

IRON SHIP.

15568

No. 4160 Survey held at Glasgow Date, First Survey 9 March 74 Last Survey 24 December 1875

On the S.S. AUSTRALIA (four masted schooner) Master William Cargill

TONNAGE under 1737.42
Tonnage Deck 866.24
Ditto of ~~Third~~ Spar, or ~~Amidships~~ Deck. 133.46
Ditto of ~~Deck~~, or ~~Raised Gr. Dk.~~
Ditto of Houses on Deck 2737.12
Gross Tonnage 146.53
Less Crew Space 1022.41
Less Engine Room 1714.71
Register Tonnage as cut on Beam

~~ONE, OR TWO DECKED, THREE DECKED VESSEL.~~
SPAR, OR ~~AMIDSHIP~~-DECKED VESSEL.
HALF BREADTH (moulded) 18.7
DEPTH from upper part of Keel to top of Upper Deck Beams 20.9
GIRTH of Half Midship Frame (as per Rule) 33.2
1st NUMBER 72.8
~~2nd NUMBER~~ 27.227
LENGTH 374
2nd NUMBER 27.227
PROPORTIONS—Breadths to Length 9.9
Depths to Length—Upper Deck to Keel 13.1
Main Deck ditto 17.8

Built at Glasgow
When built 1875 Launched 15 November
By whom built John Elder & Co.
Owners J. S. & W. S. Jamieson, 37 Glasgow
William Pearce, 37 Glasgow
Port belonging to Glasgow
Destined Voyage New Zealand
If Surveyed while Building, Afloat, or in Dry Dock.
under special survey

LENGTH on deck as per Rule 374 Feet. 374 Inches. BREADTH Moulded 37 Feet. 37 Inches. DEPTH top of Floors to Upper Deck Beams 20.9 Feet. 20.9 Inches. Do. do. Main Deck Beams 18.7 Feet. 18.7 Inches. Power of Engines 500 Horse. No. of Decks with flat laid THREE No. of Tiers of Beams THREE

Dimensions of Ship per Register, length, 376.9 breadth, 37.45 depth, 18.7

	Inches in Ship.	Inches per 16ths.	Inches in Ship.	Inches per 16ths.	Inches in Ship.	Inches per 16ths.	Inches in Ship.	Inches per 16ths.
KEEL, depth and thickness	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4
STEM, moulding and thickness	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4	10 x 2 3/4
STERN-POST for Rudder do. do.	10 1/2 x 5 1/2	3 10 x 5 1/2	10 1/2 x 5 1/2	3 10 x 5 1/2	10 1/2 x 5 1/2	3 10 x 5 1/2	10 1/2 x 5 1/2	3 10 x 5 1/2
for Propeller	10 1/4 x 6 1/2	3 10 x 5 1/2	10 1/4 x 6 1/2	3 10 x 5 1/2	10 1/4 x 6 1/2	3 10 x 5 1/2	10 1/4 x 6 1/2	3 10 x 5 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 in.	(Class 100.9)	24 in.	(Class 100.9)	24 in.	(Class 100.9)	24 in.	(Class 100.9)
FRAMES, Angle Iron, for 23 1/2 length amidships	4 1/2 x 3	8 1/2	4 1/2 x 3	8 1/2	4 1/2 x 3	8 1/2	4 1/2 x 3	8 1/2
Do. for at each end	4 1/2 x 3	7 1/2	4 1/2 x 3	7 1/2	4 1/2 x 3	7 1/2	4 1/2 x 3	7 1/2
REVERSED FRAMES, Angle Iron	3 x 3	7 1/2	3 x 3	7 1/2	3 x 3	7 1/2	3 x 3	7 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2	23 x 9 1/2
thickness at the ends of vessel	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2	7 1/2 x 8 1/2
depth at 3/4 the half-bdth. as per Rule	AS PER SECTION	AS PER SECTION	AS PER SECTION	AS PER SECTION	AS PER SECTION	AS PER SECTION	AS PER SECTION	AS PER SECTION
height extended at the Bilges	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.	TWICE DEPTH.
BEAMS, Upper, Spar, or Amidships Deck	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2	6 x 5 1/2
Single or Double Angle Iron, Plate or Tee Bulb Iron	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Single or Double Angle Iron on Upper edge	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Average space	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.
BEAMS, Main, or Middle Deck	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2
Single or Double Angle Iron, Plate or Tee Bulb Iron	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2
Single, or double Angle Iron, on Upper Edge	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Average space	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.
BEAMS, Lower Deck, Hold, or Orlop	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2
Single or Double Angle Iron, Plate or Tee Bulb Iron	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2	3 1/2 x 3	7 1/2
Single or double Angle Iron on Upper Edge	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Average space	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.	4 feet.
KEELSONS Centre line, single or double plate, bar, or intercostal, Plates	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2	19 x 13 1/2
Rider Plate	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2	9 x 10 1/2
Bulk Plate to Intercostal Keelson	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2
Angle Irons	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2	15 x 12 1/2
Double Angle Iron Side Keelson	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2
Side Intercostal Plate	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2
do. Angle Irons	3 1/2 x 3 1/2	8 1/2	3 1/2 x 3 1/2	8 1/2	3 1/2 x 3 1/2	8 1/2	3 1/2 x 3 1/2	8 1/2
Attached to outside plating with angle iron	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2
BILGE Angle Irons	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2	9 x 9 1/2
do. Bulb Iron	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2
do. Intercostal plates riveted to plating for 1/4 length	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2
BILGE STRINGER Angle Irons	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2
Intercostal plates riveted to plating for length. all the top.	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2	6 x 4 x 9 1/2
SIDE STRINGER Angle Irons	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2	x 9 1/2

Transoms, material. Knight-heads. Hawse Timbers. Iron Plates angled
Windlass Rapiers Steam Pall Bitt

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 5" apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to above Wood 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 1/4 in. diameter, averaging 5 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/4 ins. from centre to centre.

