

IRON SHIP.

70 NOV 82

5894

No. 5894 Survey held at Paisley
On the S.S. "Kawatiro"

Date, First Survey 14 May

Last Survey 23 Oct 1882

2 Mast, Schooner Rig

TONNAGE under Tonnage Deck 355.92
ONE, OR TWO DECKED, THREE DECKED VESSEL, Y
R.A.O. SPAR, OR AWNING DECKED VESSEL.
Half Breadth (moulded) 13.00
Depth from upper part of Keel to top of Upper Deck Beams 12.35
Girth of Half Midship Frame (as per Rule) 22.65
1st Number 48.00
1st Number, if a 3-Decked Vessel deduct 7 feet
Length 168.84
2nd Number 8.104
Proportions— Breadths to Length 6.49
Depths to Length— Upper Deck to Keel 13.6
Moulded Main Deck ditto Depth 11.11

Master J. Patterson
Built at Paisley
When built 1882 Launched 8 Aug
By whom built H. Mc Intyre
Owners Gibson Ferrier, Glasgow
Residence
Port belonging to Dunedin, Otago
Destined Voyage Otago
If Surveyed while Building Afloat, or in Dry Dock.

LENGTH on deck as 168.84 **BREADTH** Moulded 26 **DEPTH** top of Floors to Upper Deck Beams 11 3 **Power of Engines** 70 **Horse** 70 **No. of Decks with flat laid** 1 **No. of Tiers of Beams** 142 under R.A.O.

Dimensions of Ship per Register, length, 170.5 breadth, 26.1 depth, 11.25

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL , depth and thickness	6 1/2 x 17/8	6 1/2 x 17/8				
STEM , moulding and thickness	6 1/2 x 3 3/4	6 1/2 x 3 3/4				
STERN-POST for Rudder do. do.	6 1/2 x 3 3/4	6 1/2 x 3 3/4				
" " for Propeller	21"	21"				
Distance of Frames from moulding edge to moulding edge, all fore and aft						
FRAMES , Angle Iron, for 3/4 length amidships	3 3 6	3 3 6				
Do. for 1/2 at each end	2 1/2 2 1/2 5	2 1/2 2 1/2 5				
REVERSED FRAMES , Angle Iron	13 1/2	6 13 1/2				
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	6 3/4	6 3/4				
" thickness at the ends of vessel	27	27				
" depth at 3/4 the half-bdth. as per Rule						
" height extended at the Bilges						
BEAMS , Upper, Spar, or Awning Deck	5 3 6	5 3 6				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper edge	21	21				
Average space						
BEAMS , Main, or Middle Deck						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single, or double Angle Iron, on Upper Edge						
Average space						
BEAMS , Lower Deck						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
BEAMS , Hold, or Orlop under R.A.O.	7	7 7 7				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge	3 3 6	3 3 6				
Average space						
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	8	7 8 7				
" Rider Plate	7 1/2	7 1/2				
" Bulb Plate to Intercoastal Keelson						
" Angle Irons	3 1/2 3 6	3 1/2 3 6				
" Double Angle Iron Side Keelson	3 1/2 3 6	3 1/2 3 6				
" Side Intercoastal Plate						
" do. Angle Irons						
" Attached to outside plating with angle iron						
BILGE Angle Irons	3 1/2 3 6	3 1/2 3 6				
" do. Bulb Iron 3/5 length	6	6 6 6				
" do. Intercoastal plates riveted to plating for length						
BILGE STRINGER Angle Irons	3 1/2 3 6	3 1/2 3 6				
Intercoastal plates riveted to plating for length						
SIDE STRINGER Angle Irons	3 1/2 3 6	3 1/2 3 6				

Flat Keel Plates, breadth and thickness 30 13 30 13
PLATES in Garboard Strakes, breadth & thickness 9 9
" From Garboard to upper part of Bilges 7.8 7.8
" Of d'bling at Bilge, or increased thickness, and length applied 2 Strakes 1/16 42 length.
" From up. prt of Bilge to l.r. edge of Sh'rstrake 7.8 7.8
" Main Sheerstrake, breadth and thickness 33 11 33 11
" Of d'bling at Sh'stk. & Ing. applied 24 ft at back of R.A.O.
" From M'n. to Up. or Spar Dk. Sh'rstrake
" Up. or Spar Dk. Sh'rstrake, breadth & thickness
Butt Straps to outside plating, breadth & thickness 9 1/4 16 1/4 7.12 9 1/4 16 1/4 7.12
Lengths of Plating 147 105
Shifts of Plating, and Stringers 42 42
Gunwale Plate on ends of ~~Awning, Spar, or~~ Upper Deck Beams, breadth and thickness 27 8 27 8
Angle Iron on ditto 3 1/2 x 3 x 6 3 1/2 x 3 x 6
Tie Plates fore and aft, outside Hatchways R.A.O. 9 7 9 7
Diagonal Tie Plates on Beams No. of Pairs 6 6
Flat of Up., Spar, or Awning Dk. Iron
How fastened to Beams R.A.O. 3 1/2 3 1/2
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 3 1/2 3 1/2
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Tie Plates, outside Hatchways
Diagonal Tie Plates on Beams, No. of pairs
Flat of Middle Deck* do. do.
How fastened to Beams
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 22 6 22 6
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No. 2 3 1/2 x 3 x 6 3 1/2 x 3 x 6
Stringer or Tie Plates, outside Hatchways
Flat of Lower Deck*
Ceiling betwixt Decks, thickness and material Sparring
" in hold do. do. 2 1/2 2 1/2
Main piece of Rudder, diameter at head 4 1/4 4 1/4
do. at heel 2 1/2 2 1/2
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 4 No. per Rule 4
" Thickness of 1/4 + 5/16
" Height up all to upper Deck
" How secured to sides of ship Between double framed
" Size of Vertical Angle Irons 2 1/2 x 2 1/2 x 5 and distance apart 30 ins.
" Are the outside Plates doubled two spaces of Frames in length? Yes

