

IRON SHIP.

16452

nd Rec'd 8/6/76

Survey held at GreenockDate, First Survey 27th Nov^r 1875 Last Survey 2 June 1876Master FrederickBuilt at GreenockWhen built 1875:76 Launched 13 April 1876By whom built Scott & CoOwners The Government of N. Z.Port belonging to New ZealandDestined Voyage New Zealand

Surveyed while Building, Afloat, or in Dry Dock.

Under {
age Deck { 241.00
Third, Spar, {
ing Deck. {
Poop, or {
Gr. Dk. {
Houses {
n Deck { 27.46
Forecastle {
onage { 268.52
ew Space {

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.
HALF BREADTH (moulded)... .. 10.5 Feet.
DEPTH from upper part of Keel to top of Upper Deck Beams 13.50
GIRTH of Half Midship Frame (as per Rule) 20.34
1st NUMBER 6542
1st NUMBER, if a THREE-DECKED VESSEL [deduct 1 foot]
LENGTH 151.5
2nd NUMBER 6729
PROPORTIONS—Breadths to Length 7.21
Depths to Length—Upper Deck to Keel 11.15
Main Deck ditto 11.15

TH Deck as 151.5 Feet. Inches. BREADTH—Moulded... .. 21 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 12.5 Feet. Inches. Power of Engines 70 Horse. N° of Decks with flat laid Two N° of Tiers of Beams Two

Dimensions of Ship per Register, length, 158.35 breadth, 21.15 depth, 12.25

	Inches in Ship.	Inches per Rule.
EL, depth and thickness	<u>4 x 15</u>	<u>4 x 15</u>
EM, moulding and thickness... ..	<u>6 1/4 x 15/8</u>	<u>6 1/4 x 15/8</u>
ERN-POST for Rudder do. do.	<u>7 1/4 x 3 3/8</u>	<u>6 1/4 x 3 3/8</u>
for Propeller	<u>21</u>	<u>21</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>
FRAMES, Angle Iron, for 1/2 length amidships	<u>3</u>	<u>3</u>
Do. for 1/2 at each end	<u>3</u>	<u>3</u>
EVERSED FRAMES, Angle Iron	<u>2 1/2</u>	<u>2 1/2</u>
LOORS, depth and thickness of Floor Plate at mid line for half length amidships	<u>13</u>	<u>13</u>
thickness at the ends of vessel	<u>6 1/2</u>	<u>6 1/2</u>
depth at 1/2 the half-bdth. as per Rule	<u>36</u>	<u>36</u>
height extended at the Bilges... ..	<u>36</u>	<u>36</u>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>6</u>	<u>5</u>
Single or double Angle Iron on Upper edge	<u>2 1/2</u>	<u>2 1/2</u>
Average space... ..	<u>42</u>	<u>42</u>
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>4 1/2</u>	<u>3</u>
Single, or double Angle Iron, on Upper Edge	<u>4 1/2</u>	<u>3</u>
Average space... ..	<u>42</u>	<u>42</u>
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>4 1/2</u>	<u>3</u>
Single or double Angle Iron on Upper Edge	<u>4 1/2</u>	<u>3</u>
Average space... ..	<u>42</u>	<u>42</u>
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	<u>16</u>	<u>5</u>
" Rider Plate	<u>6</u>	<u>5</u>
" Bulb Plate to Intercostal Keelson... ..	<u>3</u>	<u>3</u>
" Angle Irons	<u>3</u>	<u>3</u>
" Double Angle Iron Side Keelson	<u>3</u>	<u>3</u>
" Side Intercostal Plate	<u>3</u>	<u>3</u>
" do. Angle Irons	<u>3</u>	<u>3</u>
" Attached to outside plating with angle iron	<u>3</u>	<u>3</u>
BILGE Angle Irons	<u>36</u>	<u>36</u>
" do. Bulb Iron... ..	<u>36</u>	<u>36</u>
" do. Intercostal plates riveted to plating for length	<u>36</u>	<u>36</u>
BILGE STRINGER Angle Irons	<u>36</u>	<u>36</u>
Intercostal plates riveted to plating for length... ..	<u>36</u>	<u>36</u>
SIDE STRINGER Angle Irons	<u>36</u>	<u>36</u>

Transoms, material. Knight-heads. Hawse Timbers.

