

# IRON SHIP.

No. 6629 Survey held at Port Glasgow Date, First Survey 26<sup>th</sup> November 1873 Last Survey 22<sup>nd</sup> September 1874

On the Ship "Nelson" Yard Number 82 Master M. Anderson

TONNAGE under Tonnage Deck } 1125.65 ONE, OR TWO DECKED, THREE DECKED VESSEL.

Ditto of Third, Spar, or Awning Deck. } 116.81 SPAR, OR AWNING DECKED VESSEL.

Ditto of Poop, or Raised Quarter Deck. } 23.20 HALF BREADTH (moulded) ... .. 19.9

Ditto of Houses on Deck ... .. 23.20 DEPTH from upper part of Keel to top of Upper Deck Beams 23.76

Ditto of Forecastle 14.23 GIRTH of Half Midship Frame (as per Rule) ... .. 34.56

Gross Tonnage 1309.89 1st NUMBER ... .. 45.62

Less Crew Space 62.53 1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet ... ..

Less Engine Room 1247.36 LENGTH ... .. 228.58

Register Tonnage (as cut on Beam) 1247.36 2nd NUMBER ... .. 14285

PROPORTIONS—Breadths to Length ... .. 6.38

Depths to Length—Upper Deck to Keel ... ..

Main Deck ditto ... .. 9.84

Built at Port Glasgow

When built 1874 Launched 15<sup>th</sup> August 1874

By whom built R. Duncan & Co.

Owners Albion Shipping Co.

Port belonging to Glasgow

Destined Voyage New Zealand

Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 228.58 BREADTH—Moulded... 35.8 DEPTH top of Floors to Upper Deck Beams 21.1 Power of Engines ... .. Horse. 2 No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 229.3 breadth, 36 depth, 20.45

KEEL, depth and thickness ... .. Inches in Ship. 9 x 22 Inches per Rule. 9 x 22  
STEM, moulding and thickness... .. 8 x 22 8 x 22  
STERN-POST for Rudder do. do. ... .. 8 x 22 8 x 22  
for Propeller ... ..

Distance of Frames from moulding edge to moulding edge, all fore and aft ... .. 24 (Class 100A)

FRAMES, Angle Iron, for  $\frac{3}{4}$  length amidships ... .. Inches in Ship. 4 x 3 16ths. 8 Inches in Ship. 4 x 3 16ths. 8  
Do. for  $\frac{1}{2}$  at each end ... .. 4 x 3 8

REVERSED FRAMES, Angle Iron ... .. 4 x 3 8

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... .. 23 x 9 23 x 9

thickness at the ends of vessel ... .. 12 8 x 4

depth at  $\frac{3}{4}$  the half-bdth. as per Rule ... .. 40 11 x 4

height extended at the Bilges... .. 40 4 x 4

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 ... ..

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, Hold or Orlop } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } ... ..

Single or double Angle Iron on Upper Edge ... ..

Average space... ..

KEELSONS Centre line, single or double plate, box, or intercostal, Plates ... ..

" Rider Plate ... ..

" Bulb Plate to Intercostal Keelson ... ..

" Angle Irons ... ..

" Double Angle Iron Side Keelson ... ..

" Side Intercostal Plate ... ..

" do. Angle Irons ... ..

" Attached to outside plating with angle iron ... ..

BILGE Angle Irons ... ..

" do. Bulb Iron... ..

" do. Intercostal plates riveted to plating for — length ... ..

BILGE STRINGER Angle Irons ... ..

Intercostal plates riveted to plating for — length ... ..

SIDE STRINGER Angle Irons in lower Decks ... ..

Transoms, material. Knight-heads. Hawse Timbers. Spruce

Windlass Spruce Patent Pall Bitt ... ..

The FRAMES extend in one length from Keel to Gunnwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to above Hold Beam Stringer and to Main Deck 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 18 in. diameter, averaging 52 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 32 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 32 ins. from centre to centre.

Butts of Three Strakes at Bilge for half 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 7/8 in. diameter, averaging 32 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 32 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.

Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting —

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

Waterway, how secured to Beams Spruce Cutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, 5 Crutches, 5

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

Manufacturer's name or trade mark. Angle iron, Cooke's Plates, Penarth & Mossend.

The above is a correct description of the ship.

