

# IRON SHIP

No. 648 Survey held at Dumbarton Date, First Survey 30<sup>th</sup> Oct/83 Last Survey 26 Mar. 1884 (Received at London Office FRIDAY 23 MARCH 1884)

On the Iron Barque "Aberfeldy" **ONE, OR TWO DECKED, THREE DECKED VESSEL,**  
~~SPAR, OR AWNING DECKED VESSEL.~~

3 masts  
 Master J. D. B. Le Conte  
 Built at Dumbarton  
 When built 1883-84 Launched 29 Feb/84  
 By whom built A. McMillan Son  
 Owners Gavin Cowper Esq  
 Residence 93 Hope Street Glasgow  
 Port belonging to Glasgow  
 Destined Voyage Sydney  
 If Surveyed while Building, Afloat, or in Dry Dock.  
While Building & afloat

**TONNAGE** under Tonnage Deck 1216.86  
 Ditto of Third, Spar, or Running Deck }  
 Ditto of Poop, 74.68  
 Ditto of Houses on Deck 13.76  
 Ditto of Forecastle 34.30  
 Gross Tonnage 1339.60  
 Less Crew Space 49.02  
 Less Engine Room 1290.56  
 Register Tonnage as cut on Beam

**Half Breadth** (moulded) ... .. 17.87 Feet.  
**Depth** from upper part of Keel to top of Upper Deck Beams 23.20  
**Girth** of Half Midship Frame (as per Rule) ... .. 36.00  
**1st Number** ... .. 77.07  
~~1st Number, for 2 Decked Vessel deduct 7 feet~~  
**Length** ... .. 224.58  
**2nd Number** ... .. 17308  
**Proportions**— Breadths to Length... .. 6.29  
 Depths to Length—Upper Deck to Keel... .. 9.69  
 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	Feet. Inches.	Power of Engines	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
Dimensions of Ship per Register, length,	<u>224.5</u>	breadth,	<u>36</u>	depth,	<u>20.95</u>	<u>22-8 1/2</u>			
<b>KEEL</b> , depth and thickness	<u>9x2 1/2</u>	Inches in Ship	<u>9x2 1/2</u>	Inches per Rule	<u>9x2 1/2</u>				
<b>STEM</b> , moulding and thickness	<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>				
<b>STERN-POST</b> for Rudder do. do.	<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>				
" " for Propeller	<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>		<u>8 1/2 x 2 1/2</u>				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>24 ins</u>		<u>24 ins</u>		<u>24 ins</u>				
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	<u>5 3 8</u>	Inches in Ship	<u>5 3 8</u>	Inches per Rule	<u>5 3 8</u>				
Do. for 1/3 at each end	<u>3 1/2 3 8</u>		<u>3 1/2 3 8</u>		<u>3 1/2 3 8</u>				
<b>REVERSED FRAMES</b> , Angle Iron	<u>3 1/2 3 8</u>		<u>3 1/2 3 8</u>		<u>3 1/2 3 8</u>				
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	<u>24</u>		<u>24</u>		<u>24</u>				
" thickness at the ends of vessel	<u>12</u>		<u>12</u>		<u>12</u>				
" depth at 2/3 the half-bdth. as per Rule	<u>48</u>		<u>48</u>		<u>48</u>				
" height extended at the Bilges	<u>48</u>		<u>48</u>		<u>48</u>				
<b>BEAMS</b> , <u>Poop</u> <del>Upper Spar, or Awning Deck</del> Single or double Angle Iron, Plate or Tee Bulb Iron	<u>6 1/2 3 8</u>		<u>6 1/2 3 8</u>		<u>6 1/2 3 8</u>				
Average space	<u>48 ins</u>		<u>48 ins</u>		<u>48 ins</u>				
<b>BEAMS</b> , <u>Main, Middle Deck</u> <del>Single or double Angle Iron, Plate or Tee Bulb Iron</del> Single or double Angle Iron, on Upper Edge	<u>8 1/2 3 8</u>		<u>8 1/2 3 8</u>		<u>8 1/2 3 8</u>				
Average space	<u>48 ins</u>		<u>48 ins</u>		<u>48 ins</u>				
<b>BEAMS</b> , <u>Lower Deck</u> <del>Single or double Angle Iron, Plate or Tee Bulb Iron</del> Single or double Angle Iron on Upper Edge	<u>8 1/2 3 8</u>		<u>8 1/2 3 8</u>		<u>8 1/2 3 8</u>				
Average space	<u>48 ins</u>		<u>48 ins</u>		<u>48 ins</u>				
<b>BEAMS</b> , <u>Hold, or Outlet</u> <del>Single or double Angle Iron, Plate or Tee Bulb Iron</del> Single or double Angle Iron on Upper Edge	<u>3 2 1/4 5</u>		<u>3 2 1/4 5</u>		<u>3 2 1/4 5</u>				
Average space	<u>48 ins</u>		<u>48 ins</u>		<u>48 ins</u>				
<b>KEELSONS</b> Centre line, single or double plate, box, or Intercoastal, Plates	<u>17 1/2 12</u>		<u>17 1/2 12</u>		<u>17 1/2 12</u>				
" Rider Plate	<u>11 12</u>		<u>11 12</u>		<u>11 12</u>				
" Bulb Plate to Intercoastal Keelson	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" Angle Irons	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" Double Angle Iron Side Keelson	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" Side Intercoastal Plate	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" do. Angle Irons	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" Attached to outside plating with angle iron	<u>3 3 7</u>		<u>3 3 7</u>		<u>3 3 7</u>				
<b>BILGE</b> Angle Irons	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" do. Bulb Iron	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
" do. Intercoastal plates riveted to plating for length	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
<b>BILGE STRINGER</b> Angle Irons	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
Intercoastal plates riveted to plating for length	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				
<b>SIDE STRINGER</b> Angle Irons	<u>5 4 9</u>		<u>5 4 9</u>		<u>5 4 9</u>				

