AWNING DECKED VESSEL.
Half Breadth (moulded) 21.80
Depth from upper part of Keel to top of Upper Deck Beams 26.70
Girth of Half Midship Frame (as per Rule) 43.16
1st Number 90.86
1st Number, if a 3-Decked Vessel deduct 7 feet 7.00
83.86
Length 318.17
2nd Number 266.81
Proportions— Breadths to Length 7.57
Depths to Length—Upper Deck to Keel 11.7
Main Deck ditto 16.9

Master Jao. Edie
Built at Dumbarton
When built 1884-85 Launched 29 June 1885
By whom built Wm. Denny & Bros.
Owners Union F. & C. Co. of New Zealand
Residence Dunedin N.Z.
Port belonging to Dunedin
Destined Voyage Dunedin
If Surveyed while Building, Afloat, or in Dry Dock.
While Building & afloat.

LENGTH	BREADTH	DEPTH	Power of Engines	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
on deck as per Rule 318 2	Moulded 42 0	top of Floors to Upper Deck Beams 26.70 Do. do. Main Deck Beams 16.85	530	3	3
Dimensions of Ship per Register, length, 320-1 breadth, 42-1 depth, 24-7					
KEEL , depth and thickness 2 side-lars 9 x 13/8 STEM , moulding and thickness 11 x 2 3/4 STERN-POST for Rudder do. do. 11 x 7 1/2 for Propeller 11 x 6 1/2 Distance of Frames from moulding edge to moulding edge, all fore and aft 24 ins.					
FRAMES , Angle Iron, for 1/2 length amidships Do. for 1/2 at each end side frames 3 1/2 x 3 1/2 REVERSED FRAMES , Angle Iron 3 1/2 x 3 1/2 FLOORS , depth and thickness of Floor Plate at mid line for half length amidships 2 1/2 x 13/8 thickness at the ends of vessel 2 1/2 x 13/8 depth at 1/2 the half-bdth. as per Rule 2 1/2 x 13/8 height extended at the Bilges 2 1/2 x 13/8					
BEAMS , Upper, Spar, or Awning Deck Single or double Angle Iron, Plates or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space 48 ins. 48 ins. BEAMS , Main, or Middle Deck Single or double Angle Iron, Plates or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space 48 ins. 48 ins. BEAMS , Lower Deck Single or double Angle Iron, Plates or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space 48 ins. 48 ins. BEAMS , Hold, or Orlop Single or double Angle Iron, Plates or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space 48 ins. 48 ins.					
KEELSONS Centre line, single or double plate, 54 x 1 1/2 54 x 1 1/2 do. or Intercoastal Plates 36 x 1 1/2 36 x 1 1/2 Rider Plate 14 x 1 1/2 14 x 1 1/2 Bulb Plate to Intercoastal Keelson 6 1/2 x 4 15 6 1/2 x 4 15 Angle Irons 3. Girders 11 11 Double Angle Iron Side Keelson 11 11 Side Intercoastal Plate 11 11 do. Angle Irons 11 11 Attached to outside plating with angle iron 3 1/2 x 3 1/2 11 3 1/2 x 3 1/2 11					
BILGE Angle Iron 6 1/2 x 4 15 6 1/2 x 4 15 do. Bulb Iron 11 11 do. Intercoastal plates riveted to plating for 1/2 length 3 1/2 x 3 1/2 13 3 1/2 x 3 1/2 13					
BILGE STRINGER Angle Irons 6 1/2 x 4 15 6 1/2 x 4 15 Intercoastal plates riveted to plating for 1/2 length 15 15					
SIDE STRINGER Angle Irons 6 1/2 x 4 15 6 1/2 x 4 15					
The FRAMES extend in one length from Bilge to Bilge and hence to gunwale The REVERSED ANGLE IRONS on floors and frames extend from middle line to gunwale KEELSONS . Are the various lengths of Plates and Angle Irons properly connected? Yes PLATING . Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 ins. from centre to centre. Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre. Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre. Butts of all Strakes at Bilge for 1/2 length, treble riveted with Butt Straps thicker than the plates they connect. Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr. Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr. Edges of Main 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 1/2 length. Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 5 1/2 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes No. of Breasthooks, Crutches, Sup. frames What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Dalzell's Butcher's Manufacturer's name or trade mark, Clydesdale, Hallside, Mossend This above is a correct description Builder's Signature, William Denny & Sons Surveyor's Signature, C. J. Dodd Surveyor to Lloyd's Register of British and Foreign Shipping.					

