

IRON SHIP.

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No. 9223 Survey held at *Port Glasgow* Date, First Survey *14th April 1886* Last Survey *November 15 1886*
(36 visits)

On the iron screw steamer "Australind"

Master *Julloch*
Built at *Port Glasgow*
When built *1886* Launched *28th Sept 1886*
By whom built *Blackwood & Gordon*
Owners *C. B. Balfour & Co. Ltd.*
London
Residence *London*
Port belonging to *Fremantle*
Destined Voyage *Perth*
Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Tonnage Deck	756.17
Ditto of Third, Spar, or Awning Deck	
Ditto of Poop, or Raised Or. Dh.	175.04
Ditto of Houses on Deck	39.80
Ditto of Forecastle	47.62
Gross Tonnage	1018.63
Less Crew Space	139.07
Light Air Space	879.56
Less Engine Room	325.96
Water Tonnage as cut on Beam	553.60

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.	
Half Breadth (moulded)	15.87
Depth from upper part of Keel to top of Upper Deck Beams	16.57
Girth of Half Midship Frame (as per Rule)	28.59
1st Number	6083
1st Number, if a 3-Decked Vessel deduct 7 feet	
Length	223.5
2nd Number	13595
Proportions— Breadths to Length	7
Depths to Length— Upper Deck to Keel	7.36
Main Deck ditto	

LENGTH	Feet. Inches. 223.6	BREADTH— Moulded	Feet. Inches. 31.9	DEPTH top of Floors to Upper Deck Beams	Feet. Inches. 14.8 1/2	Power of Engines	Horse. 125	No. of Decks with flat laid	2	No. of Tiers of Beams	2
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Dimensions of Ship per Register, length, 224.8 breadth, 32.0 depth, 14.65

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
KEEL, depth and thickness	8 1/2 x 2 3/8	8 1/2 x 2 3/8	8 1/2 x 2 3/8	8 1/2 x 2 3/8	8 1/2 x 2 3/8	8 1/2 x 2 3/8
STEM, moulding and thickness	8 1/2 x 2 3/8	7 1/2 x 2 3/8	8 1/2 x 2 3/8	7 1/2 x 2 3/8	8 1/2 x 2 3/8	7 1/2 x 2 3/8
STERN-POST for Rudder do. do.	2	2	2	2	2	2
" " for Propeller	4 1/2 x 3 5/8	7 1/4 x 4 3/4	4 1/2 x 3 5/8	7 1/4 x 4 3/4	4 1/2 x 3 5/8	7 1/4 x 4 3/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	23	21	23	21	23
FRAMES, Angle Iron, for 2/3 length amidships	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
Do. for 1/3 at each end	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
REVERSED FRAMES, Angle Iron	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	20	17 1/2	20	17 1/2	20	17 1/2
thickness at the ends of vessel	10	7	10	7	10	7
depth at 3/4 the half-bdth. as per Rule	10	7	10	7	10	7
height extended at the Bilges	40	35	40	35	40	35
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	5 1/2 x 3	5 1/2 x 3	5 1/2 x 3	5 1/2 x 3	5 1/2 x 3
Single or double Angle Iron on Upper edge	42	46	42	46	42	46
Average space	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	3	3	3	3	3
Single or double Angle Iron, on Upper Edge	42	46	42	46	42	46
Average space	9	8 1/2	9	8 1/2	9	8 1/2
BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4	4	4	4	4	4
Single or double Angle Iron on Upper Edge	10	10	10	10	10	10
Average space	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2
BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4
Single or double Angle Iron on Upper Edge	42	46	42	46	42	46
Average space	14	14	14	14	14	14
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	10 3/4	11	10 3/4	11	10 3/4	11
Rider Plate	5	5	5	5	5	5
Bulb Plate to Intercostal Keelson	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
Angle Irons	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
Double Angle Iron Side Keelson	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
Side Intercostal Plate	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
do. Angle Irons	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
Attached to outside plating with angle iron	3 2 3/8	3 2 3/8	3 2 3/8	3 2 3/8	3 2 3/8	3 2 3/8
BILGE Angle Irons	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
do. Bulb Iron	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
do. Intercostal plates riveted to plating for length	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
BILGE STRINGER Angle Irons	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
Intercostal plates riveted to plating for length	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2
SIDE STRINGER Angle Irons	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2	5 3/2