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 Bilge Stringer 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 7/8 in. diameter, averaging 3 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 ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 ins. from centre to centre.
" Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 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 ins. from cr. to cr.
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 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. But Upper or Spar Sheerstrake, treble riveted length amidships.
" Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. But Upper or Spar Stringer Plate, treble riveted for length
" Breadth of laps of plating in double riveting 4 1/2 5 1/2 Breadth of laps of plating single riveting
Butt Straps of Keelsons, Stringer and Tie Plates, treble double or single Riveted? No. of Breasthooks, 5 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles W. Dufay & Co
Manufacturer's name or trade mark, Dorman Lang. Plates, West-Stockholm Iron Works.

The above is a correct description.
Builder's Signature, H. Mc Intyre
Surveyor's Signature, J. W. Wilson
Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship.

Are the butts of plating planed or otherwise fitted? *Planed*

5894 gbs

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? *Only a few*

Masts, Bowsprit, Yards, &c., are *Wood* 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

2 Wood Mast, Schooner Rig

NUMBER for EQUIPMENT <i>8914</i>		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.												
N ^o .	CABLES &c. Chain <i>Steel</i>	<i>196</i>	<i>1 1/2</i>	<i>22 3/4</i> <i>34 1/8</i>	<i>196.1 1/2</i>	<i>State of Michigan</i> <i>26 ft. x 1 1/2 in. diameter</i>	Bower Anchors					<i>State of Michigan</i> <i>26 ft. x 1 1/2 in. diameter</i>
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)						(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
	Fore Sails, Iron Stream Chain	<i>60</i>	<i>1 1/2</i>	<i>10 1/8</i> <i>15 1/8</i>	<i>60.1 1/2</i>			<i>1</i>	<i>10.0.0</i>	<i>12.0.0.0</i>	<i>10.0.0</i>	
	Fore Top Sails, or Steel Wire ..							<i>1</i>	<i>10.0.6</i>	<i>12.2.0.2</i>	<i>10.0.0</i>	
	Fore Topmast or Hempten Strm } Cable							<i>1</i>	<i>8.2.14</i>	<i>10.15.0.0</i>	<i>8.2.0</i>	
	Stay Sails, Towline, Hemp.											
	Main Sails, or Steel Wire ..						Stream Anchor	<i>1</i>	<i>3.3.3</i>	<i>6.5.1.7</i>	<i>3.3.0</i>	
	Hawser	<i>75</i>	<i>8"</i>		<i>75.8"</i>		Kedge ...	<i>1</i>	<i>1.3.21</i>	<i>4.10.0.0</i>	<i>1.3.0</i>	
	Main Top Sails, Warp	<i>90</i>	<i>6"</i>		<i>90.6"</i>		2nd Kedge ...	<i>1</i>	<i>1.1.19</i>		<i>0.3.0</i>	
	and quality <i>Good</i>											

Standing and Running Rigger *M.H. + Manila* sufficient in size and *Good* in quality. She has *Two* Long Boats *and*

The Windlass is *Reids Patent* Capstan and Rudder *Good* Pumps *2 Hand*

Engine Room Skylights. How constructed? *Deck in Iron Lining* How secured in ordinary weather? *With Quadrant*

What arrangements for deadlights in bad weather? *Strong canvas covers*

Coal Bunker Openings. How constructed? *Cast Iron frame* How are lids secured? *With a bolt* Height above deck? *Flush*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *2 Square Pts each side*

Railway on Main Deck.

Cargo Hatchways. How formed? *Plates + Angles*

State size Main Hatch *20ft 9 x 10ft* Fore Hatch *8ft 10 x 8ft* Quarter Hatch *13ft 9 x 10ft*

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

What arrangement for shifting beams? *Dep. Mt. Plates*

Hatches, If strong and efficient? *Solid Hatches*

Order for Special Survey No. <i>1731</i>	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	<i>1882 March 14, 17, 23, 29 April 3, 10, 14, 19.</i>
Date <i>10th April 1882</i>		2nd. On the plating during the process of riveting	<i>May 5, 10, 16, 18, 22, 26, 31; June 2, 6, 13 19.</i>
Order for Ordinary Survey No. <i>1731</i>		3rd. When the beams were in and fastened, and before the decks were laid....	<i>July 7, 13, 21, 25, 31; Aug 8, 17, 21; Sep 4</i>
Date <i>10th April 1882</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>19, 22, 26; Oct. 2, 6, 11, 17, 23;</i>
No. <i>90</i> in builder's yard.		5th. After the ship was launched and equipped	

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

This is a single Decked Vessel with a Raised Quarter Deck 85-ft long + a Top Ballant- Forecastle 21 ft long. Built under Special Survey in accordance with the Rules + the General Arrangement in conformity with the Plans submitted + approved by the Committee + the materials + workmanship are good. Ballast Tanks tested by a head of water in excess of the Rules + found satisfactory.

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. Iron Deck from Break of R. A. 0 right-Fore*

The amount of the Entry Fee ... £ *5 : 0 : 0* is received by me, *W. Davidson*

Special ... £ *21 : 10 : 0* 3/11/82

Certificate ... *valid*

(to be sent as per margin).

(Travelling Expenses, if any, £ ..).

Committee's Minute

Tuesday, 7th November, 1882

Character assigned

100 A 1

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

This submitted that this vessel

appears eligible to be classed

100 A 1. as recommended

One deck

Double Bottom - particulars appended

7/11/82