

IRON SHIP.

Survey held at *Port Glasgow* Date, First Survey *3rd July* Last Survey *24th Dec^r* 18*77*

"Alert"

Master *Wm Munro*

Built at *Port Glasgow*

When built *1877* Launched *3rd Nov^r 1877*

By whom built *James D. Duncan & Co.*

Owners *James D. Duncan & Co. & others*

Port belonging to *Greenock*

Destined Voyage *Melbourne*

Surveyed while Building, Afloat, or in Dry Dock.

ONE, OR TWO DECKED, THREE DECKED VESSEL.	
SPAR, OR AWNING-DECKED VESSEL.	
HALF BREADTH (moulded)	<i>9.75</i>
DEPTH from upper part of Keel to top of Upper Deck Beam	<i>11</i>
GIRTH of Half Midship Frame (as per Rule)	<i>14.92</i>
1st NUMBER	<i>38.67</i>
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]	
LENGTH	<i>164.5</i>
2nd NUMBER	<i>6.45</i>
PROPORTIONS—Breathths to Length	<i>25.8</i>
Depths to Length—Upper Deck to Keel	
Main Deck ditto	<i>16.2</i>

LENGTH on deck as per Rule	<i>164.5</i>	BREADTH Moulded	<i>19.5</i>	DEPTH top of Floors to Upper Deck Beams	<i>10.16</i>	Power of Engines	<i>90</i>	Horse	<i>90</i>	Nº. of Decks with flat laid	<i>One</i>	Nº. of Tiers of Beams	<i>One</i>
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Dimensions of Ship per Register, length, *169.05* breadth, *19.6* depth, *9.25*

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>6x2 1/2</i>	<i>4x1 5/8</i>	STEM, moulding and thickness	<i>6x2</i>	<i>6 1/2 x 1 5/8</i>	STERN-POST for Rudder do. do.	<i>4x3</i>	<i>6 1/4 x 3 1/4</i>	for Propeller	<i>21</i>	(Class <i>90A</i>)			
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>20</i>		FRAMES, Angle Iron, for 3/4 length amidships	<i>3 2 1/2</i>	<i>6 3 2 1/2</i>	Do. for 1/4 at each end	<i>3 2 1/2</i>	<i>6 3 2 1/2</i>	REVERSED FRAMES, Angle Iron	<i>2 1/2 2 1/2</i>	<i>5 2 1/2 2 1/2</i>			
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>10</i>	<i>6 1 1/2</i>	thickness at the ends of vessel	<i>5</i>	<i>5</i>	depth at 3/4 the half-bdth. as per Rule	<i>5 1/2</i>	<i>5 1/4</i>	height extended at the Bilges	<i>36</i>	<i>23</i>			
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Angle 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	<i>6</i>	<i>6 5x3x7</i>			
Angle or double Angle Iron, on Upper Edge	<i>3 1/2 2 1/2</i>	<i>5</i>	Average space	<i>40</i>	<i>42</i>	BEAMS, Lower Deck, Hold, or Orlop Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron			Angle or double Angle Iron on Upper Edge					
Average space			KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates		<i>6</i>	Rider Plate			Bulb Plate to Intercoastal Keelson	<i>6</i>	<i>6 5</i>	<i>5</i>		
Angle Irons	<i>3 1/2 2 1/2</i>	<i>6 3 3</i>	Double Angle Iron Side Keelson			Side Intercoastal Plate			do. Angle Irons		<i>3 3</i>	<i>6</i>		
Attached to outside plating with angle iron		<i>2 1/2 2 1/2</i>	BILGE Angle Irons	<i>3 1/2 2 1/2</i>	<i>6 3 3</i>	do. Bulb Iron	<i>6</i>	<i>6 5</i>	do. Intercoastal plates riveted to plating for length					
BILGE STRINGER Angle Irons	<i>3 1/2 2 1/2</i>	<i>6 3 3</i>	Intercoastal plates riveted to plating for length	<i>6</i>	<i>6</i>	SIDE STRINGER Angle Irons								

Transoms, material. Knight-heads. Hawse Timbers. *Iron*

Windlass *Iron Patent* Pall Bitt *Iron*

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

The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *above Bilge 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* 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 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 Strakes at Bilge for length, treble riveted with Butt Straps 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, treble riveted for *75* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *✓* length amidships.