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at 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 gunwale and to 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 5/8 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 or 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 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 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 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? Yes No. of Breasthooks, 5 Crutches, 4  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Bolton Vaughan & Co's  
 Manufacturer's name or trade mark, Sorman Long & Co's, Bowfield, Morse, Stockton M. & Co's, Coats  
 The above is a correct description.  
 Builder's Signature, C. M. ... Surveyor's Signature, J. D. B. Le Conte  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1 for Iron Ships—1000—16/11/82.

2019 919149-0102

**Workmanship.** Are the butts of plating planed or otherwise fitted? *Planed* 16481 lbs  
 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? *A few.*

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

State also Length and Diameter of Lower Masts and Bowsprit *These are constructed in accordance with the approved tracing attached herewith, see Secy's letter of the 24<sup>th</sup> Nov: 1883. The steel used was manufactured by the Steel Co. of Scotland, and the Mossend Steel Works, and it was tested by the Surveyors to this Society at the Works.*

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rife.	Machine where Tested & Suprntd.	ANCHORS.		N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
		Chain	135 1/2	1 1/2	82.75	270		Bower Anchors	6872	32-0-12	30-4-1-1/4	32		
		Fore Sails,	135	1 1/2	59.125	270	Hetherington	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	6877	31-3-24	30-2-2-0	Total	Hetherington	
<i>One</i>	Fore Top Sails,	Iron Stream Chain	42	12 1/4	122.50	1 3/16	H		6891	27-3-16	27-2-2-0	9 1/4	by	
<i>One</i>	Fore Topmast Stay Sails,	or Steel Wire	75	1	18.27	75-1	S. G.		6888	10-2-8	12-10-3-1	10 1/2	S. G.	
		or Hempen Strm Cable	4	13 2 3/4		90-11	Lewis							
	Main Sails,	Towline, Hemp.	90	11		90-9 1/2		Stream Anchor	6890	4-3-6	7-18-1-2 1/2	5 1/4	Lewis.	
		or Steel Wire	90	9 1/2		90-9 1/2		Kedge				2 1/2		
	Main Top Sails, and spare	Hawser	90	6		90-6		2nd Kedge	6899	2-2-10	5-2-2-0			
		Warp	90	4 1/2										
		quality	90	4										

Standing and Running Rigging *wire rope* sufficient in size and *1<sup>st</sup>* in quality. She has *2* Long Boat and *2* others  
 The Windlass is *Karfeld 76<sup>o</sup>* Capstan *good* and Rudder *good* Pumps *Admiral 6<sup>o</sup> Liverpool*

Engine Room Skylights.—How constructed?  How secured in ordinary weather?   
 What arrangements for deadlights in bad weather?

Coal Bunker Openings.—How constructed?  How are lids secured?  Height above deck?

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Water ports:—one double and three single; scuppers 4 and 2 pipes for mowing*

Cargo Hatchways.—How formed? *Plate & angle iron*  
 State size Main Hatch *15' 10" x 12 ft* Forehatch *8 ft x 6 ft* Quarterhatch *8 ft x 6 ft*  
 If of extraordinary size, state how framed and secured? *not of an extraordinary size*

What arrangement for shifting beams? *one beam & 3 fore stays*  
 Hatches, if strong and efficient? *3 solid.*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
1908	18 <sup>th</sup> Oct 1883			255		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid	When the ship was complete, and before the plating was finally coated or cemented	After the ship was launched and equipped
						<i>Specially Surveyed:—1883:— Oct 30; Nov 7, 9, 14, 20, 23, 28; Dec 4, 7, 11, 14, 18, 21, 28; 1884:—Jan: 8, 11, 16, 18, 22, 25, 30; Feb 6, 8, 13, 21, 26, 29; Mar. 4, 7, 12, 14, 20 &amp; 26.</i>				
						State dates of letters respecting this case <i>2 Oct; 24 Nov &amp; 1 Dec. 1883</i>				

**General Remarks** (State quality of workmanship, &c.) *The workmanship is good, and the vessel has been built in accordance with the approved tracings (3 in number) and with the instructions contained in the letters above referred to, and otherwise in accordance with the Rules.*

*This is a sister vessel to the "Giuseppina Bertolla" Glasgow Report- N<sup>o</sup> 6171. The fore peak was filled with water to test Collision bulkhead, and found satisfactory.*

*Forecastle 26 ft, front Iron 6/8, Coaming plate 19 x 6/8 efft. stiffened; side houses or wings 4 ft long. Poop 32 ft (including wings foreward). Iron front 6/8, Coaming plate 19 x 6/8, efft stiffened with angles. House Iron 6/8, Coaming plates 19 x 6/8, efft stiff 24 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 *\*100A1*  
 The amount of the Entry Fee .....£ 4: 0: 0 is received by me, *[Signature]*  
 Special .....£ 54: 5: 6 *24/3/ 1884*  
 Certificate ... 0: 0: 0  
 (Travelling Expenses, if any, £ .....

Committee's Minute *FRIDAY 23 MARCH 1884 18*  
 Character assigned *[Signature]*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.  
 Lloyd's Register Foundation