

STEEL IRON SHIP.

No. 2232 Survey held at Port Glasgow Date, First Survey Feb 4 1889 Last Survey 23 August 1889

On the Steel Barge "Polonia"

TONNAGE under Tonnage Deck 46.62
Ditto of Deck, Spar, or Awning Deck 88
Ditto of Deck, Raised or, Dk. 34.26
Ditto of Houses on Deck 22.35
Ditto of Forecastle 904.11
Gross Tonnage 26.48
Less Crew Space
Less Engine Room
Register Tonnage as cut on Beam 877.63

ONE-OR TWO DECKED, THREE-DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 16.5
Depth from upper part of Keel to top of Upper Deck Beams 22.45
Girth of Half Midship Frame (as per Rule) 34.15
1st Number 72.8
1st Number, if a 3-Decked Vessel deduct 7 feet
Length 190.5
2nd Number 1386.8
Proportions— Breadths to Length 5.9
Depths to Length—Upper Deck to Keel 8.6
Main Deck ditto

Master J. Pindley
Built at Port Glasgow
When built 1881 Launched 9 Aug 81
By whom built John Reid & Co
Owners Nicholson & Mc Gill
Residence
Port belonging to Liverpool
Destined Voyage Liverpool to London
If Surveyed while Building, Afloat, or in Dry Dock. Whilst Building & afloat

LENGTH on deck as per Rule 190 6 BREADTH Moulded 33 0 DEPTH top of Floors to Upper Deck Beams 22 3 Do. do. Main Deck Beams 20 3 Power of Engines 20 3 N° of Decks with flat laid Two N° of Tiers of Beams Two

Dimensions of Ship per Register, length 202.3 breadth 33.15 depth 19.95

	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	8 x 2 1/2	8 x 2 1/2	FLAT KEEL PLATES, breadth and thickness	34	16	34	16							
STEM, moulding and thickness	7 1/2 x 2 1/2	7 1/2 x 2 1/2	PLATES in Garboard Strakes, br'dth & thickness	34	16	34	16							
STERN-POST for Rudder do. do.	7 1/2 x 2 1/2	7 1/2 x 2 1/2	From Garboard to upper part of Bilges	14	15	14	15							
" " for Propeller	23	23	Of d'bling at Bilge, or increased thickness, and length applied	14	15	14	15							
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	23	From up. prt of Bilge to lr. edge of Sh'rstrake	36	18	36	18							
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2 x 3	13	Main Sheerstrake, breadth and thickness	36	18	36	18							
Do. for 1/2 at each end	4 1/2 x 3	12	Of d'bling at Sh'stk. & lng. applied	36	18	36	18							
REVERSED FRAMES, Angle Iron	3 x 3	11	From M'n. to Upr. or Spar Dk. Sh'rstrake	36	18	36	18							
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	23	15	Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss	36	18	36	18							
thickness at the ends of vessel	12	13	Butt Straps to outside plating, breadth & thickness	36	18	36	18							
depth at 1/2 the half-bdth. as per Rule	12	13	Lengths of Plating	27	15	27	15							
height extended at the Bilges	46	45	Shifts of Plating, and Stringers	27	15	27	15							
BEAMS, Upper, Spar, or Awning Deck	5 1/2 x 3	13	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	27	15	27	15							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	13	Angle Iron on ditto	5 x 3 1/2 x 12	5 x 3 1/2 x 12	5 x 3 1/2 x 12	5 x 3 1/2 x 12							
Single or double Angle Iron on Upper edge	23	23	Tie Plates fore and aft, outside Hatchways	28	13	28	13							
Average space	23	23	Diagonal Tie Plates on Beams No. of Pairs	28	13	28	13							
BEAMS, Main, or Middle Deck	5 1/2 x 3	13	Flat of Up., Spar, or Awning Dk. Steel	28	13	28	13							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	13	How fastened to Beams	28	13	28	13							
Single or double Angle Iron, on Upper Edge	5 1/2 x 3	13	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	28	13	28	13							
Average space	5 1/2 x 3	13	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
BEAMS, Lower Deck	5 1/2 x 3	13	Angle Irons on ditto, No.	28	13	28	13							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	13	Tie Plates, outside Hatchways	28	13	28	13							
Single or double Angle Iron on Upper Edge	5 1/2 x 3	13	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
Average space	5 1/2 x 3	13	Flat of Middle Deck* do. do.	28	13	28	13							
BEAMS, Hold, or Orlop	5 1/2 x 3	13	How fastened to Beams	28	13	28	13							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	13	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	13	28	13							
Single or double Angle Iron on Upper Edge	5 1/2 x 3	13	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
Average space	5 1/2 x 3	13	Angle Irons on ditto, No.	28	13	28	13							
KEELSONS Centre line, single or double plate, box, or intercostal, Plates on Floors	14	18	Tie Plates, outside Hatchways	28	13	28	13							
" Rider Plate	11 1/2	18	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
" Bulb Plate to Intercostal Keelson	5 1/2 x 3 1/2	12	Flat of Middle Deck* do. do.	28	13	28	13							
" Angle Irons	5 1/2 x 3 1/2	12	How fastened to Beams	28	13	28	13							
" Double Angle Iron Side Keelson	5 1/2 x 3 1/2	12	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	13	28	13							
" Side Intercostal Plate	5 1/2 x 3 1/2	12	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
" do. Angle Irons	5 1/2 x 3 1/2	12	Angle Irons on ditto, No.	28	13	28	13							
" Attached to outside plating with angle iron	5 1/2 x 3 1/2	12	Tie Plates, outside Hatchways	28	13	28	13							
BILGE Angle Irons	5 1/2 x 3 1/2	12	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
" do. Bulb Iron	5 1/2 x 3 1/2	12	Flat of Middle Deck* do. do.	28	13	28	13							
" do. Intercostal plates riveted to plating for length	5 1/2 x 3 1/2	12	How fastened to Beams	28	13	28	13							
LGE STRINGER Angle Irons	5 1/2 x 3 1/2	12	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	13	28	13							
Intercostal plates riveted to plating for length	5 1/2 x 3 1/2	12	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
DE STRINGER Angle Irons	5 1/2 x 3 1/2	12	Angle Irons on ditto, No.	28	13	28	13							
FRAMES extend in one length from Keel to gunwale	5 1/2 x 3 1/2	12	Tie Plates, outside Hatchways	28	13	28	13							
REVERSED ANGLE IRONS on floors and frames extend middle line to upper deck	5 1/2 x 3 1/2	12	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected?	5 1/2 x 3 1/2	12	Flat of Middle Deck* do. do.	28	13	28	13							
PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.	5 1/2 x 3 1/2	12	How fastened to Beams	28	13	28	13							
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.	5 1/2 x 3 1/2	12	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	13	28	13							
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.	5 1/2 x 3 1/2	12	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
Butts of three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.	5 1/2 x 3 1/2	12	Angle Irons on ditto, No.	28	13	28	13							
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.	5 1/2 x 3 1/2	12	Tie Plates, outside Hatchways	28	13	28	13							
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.	5 1/2 x 3 1/2	12	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
Edges of Main Sheerstrake, double or single riveted.	5 1/2 x 3 1/2	12	Flat of Middle Deck* do. do.	28	13	28	13							
Butts of Main Sheerstrake, treble riveted for length amidships.	5 1/2 x 3 1/2	12	How fastened to Beams	28	13	28	13							
Butts of Main Stringer Plate, treble riveted for length amidships.	5 1/2 x 3 1/2	12	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	28	13	28	13							
Breadth of laps of plating in double riveting 5 1/2 x 4 1/2 Breadth of laps of plating in single riveting	5 1/2 x 3 1/2	12	Is the Stringer Plate attached to the outside plating?	28	13	28	13							
Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Single & double	5 1/2 x 3 1/2	12	Angle Irons on ditto, No.	28	13	28	13							
description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.?	5 1/2 x 3 1/2	12	Tie Plates, outside Hatchways	28	13	28	13							
Manufacturer's name or trade mark, James, Beam Bulbs Steel Plating - Steel Co. of Scotland, all inside from Parkhead.	5 1/2 x 3 1/2	12	Diagonal Tie Plates on Beams, No. of pairs	28	13	28	13							
The above is a correct description.	5 1/2 x 3 1/2	12	Flat of Middle Deck* do. do.	28	13	28	13							
Surveyor's Signature, J. D. D. Surveyor to Lloyd's Register of British and Foreign Shipping.	5 1/2 x 3 1/2	12	How fastened to Beams	28	13	28	13							

