

# STEEL IRON SHIP.

(Built at Port Glasgow)  
 Date, First Survey July 4 1889 Last Survey 23 August 1889

No. 211 Survey held at Port Glasgow On the Steel Barge "Polonia"

<b>TONNAGE</b> under Tonnage Deck <u>46.62</u>	<b>ONE-OR TWO DECKED, THREE-DECKED VESSEL,</b>	<b>Master</b> <u>J. Pinley</u>	<b>Built at</b> <u>Port Glasgow</u>
Ditto of <u>88</u>	<b>SPAR, OR AWNING-DECKED VESSEL.</b>	<b>When built</b> <u>1881</u> Launched <u>9 Aug 81</u>	<b>By whom built</b> <u>John Reid &amp; Co</u>
Ditto of <u>34.26</u>	<b>Half Breadth</b> (moulded) <u>16.5</u>	<b>Owners</b> <u>Nicholson &amp; McGill</u>	<b>Residence</b> <u>Liverpool</u>
Ditto of <u>22.35</u>	<b>Depth</b> from upper part of Keel to top of Upper Deck Beams <u>22.45</u>	<b>Port belonging to</b> <u>Liverpool</u>	<b>Destined Voyage</b> <u>Liverpool to head.</u>
Ditto of <u>904.11</u>	<b>Girth</b> of Half Midship Frame (as per Rule) <u>34.15</u>	<b>If Surveyed while Building, Afloat, or in Dry Dock.</b>	<u>Whilst Building &amp; afloat</u>
Ditto of <u>26.48</u>	<b>1st Number</b> <u>72.8</u>		
<b>Gross Tonnage</b> <u>904.11</u>	<b>1st Number, if a 3-Decked Vessel</b> .. deduct 7 feet		
<b>Less Crew Space</b> <u>26.48</u>	<b>Length</b> <u>190.5</u>		
<b>Less Engine Room</b>	<b>2nd Number</b> <u>13868</u>		
<b>Register Tonnage</b> <u>877.63</u>	<b>Proportions— Breadths to Length</b> <u>5.9</u>		
<b>as cut on Beam</b>	<b>Depths to Length— Upper Deck to Keel</b> <u>8.6</u>		
	<b>Main Deck ditto</b>		

