

# IRON SHIP.

No. 4380 Survey held at Glasgow

Date, First Survey 24 Aug 76

Last Survey 7 February 1877

1877

On the SHIP "W. A. G. A. N. U. I."

Master William Cummings

TONNAGE under Tonnage Deck 983.57

Ditto of Hold, or of Lower Deck 9

Ditto of Poop, or of Raised Quarter Deck 96.57

Ditto of Houses on Deck 16.50

Ditto of Forecastle 39.09

Gross Tonnage 1135.67

Less Crew Space 58.32

Register Tonnage as cut on Beam 1077.35

ONE, OR TWO DECKED, THREE DECKED VESSEL.

~~SEAS, OR AWAIRING-DECKED VESSEL.~~

HALF BREADTH (moulded) 16.86

DEPTH from upper part of Keel to top of Upper Deck Beams 22.7

GIRTH of Half Midship Frame (as per Rule) 34.41

1st NUMBER 73.97

~~2nd NUMBER, if a THREE-DECKED VESSEL.~~

LENGTH 205

2nd NUMBER 15.163

PROPORTIONS—Breadths to Length 6.0

Depths to Length—Upper Deck to Keel 9.0

Main Deck-ditto 9.0

Built at Glasgow

When built 1877 Launched 18 Aug 77

By whom built A. Stephen & Sons

Owners New Zealand Shipping Co.

84 Bishopsgate Street

Port belonging to London

Destined Voyage Canterbury, New Zealand

If Surveyed while Building, Afloat, or in Dry Dock

under special survey

LENGTH on deck as per Rule 205 Feet. Inches. BREADTH Moulded 33 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 20.8 Feet. Inches. Do. do. Main Deck Beams 20.8 Feet. Inches. Power of Engines — Horse. No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 214.3 breadth, 34.05 depth, 20.45

KEEL, depth and thickness 8 x 2 3/8 Inches in Ship. Inches per Rule. 8 x 2 3/8  
STEM, moulding and thickness 7 1/2 x 2 3/8  
STERN-POST for Rudder do. do. 6 1/8 x 3  
Distance of Frames from moulding edge to moulding edge, all fore and aft 23 in

FRAMES, Angle Iron, for 2/3 length amidships 5 x 3 8/16  
Do. for 1/3 at each end 5 x 3 7/16

REVERSED FRAMES, Angle Iron 3 x 3 7/16

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 23 x 9/16  
thickness at the ends of vessel 8 1/4 x 7/16  
depth at 2/3 the half-bdth. as per Rule AS PER SECTION  
height extended at the Bilges THICE DEPTH

BEAMS, Upper, ~~Star, or Awaing~~ Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8 x 8 1/16  
Average space 3 x 3 4/16

BEAMS, ~~Main or Middle~~ Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8 x 8 1/16  
Average space 3 x 3 4/16

BEAMS, ~~Lower~~ Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8 x 8 1/16  
Average space 3 x 3 4/16

BEAMS, ~~Lower~~ Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8 x 8 1/16  
Average space 3 x 3 4/16

BEAMS, ~~Lower~~ Deck Single or double Angle Iron, Plate or Tee Bulb Iron 8 x 8 1/16  
Average space 3 x 3 4/16

KEELSONS Centre line, single or double plate, 15 x 1 1/16  
Rider Plate 11 1/2 x 1 1/16

Angle Irons 5 x 3 1/2 x 8/16  
Double Angle Iron Side Keelson 5 x 3 1/2 x 8/16

Side-Intermedial Plate Work Plates 6 1/8 thick

Attached to outside plating with angle iron

BILGE Angle Irons 5 x 3 1/2 x 8/16

do. 5 x 3 1/2 x 8/16

BILGE STRINGER Angle Irons 5 x 3 1/2 x 8/16

SHIP STRINGER Angle Irons

Transoms, material. Knight-heads. Hawse Timbers. E. J. Oak

Windlass Emmersons Mather Patent Capstan windlass

The FRAMES extend in one length from Keel to Gunwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to above Lower St. Stringer and to Gunwale

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 1/2 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 Horse Strakes 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 1/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 for Half length amidships.

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

Breadth of laps of plating in double riveting 4 1/2 5 1/4 Breadth of laps of plating in single riveting —

Flat Keel Plates, breadth and thickness 35 x 1 1/16

PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges 9 1/16 x 10 1/16

of doubling at Bilge, or increased thickness, and length applied 9 1/16 x 10 1/16

fin up. part of Bilge to Ir. edge of Sh'rstrake 9 1/16 x 10 1/16

Main Sheerstrake, breadth and thickness 37 1/2 x 1 1/16

of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. 36 x 1 1/16

Up. or Spar Dk. Sh'rstrake, breadth & thickness 37 1/2 x 1 1/16

Butt Straps to outside plating, breadth & thickness 10 1/16 x 13 1/4 x 3/4

Lengths of Plating 65 ft. 6 in.