Windlass Iron Patent Pall Bitt

	Inches in Ship.	16ths. In Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	<u>30</u>	<u>0</u>	<u>30</u>	<u>0</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	<u>7</u>	<u>7</u>	<u>me shade 7</u>	<u>647</u>
fin up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thckns	<u>42</u>	<u>9</u>	<u>30</u>	<u>9</u>
Butt Straps to outside plating, breadth & thickness	<u>4 x 10</u>	<u>4 x 10</u>	<u>5 x 9 1/2 x 7 1/2</u>	<u>5 x 9 1/2 x 7 1/2</u>
Lengths of Plating	<u>6</u>	<u>6</u>	<u>5 spaces</u>	<u>5 spaces</u>
Shifts of Plating, and Stringers... ..	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Angle Iron on ditto	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Tie Plates fore and aft, outside Hatchways	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Waterways do. do.	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Flat of Upper Deck do. do.	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
How fastened to Beams	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<u>34</u>	<u>6</u>	<u>34</u>	<u>6</u>
Is the Stringer Plate attached to the outside plating? <u>Yes</u>	<u>34</u>	<u>6</u>	<u>34</u>	<u>6</u>
Angle Irons on ditto, No. <u>one</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>
Tie Plates, outside Hatchways	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>
Diagonal Tie Plates on Beams, No. of pairs	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>
Waterways materials and scantlings	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>
Flat of Middle Deck do. do. <u>Y. Pine</u>	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>
How fastened to Beams	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>12</u>	<u>5</u>	<u>12</u>	<u>5</u>
Is the Stringer Plate attached to the outside plating? <u>Yes</u>	<u>12</u>	<u>5</u>	<u>12</u>	<u>5</u>
Angle Irons on ditto, No. <u>one</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>	<u>3 x 3 x 6</u>
Stringer or Tie Plates, outside Hatchways	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Flat of Lower Deck	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Ceiling betwixt Decks, thickness and material	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>
in hold do. do.	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>	<u>2 1/2 x 2 R. Pine</u>
Main piece of Rudder, diameter at head	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
do. at heel	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Can the Rudder be unshipped afloat? <u>Yes</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Bulkheads No. <u>4</u> Thickness of <u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>
Height up <u>Three to main deck</u>	<u>Three to main deck</u>	<u>Three to main deck</u>	<u>Three to main deck</u>	<u>Three to main deck</u>
How secured to sides of ship <u>Double frames</u>	<u>Double frames</u>	<u>Double frames</u>	<u>Double frames</u>	<u>Double frames</u>
Size of Vertical Angle Irons <u>2 1/2 x 2 1/2 x 7/8</u> and distance apart <u>30</u> ins.	<u>2 1/2 x 2 1/2 x 7/8</u>	<u>2 1/2 x 2 1/2 x 7/8</u>	<u>2 1/2 x 2 1/2 x 7/8</u>	<u>2 1/2 x 2 1/2 x 7/8</u>
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 16 apart.The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper part of bilges and to on every frame 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 8 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 1/2 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.Butts of one Strake at Bilge for half 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 1/2 ins. from cr. to cr.Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, double or single riveted. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.

Butts of Main Stringer Plate, treble riveted for whole length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 3/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble double or single Riveted?

Waterway, how secured to Beams Iron gutter (Explain by Sketch, if necessary.)Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, 3 Crutches, 3What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? BestManufacturer's name or trade mark, Angle & Bulb Iron Works and Plate Company

The above is a correct description.

Builder's Signature, Scott & CoSurveyor's Signature, H. J. B. 0000

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

IRON 466-0433

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 16452 Iron
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 few*

Masts, Bowsprit, Yards, &c., are *Am 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 *Fore Mast 59' 9" dia 17" Main 68' 17" dia Mizzen 49 1/2' dia*
Fore & Main Masts in 2 plates 5/16 throughout? Edges single riveted, butts treble
Mizzen Masts in 2 plates 5/16 to 4/16 & and plates doubled in way of wye
Bowsprit of Wood

NUMBER for EQUIPMENT

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate	Length & Size req'd per Rule	Test req'd per Rule	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test per Rule
	Fore Sails,	Chain	165	2 1/2	1072	165	15 1/2	Bowers	2604	8.0.14	10.5.0.0	6.2	8 1/2
	Fore Top Sails,	Lepton Proving House			26	1076	15 1/2		2603	6.2.0	8.15.0.0		20
	Fore Topmast Stay Sails	Samuel Regema Superintendent											
	Main Sails,	Ham Strm Cbl	90	1 1/2		146		Lepton Proving House				2.2	
	Main Top Sails,	Hawser ...	90	5		5		Samuel Regema Superintendent				1.1	
	and	Towlines											
	Span sails	Warp											
		quality											

Standing and Running Rigging *Win's Kempen* sufficient in size and *Good* quality. She has *Two* Long Boats and *one other*
The Windlass is *Harfield Patent* Capstan *Mean Wind* and Rudder *Efficient* Pumps *In each compartment*
Engine Room Skylights.—How constructed? *Am Comings 42 above Deck* How secured in ordinary weather? *Win Gratings*
What arrangements for deadlights in bad weather? *Sarkaulins*
Coal Bunker Openings.—How constructed *Cast Am Reinforced* How are lids secured? *By Bars* Height above deck? *Flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Pots & Scuppers*

Cargo Hatchways.—How formed? *Am Comings*

State size Main Hatch *7' X 8'* Forehatch _____ Quarterhatch _____

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

What arrangement for shifting beams? _____

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *769* 1st. On the several parts of the frame, when in place, and before the plating was wrought *Built under S.S. and surveyed 1875*
Date *25 Oct 1876* 2nd. On the plating during the process of riveting *November 27, Dec 1, 14, 20, 31, 1876-Jan 1*
Order for Ordinary Survey No. *171* 3rd. When the beams were in and fastened, and before the decks were laid.... *10, 14, 20, 28, Feb 3, 7, 17, 25, March 13,*
Date *✓* 4th. When the ship was complete, and before the plating was finally coated or cemented... *22, April 3, 15, 21, May 4, 10, 15, 22, 29,*
No. *171* in builder's yard. 5th. After the ship was launched and equipped *June 1, 2, -*

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conformity with the Rules and Midship section and longitudinal plan herewith appended which were submitted and approved by the Committee in Letter dated 2nd November 1875.*

The workmanship and materials are of the best description.

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

How are the surfaces preserved from oxidation? Inside *Portland Cement to above Belier's Red* Outside *Red Lead & Paint*

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

The amount of the Entry Fee ... £ 3: 0: 0 is received by me, *[Signature]*

Special ... £ 13: 8: 0 *6 June 1876*

Certificate ... £ 9: 0: 0

(Travelling Expenses, if any, £ _____).

Committee's Minute *9 June 1876*

Character assigned *100 A.1*

H. J. Booth

[Signature]

[Signature]

[Signature]

[Signature]