

274258/8/50

No. 4840 Survey held at Port Glasgow Date, First Survey 16th January Last Survey 9th August 1880
On the S. S. "Ardanbhan" Master South

TONNAGE under		ONE, OR TWO DECKED, THREE DECKED VESSEL.	Feet.	Built at
" Tonnage Deck	923.44	SPAR, OR AWNING DECKED VESSEL.		Port Glasgow
Ditto of Third, Spar, or Awning Deck.	14.73			
Ditto of Beam as Framed or Decked	94.88	HALF BREADTH (moulded)	15.5	When built 1880
Ditto of Houses on Deck	94.46	DEPTH from upper part of Keel to top of Upper Deck Beams	18.54	Launched 24 th June 80
Ditto of Forecastle	35.82	GIRTH of Half Midship Frame (as per Rule)	29.86	By whom built W. Murray & Co
Gross Tonnage	1144.34	1st NUMBER	63.90	Owners Mr Laren. James & Co
Less Crew Space	54.81	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet ✓]		Port belonging to Glasgow
Less Engine Room	1116.56	LENGTH	233.7	Destined Voyage Mediterranean
Register Tonnage as cut on Beam	345.80	2nd NUMBER	1493.24	
	440.46	PROPORTIONS—Breadths to Length	8.6	If Surveyed while Building, Afloat, or in Dry Dock.
		Depths to Length—Upper Deck to Keel	2.6	While Building
		Main Deck ditto		

LENGTH on deck as per Rule ... **Feet.** *233* **Inches.** *8* **BREADTH—** Moulded... **Feet.** *31* **Inches.** — **DEPTH** top of Floors to Upper Deck Beams ... **Feet.** *17* **Inches.** — **Power of Engines** ... **Horse.** *98* **N° of Decks with flat laid** *2* **N° of Tiers of Beams** *2*

Dimensions of Ship per Register, length *235.55* breadth, *31.5* depth, *14.1*

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>8 x 2 3/8</i>	<i>8 x 2 3/8</i>
STEM, moulding and thickness... ..	<i>7 1/2 x 2 3/8</i>	<i>7 1/2 x 2 3/8</i>
STERN-POST for Rudder do. do.	<i>8 x 4 1/2 = 36</i>	<i>7 1/2 x 4 3/4 = 35.6</i>
" " for Propeller	<i>8 x 4 1/2 = 36</i>	<i>7 1/2 x 4 3/4 = 35.6</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>23</i>	(Class <i>100A</i>)
FRAMES, Angle Iron, for 2/3 length amidships ...	<i>4 3 7</i>	<i>4 3 7</i>
" Do. for 1/3 at each end	<i>4 3 6</i>	<i>4 3 6</i>
REVERSED FRAMES, Angle Iron	<i>3 3 6</i>	<i>3 3 6</i>
FLOORS, depth and thickness of Floor Plate) at mid line for half length amidships ...	<i>18 1/2 x 8</i>	<i>18 1/2 x 8</i>
" thickness at the ends of vessel	<i>7</i>	<i>7</i>
" depth at 1/3 the half-bdth. as per Rule ...	<i>10</i>	<i>9 1/4</i>
" height extended at the Bilges... ..	<i>37</i>	<i>37</i>
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron except bulb beams at ends of hatchways	<i>5 1/2 3 7</i>	<i>5 1/2 3 7</i>
Single or double Angle Iron on Upper edge Average space... ..	<i>23</i>	<i>23</i>
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron		
Single, or double Angle Iron, on Upper Edge Average space... ..		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>7 x 7</i>	<i>7 x 7</i>
Single or double Angle Iron on Upper Edge Average space... ..	<i>3 3 6</i>	<i>3 3 6</i>
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	<i>15 x 11</i>	<i>15 x 11</i>
" Rider Plate	<i>10 3/4 x 11</i>	<i>10 3/4 x 11</i>
" Bulb Plate to Intercostal Keelson		
" Angle Irons	<i>5 3 1/2 8</i>	<i>5 3 1/2 8</i>
" Double Angle Iron Side Keelson	<i>5 3 1/2 8</i>	<i>5 3 1/2 8</i>
" Side Intercostal Plate Wash. Plate	<i>6</i>	<i>6</i>
" do. Angle Irons		
" Attached to outside plating with angle iron		
BILGE Angle Irons	<i>5 3 1/2 8</i>	<i>5 3 1/2 8</i>
" do. Bulb Iron... ..	<i>7 x 7</i>	<i>7 x 7</i>
" do. Intercostal plates riveted to plating for length		
BILGE STRINGER Angle Irons	<i>5 3 1/2 8</i>	<i>5 3 1/2 8</i>
Intercostal plates riveted to plating for length.		
SIDE STRINGER Angle Irons		
Transoms, material. Knight-heads. Hawse Timbers. <i>Plates & angles</i>		
Windlass <i>iron patent</i> Pall Bitt <i>iron</i>		
The FRAMES extend in one length from <i>Keel to fore-castle stringer upper deck</i> } Riveted through plates with <i>3/4</i> in. Rivets, about <i>6"</i> apart.		
The REVERSED ANGLE IRONS on floors and frames extend <i>from middle line to 6" above hold stringer and to upper deck</i> , alternately		
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? <i>yes.</i> And butts properly shifted? <i>yes.</i>		
PLATING. Garboard, double riveted to Keel, with rivets <i>1/8</i> in. diameter, averaging <i>5 5/8</i> ins. from centre to centre.		
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets <i>3/8</i> in. diameter, averaging <i>3 3/4</i> ins. from centre to centre.		
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets <i>7/8 3/4</i> in. diameter averaging <i>3 3/4 3 1/2</i> ins. from centre to centre.		
" Butts of <i>3</i> Strakes at Bilge for <i>half</i> length, treble riveted with Butt Straps <i>1/16</i> thicker than the plates they connect.		
" Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets <i>3/4</i> in. diameter, averaging <i>3 1/2</i> ins. from cr. to cr.		
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets <i>7/8 3/4</i> in. diameter, averaging <i>3 3/4 3 1/2</i> 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 <i>1/2</i> length amidships. Butts of Upper or Spar Sheerstrake, treble riveted ✓ length amidships.		
" Butts of Main Stringer Plate, treble riveted for <i>1/2</i> length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for ✓ length.		
" Breadth of laps of plating in double riveting <i>5 1/4 4 1/2</i> . Breadth of laps of plating in single riveting <i>2 5/8</i>		
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?		
Waterway, how secured to Beams — <i>Iron Deck</i> (Explain by Sketch, if necessary.)		
Beams of the various Decks, how secured to the sides? <i>upper dk. by knee knees lower solid rilled knees</i>	No. of Breasthooks, <i>3</i> Crutches, <i>3</i>	
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <i>good</i>		
Manufacturer's name or trade mark, <i>Plates from Glasgow Iron Co. and angles from Dalziel & Macdonald</i>		