Shifts of Plating, and Stringers 3

Gunwale Plate on ends of Upper, Spar, or 42 x 9/16

Upper Deck Beams, breadth and thickness 42 x 9/16

Angle Iron on ditto 5 x 3 1/2 x 8/16

Tie Plates fore and aft, outside Hatchways 12 x 9/16

Diagonal Tie Plates on Beams No. of Pairs, 3

Planksheer material and scantling 3

Waterways do. do. 3

Flat of Upper Deck do. do. 4

How fastened to Beams Full Iron Bolted

Stringer Plate on ends of Main or Middle Deck 12 x 9/16

Is the Stringer Plate attached to the outside plating? yes

Angle Irons on ditto, No. 2 3 1/2 x 3 1/2 x 8/16

Tie Plates, outside Hatchways 12 x 8/16

Diagonal Tie Plates on Beams, No. of pairs 2 12 x 8/16

Waterways materials and scantlings 3

Flat of Middle Deck do. do. 3

How fastened to Beams 5 in bolts

Stringer Plates on ends of Lower Deck, Hold or Orlop Beams

Is the Stringer Plate attached to the outside plating? yes

Angle Irons on ditto, No. —

Stringer or Tie Plates, outside Hatchways —

Flat of Lower Deck —

Ceiling betwixt Decks, thickness and material 2 1/2 in. 7.7

in hold do. do. 5 1/4

Main piece of Rudder, diameter at head 5 1/4

do. at heel 5 1/4

Can the Rudder be unshipped afloat? yes

Bulkheads No. one Thickness of 10 1/16 x 5/16

Height up Main deck

How secured to sides of ship Double bands

Size of Vertical Angle Irons 3 x 3 x 7/8 and distance apart 30 ins.

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

The above is a correct description.

Builder's Signature, Ally Stephen & Sons

Surveyor's Signature, James P. Smith

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

IRON 470-0244



**Workmanship.**

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

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? *Very few and in bottom only.*

17829 Iron

Masts, Bowsprit, Yards, &c., are *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 78' 9" x 29" Main 82' 4" x 29" Mizen 73' x 25"*

*More plates in Round 7/16-4/16 (Mizen 9/16-5/16-) Edges zig zag Butts Tied.*

*Bowsprit 34 ft. Square x 24" in plates in the round 9/16-4/16. Edges zig zag Butts.*

*Tables & quadrants -*

NUMBER for EQUIPMENT	16.174	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
SAILS.							Bowers					
No. Fore Sails,		270	1 3/4	55.125	270 1 3/4	55 1/8			30.0.21	28 1/2	30	28 1/2
Fore Top Sails,									30.0.13	28 1/2	30	28 1/2
Fore Topmast Stay Sails									25.2.22	25 1/2	25.2.0	25 1/2
Main Sails,												
Main Top Sails,												
and												

Standing and Running Rigging *Wire & Stamp* sufficient in size and *good* in quality. She has *2 life* Long Boats and *some* others.

The Windlass is *Emmerson's* *rotator* *st.* Capstan *good* and Rudder *good*. Pumps, *in bulk with brass chambers.*

**Engine Room Skylights.** How constructed? *How secured in ordinary weather?*

What arrangements for deadlights in bad weather? *How are lids secured?*

**Coal Bunker Openings.** How constructed? *Height above deck?*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Five scupper ports on each side*

**Cargo Hatchways.**—How formed? *Iron casings.*

State size Main Hatch *14.0 x 11.0* Forehatch *7.9 x 6.2* Quarterhatch *8.0 x 7.7.*

If of extraordinary size, state how framed and secured? *Built iron and angles.*

What arrangement for shifting beams? *Built iron and angles.*

Hatches, If strong and efficient? *yes*

Order for Special Survey No. <i>1746</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>1876. July 24. 28. 31. August 7. 18. 22. 28</i>
Date <i>March 5/96</i>	2nd. On the plating during the process of riveting and before the decks were laid...	<i>September 11. 7. 11. 15. 18. 21. 25. 28. October 2. 5.</i>
Order for Ordinary Survey No. <i>205</i>	4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>30. 32. 34. 7. 11. 15. 19. 22. 26. 29. 1877. Jan</i>
Date <i>March 5/96</i>	5th. After the ship was launched and equipped	<i>9. 12. 15. 27. 31. February 3 and 7</i>

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

*Fore Main yards 76 x 19" no plates in Round 6/16-4/16 } edges zig zag & Butts Tied*  
*- Lower 20 ft 62 x 15 " " " 5/16-3/16 } Rotted.*

*This is a sister vessel to ship "Hako" Glasgow Report No 4369. Has been constructed in accordance with approved midship section attached to ship "Pawa". Glasgow Report No 4351. So well built and working in my opinion of the class recommended below -*

*Deck House 31.8 x 14.7*

*1464.9" 29 ft.*

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

How are the surfaces preserved from oxidation? Inside *Caulked in bottom, Painted* Outside *Paint.*

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

The amount of the Entry Fee ... £ 5 : : : is received by me, *Feb 6th*

Special ... £ 51 : 18 : 6 February 1877

Certificate ... *Mar 1877*

(Travelling Expenses, if any, £ ...).

Committee's Minute *9th February 1877*

Character assigned *100 A. 1.*