Official Use

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 <sup>o</sup> . of Decks with flat laid		N <sup>o</sup> . of Tiers of Beams					
	Feet.	Inches.		Feet.	Inches.		Feet.	Inches.			Inches.	16ths.	Inches.	16ths.				
Dimensions of Ship per Register, length	190	6	33	0	20	3	20	3			Two	Two						
	breadth <u>33.15</u> depth, <u>19.95</u>																	
<b>KEEL</b> , depth and thickness	8 x 2 1/2		8 x 2 1/2		Flat Keel Plates, breadth and thickness													
<b>STEM</b> , moulding and thickness	7 1/2 x 2 1/2		7 1/2 x 2 1/2		<b>PLATES</b> in Garboard Strakes, br'dth & thickness													
<b>STERN-POST</b> for Rudder do. do.	7 1/2 x 2 1/2		7 1/2 x 2 1/2		34 16 34 16													
" " for Propeller	23		23		" From Garboard to upper part of Bilges													
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23		" Of d'bling at Bilge, or increased thickness, and length applied													
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	4 1/2	3	13	4 1/2	3	13	" From up. prt of Bilge to lr. edge of Sh'rstrake								36	18	36	18
Do. for 1/2 at each end	4 1/2	3	12	4 1/2	3	12	" Main Sheerstrake, breadth and thickness								36	18	36	18
<b>REVERSED FRAMES</b> , Angle Iron	3	3	11	3	3	11	" Of d'bling at Sh'stk. & lng. applied											
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	23		15	22 1/2		15	" From M'n. to Upr. or Spar Dk. Sh'rstrake											
" thickness at the ends of vessel			13			13	" Up. or Spar Dk Sh'rstrake, br'dth & thicken'ss											
" depth at 3/4 the half-bdth. as per Rule	12			1 1/2			Butt Straps to outside plating, breadth & thickness								9 1/2	1 1/2	14 1/2	1 1/2
" height extended at the Bilges	46			45			Lengths of Plating								6 frame spaces		8 fr spaces	
<b>BEAMS</b> , Upper, Spar, or Awning Deck	5 1/2	3	13	5 1/2	3	13	Shifts of Plating, and Stringers								2 1/2	3	2 1/2	3
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron							Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness								27	15	27	15
Single or double Angle Iron on Upper edge	23			23			Angle Iron on ditto								5 x 3 1/2 x 12		5 x 3 1/2 x 12	
Average space							Tie Plates fore and aft, outside Hatchways											
<b>BEAMS</b> , Main, or Middle Deck							Diagonal Tie Plates on Beams No. of Pairs											
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron							Flat of Up., Spar, or Awning Dk. * Steel								10		10	
Single or double Angle Iron on Upper Edge							How fastened to Beams								Rivets			
Average space							Stringer Plate on ends of Main or Middle Deck											
<b>BEAMS</b> , Lower Deck	8		14	8		14	Beams, breadth and thickness											
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	3	10	3	3	10	Is the Stringer Plate attached to the outside plating?											
Single or double Angle Iron on Upper Edge	46			46			Angle Irons on ditto, No.											
Average space							Tie Plates, outside Hatchways											
<b>BEAMS</b> , Hold, or Orlop							Diagonal Tie Plates on Beams, No. of pairs											
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron							Flat of Middle Deck* do. do.											
Single or double Angle Iron on Upper Edge							How fastened to Beams											
Average space							Stringer Plates on ends of Lower Deck, Hold or Orlop Beams								28	13	28	13
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates on Floors	14		18	14		18	Is the Stringer Plate attached to the outside plating?								Yes			
" Rider Plate	1 1/2		18	1 1/2		18	Angle Irons on ditto, No.								3 1/2 x 3 1/2 x 13		3 1/2 x 3 1/2 x 13	
" Bulb Plate to Intercostal Keelson	5	3 1/2	12	5	3 1/2	12	Stringer or Tie Plates, outside Hatchways								10	13	10	13
" Angle Irons	5	3 1/2	12	5	3 1/2	12	Flat of Lower Deck * Spruce								2 1/2		2 1/2	
" Double Angle Iron Side Keelson			11			11	Ceiling betwixt Decks, thickness and material								2			
" Side Intercostal Plate							" in hold do. do. p. p. p.								2 1/2		2 1/2	
" Attached to outside plating with angle iron	3	3	11	3	3	11	Main piece of Rudder, diameter at head								5		5	
<b>BILGE</b> Angle Irons	5	3 1/2	12	5	3 1/2	12	do. do. at heel								3		3	
" do. Bulb Iron							Can the Rudder be unshipped afloat?								Yes			
" do. Intercostal plates riveted to plating for length							Bulkheads No. <u>012</u> No. per Rule									9 1/2		9 1/2
<b>LARGE STRINGER</b> Angle Irons	5	3 1/2	12	5	3 1/2	12	" Thickness of								9 1/2			
" Intercostal plates riveted to plating for length							" Height up								Upper 32 deck			
<b>SMALL STRINGER</b> Angle Irons							" How secured to sides of ship								Double frames			
" Intercostal plates riveted to plating for length							" Size of Vertical Angle Irons								3 x 3 x 1 1/2		and distance apart 30 ins.	
<b>FRAMES</b> extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 in. apart							" Are the outside Plates doubled two spaces of Frames in length?								Yes			
<b>REVERSED ANGLE IRONS</b> on floors and frames extend middle line to upper deck and to 1/2" stringers alternately																		
<b>KEELSONS</b> . Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes																		
<b>PLATING</b> . 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 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 three Strakes at Bilge for half 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 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. 7/8 inch 1 3/4 ins. cut off.																		
" Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.																		
" Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.																		
" Breadth of laps of plating in double riveting 5 1/4 x 4 1/2 Breadth of laps of plating in single riveting																		
" Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Single & double No. of Breasthooks, Five Crutches, three																		
" description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.?																		
" manufacturer's name or trade mark, James, Bell, Bull's Head Plating - Steel Co. of Scotland, all kinds from Parkhead.																		
" the above is a correct description.																		
" Surveyor's Signature, J. D. Pinley																		
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State clearly where plating of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

\* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

Surveyor's Signature, J. D. Pinley Surveyor to Lloyd's Register of British and Foreign Shipping.