The above is a correct description.

Builder's Signature, *Henry Murray Esq*

Surveyor's Signature,

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

Lloyd's Register
and Foreign Shipping.

IRON 494-0245

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? *In a few cases at the butts only.*

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

27459 *Jun*

NUMBER for EQUIPMENT		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.	Weight req'd per Rule.	Test req'd per Rule.
one	SAILS.	CABLES, &c.					Bowers					
	Fore Sails,	Chain										
	Fore Top Sails,	Tipton Pressing House										
	Fore Topmast Stay Sails,	Hawser ...										
	Main Sails,	Towlines ...										
and	Main Top Sails,	Warp					Stream					
	and	quality										

Standing and Running Rigging *Keup* sufficient in size and *good* in quality. She has *2* Life Long Boats and *one* other.
The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good* and sufficient.

Engine Room Skylights. How constructed? *framed of Teak* How secured in ordinary weather? *bolted down*
What arrangements for deadlights in bad weather? *Brass guards and shutters*

Coal Bunker Openings. How constructed? *of wrought iron* How are lids secured? *iron battens* Height above deck? *12" on house*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *three water ports and mooring-pipes on each side*

Cargo Hatchways. How formed? *iron coverings and headledges riveted together*
State size Main Hatch *30'6" x 11'0"* Fore hatch *13'4" x 11'0"* Quarter hatch *17'3" x 10'0"* *13'4" x 10'0"*

If of extraordinary size, state how framed and secured? *plating doubled round hatch and deep coverings 4'2" x 7'6" fitted also deep web frame abreast of it and 2 full depth web plates in hatchways fore and*

What arrangement for shifting beams? *Comings* *quarter hatchways each fitted with shifting beam and after hatchway with deep web plate. Each hatchway fitted with strong fore and afters.*

Hatches, If strong and efficient? *yes.*

Order for Special Survey No. <i>741</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	Specially Surveyed 1880. - January 16, February 11, March 1, 10, 31, April 12, 15, May 11, 14, 24, June 2, 10, 14, August 9.
Date <i>4th Decemr 1879</i>		2nd. On the plating during the process of riveting	
Order for Ordinary Survey No. <i>100</i>		3rd. When the beams were in and fastened, and before the decks were laid	
Date <i>1</i>		4th. When the ship was complete, and before the plating was finally coated or cemented	
No. <i>100</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *Workmanship & materials good.*

This S. Steamer has been constructed in accordance with the rules and the accompanying tracings 26^c which were submitted and approved, please see Secty's Letters of the 8th Decr 1879 and the 17th April 1880.

She is built with a top gallant forecabin, bridge deck and raised quarter deck, also to carry water ballast in fore and in after hold, also in fore peak - each of these compartments backed by a head of water to the height of load line and proved tight.

Particulars of double bottom will be sent in course.

34ft 84ft top of
in main hold 94ft. " after - 65 -

How are the surfaces preserved from oxidation? Inside *by cement and paint* Outside *by paint & composition.*

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

The amount of the Entry Fee ... *5 : 0 : 0* is received by me, *R. J. Reed.*

Special ... *52 : 18 : 0* 20th Aug 1880

Certificate ... *0 : 0 : 0*

(Travelling Expenses, if any, £) *54 : 18 : 0*

Committee's Minute *Tuesday, August 24th, 1880.*

Character assigned *100 A.1.*

Lloyd's Register