

IRON SHIP.

THURSDAY 6 DEC 1883

No. *654* Survey held at *Dumbarton* Date, First Survey *20th June 1883* Last Survey *4th Dec 1883*

On the *Sailing Ship "Macdiarmid"*

TONNAGE under Tonnage Deck } <i>1497.87</i>	ONE, OR TWO DECKED, THREE DECKED VESSEL, STATE OR AWNING DECKED VESSEL	Master <i>Constable</i>
Ditto of Third, Spar, or Awning Deck. } <i>64.00</i>	Half Breadth (moulded) <i>18.98</i>	Built at <i>Dumbarton</i>
Ditto of Poop, or Deck } <i>17.70</i>	Depth from upper part of Keel to top of Upper Deck Beams <i>24.75</i>	When built <i>1883</i> Launched <i>16 Oct/83</i>
Ditto of Houses on Deck } <i>42.86</i>	Depth of Half Midship Frame (as per Rule) <i>38.58</i>	By whom built <i>A. McMillan & Co.</i>
Ditto of Forecastle } <i>1622.41</i>	1st Number <i>82-28</i>	Owners <i>A. McMillan & Co.</i>
Gross Tonnage } <i>62.55</i>	2nd Number <i>19994</i>	Residence <i>Dumbarton</i>
Less Crew Space	Length <i>243</i>	Port belonging to <i>Glasgow</i>
Less Engine Room	2nd Number <i>19994</i>	Destined Voyage <i>Sydney</i>
Register Tonnage as out on Beam } <i>1559.86</i>	Proportions— Breadths to Length... .. <i>8.41</i>	If Surveyed while Building, Afloat, or in Dry Dock. <i>While Building & Afloat</i>
	Depths to Length—Upper Deck to Keel... .. <i>9.81</i>	
	Main Deck ditto	

Official Number

LENGTH on deck as per Rule	Feet. Inches.	BREADTH Moulded	Feet. Inches.	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.	Power of Engines	Horse.	N° of Decks with flat laid	N° of Tiers of Beams
<i>243</i>	<i>-</i>	<i>87 11</i>	<i>87 11</i>	<i>22 8 1/2</i>	<i>22 8 1/2</i>	<i>✓</i>	<i>✓</i>	<i>2</i>	<i>2</i>
Dimensions of Ship per Register, length, <i>255.3</i> breadth, <i>38.2</i> depth, <i>22.55</i> moulded depth <i>24.5</i>									
KEEL, depth and thickness	Inches in Ship		Inches per Rule		Flat Keel Plates, length and thickness				
STEM, moulding and thickness	<i>9 1/2 x 2 1/2</i>		<i>9 1/2 x 2 1/2</i>		<i>36 12 36 12</i>				
STERN-POST for Rudder do. do.	<i>9 x 2 1/2</i>		<i>9 x 2 1/2</i>		PLATES in Garboard Strakes, br'dth & thickness				
" " for Propeller	<i>9 x 2 1/2</i>		<i>9 x 2 1/2</i>		From Garboard to upper part of Bilges... <i>2 shakes 10</i>				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24 ins</i>		<i>24 ins</i>		Of d'bling at Bilge, or increased thickness and length applied <i>2 - - - 11</i>				
					From up. prt of Bilge to lr. edge of Sh'rstrake... <i>2 - - - 10</i>				
					Main Sheerstrake, breadth and thickness... <i>3 - - - 12</i>				
					Of d'bling at Sh'rstrake & lng. applied <i>40 13 40 13</i>				
					From Main to Upper or Spar Dk Sh'rstrake... <i>19 1/2 14 19 1/2 14</i>				
					Up. or Spar Dk Sh'rstrake, breadth & thickness... <i>9 3/4 5</i>				
					Butt Straps to outside plating, breadth & thickness Lengths of Plating <i>7 space</i>				
					Shifts of Plating, and Stringers <i>21 - - -</i>				
					Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... <i>48</i>				
					Angle Iron on ditto <i>5 1/2 x 4</i>				
					Tie Plates fore and aft, outside Hatchways <i>2 13</i>				
					Diagonal Tie Plates on Beams No. of Pairs <i>5 13</i>				
					Flat of Up., Spar, or Awning Dk. <i>4 yellow</i>				
					How fastened to Beams ... <i>nut and oak</i>				
					Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
					Is the Stringer Plate attached to the outside plating?				
					Angle Irons on ditto, No.				
					Tie Plates, outside Hatchways				
					Diagonal Tie Plates on Beams, No. of pairs				
					Flat of Middle Deck* do. do.				
					How fastened to Beams				
					Stringer Plates on ends of Lower Deck, Holders or Outlet Beams <i>34 9 34 9</i>				
					Is the Stringer Plate attached to the outside plating? <i>Yes</i>				
					Angle Irons on ditto, No. <i>2</i> <i>4 x 4 x 9 4 x 4 x 9</i>				
					Stringer or Tie Plates, outside Hatchways <i>13 9 13 9</i>				
					Flat of Lower Deck*				
					Ceiling betwixt Decks, thickness and material ... <i>Sparring</i>				
					" in hold do. do. <i>12 1/2 R.P. 3 1/2</i>				
					Main piece of Rudder, diameter at head <i>6 1/2 3 1/2 6 1/2 3 1/2</i>				
					do. at heel <i>3 1/2 3 1/2</i>				
					Can the Rudder be unshipped afloat? <i>Yes</i>				
					Bulkheads No. 1 No. per Rule <i>11</i>				
					" Thickness of <i>7/16</i>				
					" Height up <i>upper deck</i>				
					" How secured to sides of ship <i>Double frames</i>				
					" Size of Vertical Angle Irons <i>3 1/2 x 3 1/2 x 8</i> and distance apart <i>30 ins.</i>				
					" Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>				

* If Iron Decks are of wrought iron, and if wood deck is of teak, the thicknesses as distinguished by the ends of vessel.