GRK 297-0001

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

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?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

*Planed*

*Yes  
Yes  
Yes  
Yes*

*Yes a few in the butt*

Masts, Bowsprit, Yards, &c., are of *Steel & 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

*The lower & top masts also the bowsprit & the jibboom are made in one length of Shell from Parkers properly stamped, the size & scantlings being as shown on accompanying app'd sketches. All butts of plates in masts & bowsprit are fluted & riveted with butts straps as directed by the letter of 24th March.*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	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.
SAILS.											
N <sup>o</sup> .	CABLES, &c.										
	Chain	135	1 1/2	51.5-0-0	70	Wm. Fairbank's	Bower Anchors	27-3-24	27-2-2-0	27-3-0	Wm. Fairbank's
	Fore Sails, Iron Straps	135	1 1/2	51.5-0-0	70	Wm. Fairbank's	6289	27-3-0	26-4-5-0	27-3-0	Wm. Fairbank's
	Fore Top Sails, or Hemp Strm Cable	15	1 1/2	15-16-0-0	45	Wm. Fairbank's	6291	23-3-24	23-17-2-0	23-2-0	Wm. Fairbank's
	Fore Topmast Stay Sails, Towline, Hemp.	60	1 1/2	15-16-0-0	45	Wm. Fairbank's	79	2-20	79-0-0	79-0-0	Wm. Fairbank's
	Main Sails, or Steel Wire	90	10 1/2	90-10 1/2	90	Wm. Fairbank's	Stream Anchor	8-3-17	11-1-1-0	8-3-0	Wm. Fairbank's
	Main Top Sails, Warp	90	9	90-9	90	Wm. Fairbank's	Kedge	4-2-18	7-1-1-0	4-2-0	Wm. Fairbank's
	and other quality	100	5 1/2	90-5 1/2	90	Wm. Fairbank's	2nd Kedge	2-1-15	4-17-3-0	2-1-11	Wm. Fairbank's

Standing and Running Rigging *of same material* sufficient in size and *good* in quality. She has *Four* Long Boat and *Four* Pumps *good*.

The Windlass is *good* Capstan and Rudder *good*

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

What arrangements for deadlights in bad weather? *How are lids secured? Height above deck?*

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? *Four Scuppers & four ports each side*

Cargo Hatchways. How formed? *State size Main Hatch 15.2 x 11.0 Fore hatch 7.8 x 7.0 Quarter hatch 7.8 x 7.0*

If of extraordinary size, state how framed and secured? *What arrangement for shifting beams? A deep web plate & strong fore & afters in the main*

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

Order for Special Survey N <sup>o</sup>	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
1003	27 <sup>th</sup> December 1880	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>Built under S.S. and surveyed 1881. February 4, 15, 18, 26 March 8, 16, 21, 30, April 5, 11, 19, 21, 26, May 3, 10, 18, 23, June 1, 5, 10, 14, 20, 24, 28, July 1, 14, 19, 21, 24, August 5, 8, 19, 23.</i>				

**General Remarks** (State quality of workmanship, &c.) *Workmanship & materials very good. This vessel has been constructed in accordance with the accompanying approved sketches and in all other respects with the Rules & the Committee's Circulars. All plates & butt straps above 1/2 inch thick having been properly annealed after the holes were punched. She is a well constructed vessel & in my opinion eligible to be classed as stated below.*

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 & Tallow*

I am of opinion this Vessel should be Classed *100 A1, Steel*

The amount of the Entry Fee ... £ 5: 0: 0 is received by me, *(Signature)*  
 Special ... £ 43: 14: 0 *26 Aug 1881*  
 Certificate ... £ 0: 0: 0  
 (to be sent as per margin)

Committee's Minute *Tuesday August, 30th 1881*

Character assigned *100 A1 Steel*

*(Signature) J. Dawkins*  
 Surveyor to Lloyd's Register of British and Foreign Shipping  
*This vessel has been approved & classed with the Rules and is eligible to be classed as recommended by the Rules.*

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