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

Planed

7095.290

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?

A very 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. The masts & Bowsprit are built in accordance with the approved tracing attached herewith and with the instructions contained in the Secy's letter 24th Jan 1885. The steel used is "Crossed" which was tested at the Manufacturer's Works by the Surveyors to the Society.

NUMBER for EQUIPMENT 31918 (A)		Pathways.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supplied.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wt. req'd per Rule.	Machine where Tested & Supplied.
N ^o .	SAIIS.	CABLES, &c.	150	27 1/2	187 1/2	300	Bower Anchor	8672	4 1/2 x 28	36 19 0 0	36 1/2	Chester
		Chain	25	4 1/2	4 1/2	2 1/2		8673	3 1/2 x 0	34 13 0 1/4	18 1/4	
One	Fore Sails,	Iron Stream Chain	90 1/2	1 1/8	3 1/2	90 1/8	Jack	8661	3 1/2 x 23 3/4	15 3 0	11 1/2	Jack
		or Steel Wire	25	4 1/2	4 1/2	2 1/2		8662	1 1/2 x 15	13 3 0	11 1/2	
Sail	Fore Top Sails,	or Hempen Strm	100	4	4	10	Stream Anchor	8675	5 1/2 x 24	7 16 0 0	5 1/2	
		Cable	90	10	10	90 10		8676	3 1/2 x 13 1/2	7 2 6	2 3/4	
Sail	Fore Topmast Stay Sails,	Towline, Hemp.	120	5	5	120	Kedge					
		or Steel Wire	90	10	10	90 10						
Main	Main Sails,	Hawser	120	5	5	120	2nd Kedge					
		Warp	120	5	5	120						
Main	Main Top Sails,	Warp	120	5	5	120						
		Warp	120	5	5	120						

Standing and Running Rrigging Wire Thump sufficient in size and g^d in quality. She has 4 Long Boat and 3 others

The Windlass is Clarke Chapman 7 1/2 Capstan g^d and Rudder g^d Pumps g^d

Engine Room Skylights. How constructed? Deck on Iron St. House How secured in ordinary weather? Bolts

What arrangements for deadlights in bad weather? Brass 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? 4 Scuppers; 5 water ports;

3 Cargo ports; 2 gangway ports & working pipes

Cargo Hatchways. How formed? 10' 4" x 10' 4" as usual

State size Main Hatch 10' 4" x 10' 4" Forehatch 10' 4" x 8' 4" Quarterhatch 10' 4" x 9' 4"

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

What arrangement for shifting beams?

Hatches, If strong and efficient? 3" oak plating and tarpaulins.

Order for Special Survey No. 990

Date 25 Nov 1884

Order for Ordinary Survey No. 304

Date 25 Nov 1884

No. 304 in builder's yard.

State dates of letters respecting this case 6th Nov 1884; 14th Dec 1884; 11th April 1885

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

The workmanship is good, and the vessel has been built in accordance with the six tracings attached herewith, and with the instructions contained in the Secretary's letters above referred to and otherwise in accordance with the requirements of the Rules. She is built of steel, and on the cellular double bottom system except in the Boiler space which is on the ordinary system, see sketch of Mid. Section, and the longitudinal strength of the bottom is efficiently maintained at the junction of the different systems of framing. And the steel of which she is built has been tested at the Manufacturer's Works, according to the Committee's Circulars. The four ballast tanks have been tested according to the Rules and found satisfactory. And the fore and after peaks were filled and also found satisfactory. Poop 63 ft., then 17 ft. of shade deck with open bulwarks; then 9 ft. of bridge with middle line houses and side houses underneath; then 8 ft. of shade deck with open bulwarks and middle line houses under, with a side house 8 ft. long at fore end of shade deck within it. Forecastle 42 ft. long.

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

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

I am of opinion this Vessel should be Classed 100 A. 1. "steel"

The amount of the Entry Fee £ 5 is received by me, C. J. Dodd

Special £ 83 13: 6 24/8/ 1885

(To be sent as per margin). Certificate ...

Committee's Minute TUESDAY 8 SEPT 1885 18

Character assigned 3 Dns (1 Steel)