The FRAMES extend in one length from *middle line* to *gunwale* Riveted through plates with *7/8* in. Rivets, about *7* apart.

The REVERSED ANGLE IRONS on floors and frames extend *from middle line to upper deck* and *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 *1/8* 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 *4* 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 ~~single~~ riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *5 1/2* ins. from cr. to cr.

" Edges of Main Sheerstrake, double ~~single~~ riveted. ~~Upper Sheerstrake, double or single riveted.~~

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

" Butts of Main Stringer Plate, treble riveted for *1/2* 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? *Double & Single* No. of Breasthooks, *6* Crutches, *5*

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

Manufacturer's name or trade mark, *"West Stockton" "Coats" "Mossend"*

The above is a correct description.

Builder's Signature, *A. McMillan & Co.* Surveyor's Signature, *J. H. ...*

Surveyor to Lloyd's Register of British and Foreign Shipping

Form No. 1 for Iron Ships—1000—247/81.

615 148-0364

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 6347 *pl.*
 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*

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 *Have been built in accordance with the tracing herewith attached.*
The Iron used is Clydesdale B.B. and it was tested in accordance with the Rules and found satisfactory.

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight.	Test per Certificate	Wght req'd per Rule.	Machine where Tested & Suprntd.
			Ex. Stock.	Weight.	Wght req'd per Rule.								
	Fore Sails,	Chain	135	1 7/8	63.25	2.70	<i>A.P. Clark</i>	Bower Anchors	7651	35-0-0	52-7-2-0	34	<i>W. J.</i>
	Fore Top Sails,	Iron Stream Chain	135	1 7/8	88-5	1 7/8	<i>Chester</i>		7649	34-0-22	31-16-0-0	97	<i>Jack</i>
	Fore Topmast Stay Sails,	or Steel Wire	75	3/4	101.7	3/4	<i>Chester</i>		7650	29-1-18	28-4-0-0		<i>Chester</i>
	Main Sails,	or Hempen Strm Cable	75	3 1/2	Steel	90-11	<i>Chester</i>		7652	11-0-11	13-0-0-0	10 1/4	
	Main Top Sails,	Towline, Hemp	75	11	Manilla	0.3 1/2		Stream Anchor	7653	5-2-0	7-16-1-0	5 1/2	
	and	or Steel Wire	90	10		90-10		Kedge	7654	2-2-2	5-3-3-0	2 1/2	
		Hawser	90	6		90-6		2nd Kedge		2-18			
		Warp	90	4 1/2									

Standing and Running Rigging *Wire & Hemp* sufficient in size and *gd* in quality. She has *2* Long Boat and *2* others
 The Windlass is *W. J. M. Quirk's* Capstan *good* and Rudder *good* Pumps *good*
 Engine Room Skylights.—How constructed? *patent* How secured in ordinary weather? *✓*
 What arrangements for deadlights in bad weather? *✓*

Openings.—How constructed? *✓* How are lids secured? *✓* Height above deck? *✓*
 What arrangements for clearing upper deck of water, in case of shipping a sea? *4 Scuppers, 5 double water 2 mowing pipes*
 Hatch *15" 9" x 12 ft* Forehatch *8 ft x 6 ft* Quarterhatch *8 ft x 6 ft*
 size, state how framed and secured? *not of an extraordinary size*
 shifting beams? *one shifting Beam*
 efficient? *3" solid*

Order for Ordinary Survey No. *251* in builder's yard, *1883*
 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 *Specially surveyed: 1883:— June 20, 22, 26, July 2, 4, 6, 9, 31; Aug 2, 9, 10, 15, 17*
 2nd. On the plating during the process of riveting *22, 24; Sep: 3, 7, 11, 14, 18, 25, 28; Oct: 2,*
 3rd. When the beams were in and fastened, and before the decks were laid... *5, 10, 16, 23; Nov. 7, 9, 14, 16, 20, 23, 28,*
 4th. When the ship was complete, and before the plating was finally coated or cemented... *Dec. 4*
 5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *The workmanship is good, and the vessel has been built in accordance with the approved drawing (3 in number) herewith enclosed. And she is a sister vessel to the "Solankhe", Glasgow Report No. 6261.*

The fore peak was filled with water, to test bulkhead, and was found satisfactory.

Poop 28 feet long. Forecastle 28 feet long with 4 ft of wings House amidships 28 1/2 ft x 12 1/2 ft.

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 *Cement & Paint* Outside *Paint*

I am of opinion this Vessel should be Classed **100A.1.*
 The amount of the Entry Fee ... £ *4* : 0 : 0 is received by me, *J. J. Dodd*
 Special ... £ *64* : 0 : 0 *1/12/ 1883*
 Certificate ... 0 : 0 : 0
 (to be sent as per margin).
 Travelling Expenses, if any, £ *0*

Surveyor to Lloyd's Register of British and Foreign Shipping.
 FRIDAY 7 DEC 1883 18
 Character assigned **100A.1*
17/12/83