Butts of Horse Strakes at Bilge for 198 ft length, treble riveted with Butt Straps 1/6 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 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 198 ft length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 198 ft length amidships.

Butts of Main Stringer Plate, treble riveted for 198 ft length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 198 ft 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? Double and Riddle as per rule

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

Beams of the various Decks, how secured to the sides? Beam knees Riveted to Beams No. of Breasthooks, 5 Crutches, 3

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

Manufacturer's name or trade mark. James Caird

The above is a correct description.

Surveyor's Signature, James Caird

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

IRON 464-0255

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 butts only.*
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 *Track and yards of deck steel wire*

NUMBER for EQUIPMENT 32.986		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 req'd per Rule.
N ^o .	SAILS.	CABLES, &c. Chain	300	1 15/16	67 1/2	300 1 15/16 67 1/2	Bowers		36.2.14	33 1/2	36 1/2	33 1/2
	Fore Sails,								36.2.19	33 1/2	36 1/2	33 1/2
	Fore Top Sails,								30.2.14	29 1/2	31.0.3	29 1/2
	Fore Topmast Stay Sails											
	Main Sails,											
	Main Top Sails,											
	and											

Standing and Running Rigging *Wm Kemp* sufficient in size and *good* in quality. She has *2 Life Long* Boat and *two others*
The Windlass is *superior steam* Capstan *and* Rudder *good* Pumps *from bunch copper chambers.*
Engine Room Skylights. How constructed? *Iron coming 8' 1/2' above deck and 1' 1/2' below.* How secured in ordinary weather? *Brick down*
What arrangements for deadlights in bad weather? *Thick glass with iron gratings.*
Coal Bunker Openings. How constructed? *Cast iron frames* How are lids secured? *Locking lids* Height above deck? *18 inches*
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *open Bulwarks (spar deck)*

Cargo Hatchways. How formed? *Iron coming*
State size Main Hatch *8' 0" x 7' 8"* Forehatch *6' 1" x 6' 2"* Quarterhatch *6' 1" x 5' 11"*
If of extraordinary size, state how framed and secured? *yes*
What arrangement for shifting beams? *yes*
Hatches, If strong and efficient? *yes*

Order for Special Survey No. <i>9448</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1874 March 9. 13. 17. 19. 26. April 4. 8. 16. 18. 23. 30.
Date <i>Dec. 1973</i>	2nd. On the plating during the process of riveting	May 8. 12. 23. 27 June 1. 5. 10. 13. 17. 20. 22. 26. 29. July 2.
Order for Ordinary Survey No. <i>175</i>	3rd. When the beams were in and fastened, and before the decks were laid....	13. August 14. 20. 26. North stopped.
Date <i>1875</i>	4th. When the ship was complete, and before the plating was finally coated or cemented...	10. 15. July 2. 9. 13. 15. 26. 29. August 3. 6. 10. 12. 16. 19. 24. 27. 30.
No. <i>175</i> in builder's yard.	5th. After the ship was launched and equipped	Sept. 1. 17. 22. 25. 28. Oct. 1. 6. 8. 11. 14. 19. 21. 28 November 1. 4. 9. 12. 16. 25. 27. December 2. 10. 16. 23 and 24.

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

Fourteen pairs of Partial Bulkheads, fitted on each side (between main & spar deck) no compensation for deck-bonnet. Eight pairs of Stiff, fitted between Lower and main deck as compensation for deficiency of Reverse Bars.

This is a sister vessel to the S.S. "ZEALANDIA". Glasgow Report No. 4143 was placed and port riveted when north was stopped. Ultimately the vessel was lengthened 22 feet in accordance with the iron approved drawings attached to Report No. 4143.

Is well built and nothing in my opinion of the class recommends below.

Main deck Stiff 110 ft. 6 in x 17 ft. 2 in midship Stiff 21 ft. 4 in x 14 ft. 2 in after Stiff 31 ft. 10 in x 14 ft. 2 in

State if *one, two, or three, decked vessel, or if spar, or arched decked*, and the length 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 *Cement in bottom Paint above* Outside *Paint*.

I am of opinion this Vessel should be Classed *100 A-1 marked "SPAR DECKED"*

The amount of the Entry Fee ... £ *5* : : : is received by me, *James Purdie*

Special ... £ *89.15.6* Dec. 25 1875

Certificate ... *Grates*

(Travelling Expenses, if any, £ *6.6.6*.)

Committee's Minute *28th Dec. 1875*

Character assigned *100 A-1*

J. M. Purdie

2 Dk. Spec. Pl. Lloyd's Reg. 28/12/75

100 A-1 as recommended
28/12/75
Lloyd's Register Foundation