Builder's Signature, R. Duncan & Co. Surveyor's Signature, H. J. B. 1000

Flat Keel Plates, breadth and thickness ... .. Inches. 36 16ths. 11 Inches. 36 16ths. 11  
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges ... .. 10 10  
of doubling at Bilge, or increased thickness, and length applied ... .. 11 11  
fin up. part of Bilge to l. edge of Sh'rstrake ... .. 10 10  
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. ... .. 40 12 40 12  
Up. or Spar Dk Sh'rstrake, brdth & thickness ... ..  
Butt Straps to outside plating, breadth & thickness 3 x 10 11 x 10 11 x 10 11 x 10  
Lengths of Plating ... .. 16 x 10 16 x 10 16 x 10 16 x 10  
Shifts of Plating, and Stringers... .. 5 spaces 5 spaces  
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..  
Angle Iron on ditto ... ..  
Tie Plates fore and aft, outside Hatchways ... ..  
Diagonal Tie Plates on Beams No. of Pairs, ... ..  
Planksheer material and scantling ... ..  
Waterways do. do. ... ..  
Flat of Upper Deck do. do. ... ..  
How fastened to Beams ... ..  
Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness ... .. 32 10 32 10  
Is the Stringer Plate attached to the outside plating? Yes  
Angle Irons on ditto, No. One ... .. 5 x 4 x 9 5 x 4 x 9  
Tie Plates, outside Hatchways ... .. 10 x 10 10 x 10  
Diagonal Tie Plates on Beams, No. of pairs 6 ... .. 10 x 10 10 x 10  
Waterways materials and scantlings ... .. Butter  
Flat of Main Deck do. do. 14 P. Pine ... .. 4 x 4  
How fastened to Beams ... .. Screw Bolts & Nuts  
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams (from inside of frame) } 24 x 9 24 x 9  
Is the Stringer Plate attached to the outside plating? Yes  
Angle Irons on ditto, No. Two ... .. 4 x 4 x 9 4 x 4 x 9  
Stringer or Tie Plates, outside Hatchways ... .. 10 x 10 10 x 10  
Flat of Lower Deck ... .. 3  
Ceiling betwixt Decks, thickness and material ... .. Battens  
in hold do. do. ... .. 2 x P. Pine 2 x 3  
Main piece of Rudder, diameter at head ... .. 6  
do. at heel ... .. 3  
Can the Rudder be unshipped afloat? Yes  
Bulkheads No. One Thickness of 6/16 6/16  
Height up to Main Deck  
How secured to sides of ship Double frames & broad lines  
Size of Vertical Angle Irons 3 x 3 x 7/16 and distance apart 30 ins.  
Are the outside Plates doubled two spaces of Frames in length? Yes



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? A few 13346 Iron

Masts, Bowsprit, Yards, &c., are Iron 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 85 ft dia 2 1/2, Main 85 ft 9 dia 2 1/2, Mizzen 18 ft 9 dia 2 1/2, Bowsprit 35 ft 5 dia 2 1/2

Masts and Bowsprit in three plates 3/16 thick tapering to 1/16, seams double riveted, and butts treble and double riveted, and in way of wedging plates doubled. Bowsprit has three angle irons 5 x 4 x 9/16, all throughout.

NUMBER for EQUIPMENT 19.013		Fathoms.	Inches.	Test per Certificate.	Lngh. & Size req'd pr Rule	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.	CABLES.										
1	Fore Sails,	Chain	135 1/2	1 1/2	59 1/2 B. 582 1/2	59 1/2	Bowers	1428	32.2.7	30.10.3.0	32.0.0.0	30 1/2
2	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	135 1/2	1 1/2	59 1/2 B. 582 1/2	59 1/2		1429	32.0.10	30.14.1.0	32.0.0.0	30 1/2
3	Fore Topmast Stay Sails,											
4	Main Sails,	Hanna Strm Cbl	75	1								
5	Main Top Sails,	Hawser	90	9 1/2								
6	and others as usual,	Towlines	90	10								
		Warp	90	6								
		quality good.										

Standing and Running Rigging Wire & Hempen sufficient in size and good in quality. She has Two Life Boats and four others

The Windlass is Patent Capstans 8 and Rudder efficient Pumps 2 Patent

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?  Height above deck?

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

Cargo Hatchways. How formed? Iron beamings 15" high

State size Main Hatch 12' 0" x 11' 0" Forehatch 7' 0" x 6' 0" Quarterhatch 7' 0" x 6' 0"

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. <u>653</u>	DATES of Surveys held while building as per Section 16	1st. On the several parts of the frame, when in place, and before the plating was wrought	<u>Built under S.S. and surveyed: 1873 - November 26, 29.</u>
Date <u>24 October 1873</u>		2nd. On the plating during the process of riveting	<u>December 14, 10, 16, 26, 1874 - January 7, 10, 14, 27, February 14,</u>
Order for Ordinary Survey No. <u></u>		3rd. When the beams were in and fastened, and before the decks were laid....	<u>16, March 9, 16, 21, 26, 30, April 9, 16, 23, 30, May 14, 8, 16, 26,</u>
Date <u></u>		4th. When the ship was complete, and before the plating was finally coated or cemented....	<u>June 2, 8, 10, 16, 22, 25, July 7, 13, 14, 20, August 6, 14, 17, 19, 23,</u>
No. <u>82</u> in builder's yard.		5th. After the ship was launched and equipped	<u>Sept. 3, 22,</u>

General Remarks, (State quality of workmanship &c.)  
This Vessel has been built in conformity with the Rules, and midship section appended to Report of Survey on Sister Ship N<sup>o</sup> 6520. - Dunedin. - additional strength has been fitted in way of full Poop as per Rule, in consideration of its being over one fourth the length of the Vessel. - The workmanship and materials are of the very best description. -

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

How are the surfaces preserved from oxidation? Inside Portland Cement & above Belgian Red Outside 3 Coats of Red Lead Paint & Lead above. One off composition on Bottom

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

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

Special ... £ 56 : 3 : 6 25 Sept. 1874

Certificate ... £ 0 : 0 : 0

(Travelling Expenses) £ 61 : 3 : 6

(if any) £

Committee's Minute 29<sup>th</sup> September 1874

Character assigned 100 A. 1.

AICP

TRUF

This vessel appears to be eligible to be classed as recommended 100 A. 1.

Lloyd's Register Foundation