	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
Flat Keel Plates, breadth and thickness	40	10 1/2	34	10 1/2
PLATES in Garboard Strakes, br'dth & thickness	9	8	9	8
" From Garboard to upper part of Bilges	116	116	116	116
" Of d'bling at Bilge, or increased thickness, and length applied	9 1/2	9 1/2	9 1/2	9 1/2
" From up. prt of Bilge to l.r. edge of Sh'rstrake	40	11 1/8	36	11 1/8
" Main Sheerstrake, breadth and thickness	16 1/2	16 1/2	16 1/2	16 1/2
" Of d'bling at Sh'stk. & Ing. applied	14 1/2	14 1/2	14 1/2	14 1/2
" From M'n. to Up. or Spar Dk. Sh'rstrake	16 1/2	16 1/2	16 1/2	16 1/2
" Up. or Spar Dk Sh'rstrake, br'dth & thic'k'ns.	14 1/2	14 1/2	14 1/2	14 1/2
Butt Straps to outside plating, breadth & thickness	2 1/2	2 1/2	2 1/2	2 1/2
Lengths of Plating	21 1/2	21 1/2	21 1/2	21 1/2
Shifts of Plating, and Stringers	32	10	32	10
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	24	8	24	8
Angle Iron on ditto	5 1/2	7	5 1/2	7
Tie Plates fore and aft, outside Hatchways	10	8	10	8
Diagonal Tie Plates on Beams No. of Pairs	3 1/2	3 1/2	3 1/2	3 1/2
Flat of Up., Spar, or Awning Dk.	3 1/2	3 1/2	3 1/2	3 1/2
How fastened to Beams	3 1/2	3 1/2	3 1/2	3 1/2
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	28	8	28	8
Is the Stringer Plate attached to the outside plating?	22	7	22	7
Angle Irons on ditto, No.	3 1/2	8	3 1/2	8
Tie Plates, outside Hatchways	3	3	3	3
Diagonal Tie Plates on Beams, No. of pairs	3	3	3	3
Flat of Middle Deck* do. do.	3	3	3	3
How fastened to Beams	3	3	3	3
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	8	28	8
Is the Stringer Plate attached to the outside plating?	22	7	22	7
Angle Irons on ditto, No.	3 1/2	8	3 1/2	8
Stringer or Tie Plates, outside Hatchways	3	3	3	3
Flat of Lower Deck	3	3	3	3
Ceiling betwixt Decks, thickness and material	2 1/2	2 1/2	2 1/2	2 1/2
" in hold do. do.	5 1/4	5 1/4	5 1/4	5 1/4
Main piece of Rudder, diameter at head	3	3	3	3
do. at heel	3	3	3	3
Can the Rudder be unshipped afloat?	4	4	4	4
Bulkheads No. 4 No. per Rule	4	4	4	4
" Thickness of	5 1/2	5 1/2	5 1/2	5 1/2
" Height up	2 1/2	2 1/2	2 1/2	2 1/2
" How secured to sides of ship	3 1/2	3 1/2	3 1/2	3 1/2
" Size of Vertical Angle Irons	3 1/2	3 1/2	3 1/2	3 1/2
" Are the outside Plates doubled two spaces of Frames in length?	3	3	3	3

The FRAMES extend in one length from *middle line* to *gunwale* Riveted through plates with *3/4* in. Rivets, about *6* apart.

REVERSED ANGLE IRONS on floors and frames extend *from middle line to main all changes* and to *stem H.L.* alternately

BEAMS. 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* in. diameter, averaging *5* 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 *3* 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 Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.

Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Breadth of laps of plating in single riveting *5 1/2 x 4 1/2*

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

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *yes* No. of Breasthooks, *4* Crutches, *3*

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

Manufacturer's name or trade mark, *Beams, Butts & Angles*

The above is a correct description

Builder's Signature, *Blackwood & Gordon* Surveyor's Signature, *W. W. W.*

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

Form No. 1 for Iron Ship

State clearly where plating is of alternate thickness— as distinguished from diminished thickness at ends of vessel. * If Iron Deck, state if white or part, and if wood deck is laid thereon.