Butts of Main Stringer Plate, treble riveted for *75* 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? *Welded knee plates* No. of Breasthooks, *4* Crutches, *3*

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

Manufacturer's name or trade mark, *Angled Beams Ingham Plates Glasgow Iron Co^{rs}*

The above is a correct description.

Builder's Signature, *Robt Duncan & Co* Surveyor's Signature, *Edmund Rouchman*

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

IRON 475-0315

Workmanship.

Are the butts of plating planed 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?

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*

19909

Masts, Bowsprit, Yards, &c., are *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 *Light Pale Masts 3 in W. & rigged as a Barque to sail out to Melbourne*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS. N°.	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
N°.	SAILS.	CABLES, &c.					Bowers				
1/2	Fore Sails,	Chain	90	10.27	16581	18.27	4924	7.2.4	7.15.3.21	7 1/4	9-30
	Fore Top Sails,	<i>Netherton Proving House</i>					4926	4.1.10	9.11.2.4		
	Fore Topmast Stay Sails	<i>2nd Nov 1877 D. G. Lewis Sup</i>					38m	7.4	<i>D. G. Lewis Superintendent</i>		
	Main Sails,	Hawser ...	30	11/16	45 1/16		Stream	4953	2-1.24.5.0.0.0	2 3/4	
	Main Top Sails,	Towlines ...	90	4	90 1/16 1/2		Kedges	stock	2.11	1 1/4	
and		Warp ...	120	5				1	1.1.8		
		quality	120	3 1/2							

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* quality. She has *One* Long Boat and *two* others

The Windlass is *Brown & Harfield's Patent* Capstan *2 1/2"* which and Rudder and Pumps *efficient*

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

What arrangements for deadlights in bad weather? *Wooden Shutters & Bulls Eyes.*

Coal Bunker Openings. How constructed? *Cast Iron* How are lids secured? *Self Locking* Height above deck? *flush*

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

Cargo Hatchways. How formed? *Iron framed Coamings 12ms deep*

State size Main Hatch *9'9" by 6'0"* Forehatch *5'6" by 7'0"* 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. <i>862</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.P. and Surveyed 1877.</i>
Date <i>24 April 1877</i>		2nd. On the plating during the process of riveting	<i>July 3-24. 27. 31 August 10. 13. 15. 16. 22</i>
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>September 5. 7. 10. 21. 24. October 5. 11. 16. 19</i>
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>23. 26. 30 November 3. 8. 13. 15. 24. 28</i>
No. <i>120</i> in builder's yard.		5th. After the ship was launched and equipped	<i>December 5. 10. 12. 17. 22. 24</i>

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the Midship Section and Deck and Longitudinal plans here- with appended which were submitted and approved by the Committee in letter dated 24th May 1877. and as recommended therein the Iron Deck plating has been extended forward as shown in Red Ink on Deck plan, and in all other respects the Rules have been complied with. The workmanship and materials are of good quality Water Ballast Tanks forward and aft tested*

*Mem: 8/11/78
The facts as regards the fitting of this vessel will be found in the papers of the Committee of this date, sitting at the Committee's office, 10, Cornhill, London, E.C. 4. The Committee is of opinion that the vessel is to be written to - approved.*

*See Com of Newi
Queen of the South
at bottom
Thomas Richard
Lady Longdon*

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

How are the surfaces preserved from oxidation? Inside *Portland Cement* Outside *Red Lead & Paint and Yellow on bottom*

I am of opinion this Vessel should be Classed *90A1*

The amount of the Entry Fee ... £ 3 : 0 : 0 is received by me, *Dec 1877*

Special ... £ 11 : 10 : 0
Certificate ... £ 0 : 0 : 0
(Travelling Expenses, if any, £ ...)

Committee's Minute

28th December, 1877.

Character assigned

Le 10/1/78

*90A1
D. G. Lewis*

*Edmund R. Anchman
It is submitted that this appears eligible to be classed 90A1 as recommended
"One deck"*

*Lloyd's Regd
29/12/77*