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 only.*

Masts, Bowsprit, Yards, &c., are *all* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings 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 Material and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Both steel masts as per sketch attached*
Siemens Martin Steel manufactured by Messrs. Brown & Forth Ltd.

NUMBER & LETTER for EQUIPMENT		SAILS.		CABLES, &c.		Test per Certificate.		Inches per Rule.		Machine where Tested and Superintendent, also Number of Certificate.		ANCHORS.		N ^o .		Weight.		Test per Certificate.		W'ght req'd per Rule.		Machine where Tested and Superintendent, also Number of Certificate.	
N ^o .				Fathoms.	Inches.	T	T	fms.				N ^o .	Ex. Stock.										
	Fore Sails,	Chain	270	1 5/8	47 1/2	66 1/2	240	1 5/16		30. Dock, J. Hartnefs	Bower	15566	23:3:0	23:13:3:0									
	Fore Top Sails,	Iron Stream Chain or Steel Wire	75	1 5/16	15 1/2	23 1/2	75	1 5/16			15567	23:1:0	23:6:1:0										
	Fore Topmast Stay Sails,	or Hempen Strm Cable									15565	20:2:0	21:3:3:0									30. Dock, J. Hartnefs	
	Main Sails,	Towline, Hemp or Steel Wire	90	10			10				Total	67:2:0											
	Main Top Sails, and	Hawser	90	8			8				Stream Anchor	15566	18:0:7	19:2:0:21									
		Warp	90	5 1/2			5 1/2				Kedge	15562	7:1:14	9:11:2:4									
		quality									2nd Kedge	15564	3:2:14	6:0:3:21									

Standing and Running Rigging *Wire & Manilla* sufficient in size and *good* in quality. She has *two* Long Boats and *two* Life Boats.

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good & efficient*

Engine Room Skylights.—How constructed? *Iron and Teak* How secured in ordinary weather? *Platings*

What arrangements for deadlights in bad weather? *Shutters & Dead Lights*

Coal Bunker Openings.—How constructed? *Castings* How are lids secured? *by Bolts* Height above deck? *Flush*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *2 Ports each side 2' x 1' 8" and four Scupper, also carrying pipes & 3 scuppers each side*

Cargo Hatchways.—How formed? *Plate and Angle Iron*

State size Main Hatch *19'3" x 10'* Forehatch *5' x 5'* Quarterhatch *14' x 9'*

If of extraordinary size, state how framed and secured? *2 x 10" frames to main hatch above and below*

What arrangement for shifting beams? *Fitted between double sponges & secured with Bolts & nuts*

Hatches, If strong and efficient? *Yes 3" solid*

Order for Special Survey No. *1310* Date *7th May 1886*

Order for Ordinary Survey No. *1* Date *9th*

No. *212* in builder's yard.

State dates of letters respecting this case *29 April 1886 and 28 July 1886*

General Remarks (State quality of workmanship, &c.) *The workmanship is good and well finished throughout. This vessel has been built in accordance with the approved Drawings attached, and in general conformity with the rules the details of which have been fully complied with. Strong beams have been fitted in the Engine and Boiler space as shown on Profile Drawing.*

Shade deck 80' 20' 42"

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Paint and Paint* Outside *Paint & Blistering*

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, *J.W.*

Special *£ 47 : 4 : 0* 19/11/1886

(to be sent as per margin). Certificate ... *gratis.*

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

Committee's Minute *TUESDAY NOV 23 1886*

Character assigned *100 A 1*

J.W. 100A (part iron) Shade DR

Shade DR 3" TB Equipment letter 7

Shade DR

Shade DR

Shade DR

Shade DR

Shade DR

Shade DR

Certificate to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.

Surveyor to Lloyd's Register of British and Foreign Shipping
 It is submitted that this vessel is worthy to be classed 100A 1 as recommended
 1886 (part iron) and Shade DR 3" TB
 Lloyd's Register
 22/11/86