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.

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?

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 *steel* from *Park* properly stamped, the sizes & scantlings being as shown on the accompanying app'd sketches. All butts of plates in masts & bowsprit are flange jointed & double riveted butt straps as directed by the Committee of 24th March.

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supplied.	ANCHORS. N ^o .	Weight. Ex. Stock.	Test per Certificate.	W't req'd per Rule.	Machine where Tested & Supplied.
SAILS.											
N ^o .	CABLES, &c.										
	Chain	135	1 1/2	51.5-0-0	7 1/2	11 1/2" Test	Bower Anchors	6290	27-3-24	27-2-2-0	27-3-0
Fore Sails,	Iron Strong Chain	135	1 1/2	51.5-0-0	7 1/2	11 1/2" Test		6289	27-3-0	26-4-3-0	27-3-0
Fore Top Sails,	on Steel Wire	15	1 1/2	15-16-0-0	7 1/2	11 1/2" Test		6291	23-3-24	23-17-2-0	23-2-0
Fore Topmast Stay Sails,	or Hempen Strm Cable	60	1 1/2			11 1/2" Test		79-2-20			79-0-0
Main Sails,	Towline, Hemp.	90	10 1/2		90-10 1/2		Stream Anchor	6292	8-3-17	11-1-1-0	8-3-0
Main Top Sails,	or Steel Wire	90	9		90-9		Kedge	6293	4-2-18	7-1-1-0	4-2-0
and other quality <i>good</i>	Hawser	90	5 1/2		90-5 1/2		2nd Kedge	6294	2-1-15	4-17-3-0	2-1-1
	Warp	100	3 1/2								

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

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

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?

each side

Four Scuppers & four ports

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 frame & afters in the main
Yes 3 in solid.

Hatches, If strong and efficient?

Order for Special Survey N^o *1003*

Date *27 December 1880*

Order for Ordinary Survey N^o *1*

Date *✓*

No. *6/T* in builder's yard.

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
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid...
- 4th. When the ship was complete, and before the plating was finally coated or cemented...
- 5th. After the ship was launched and equipped

Built under S.S. and surveyed 1881. February 4, 15, 18, 25, 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, 33.

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 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: 9: 0* is received by me,

Special ... £ *43: 14: 0* 26 Aug 1881

Certificate ... *0: 0: 0*

(Travelling Expenses, if any, £ *248: 14: 0*)

Committee's Minute

Tuesday, August, 30th 1881.

Character assigned

100 A1, "Steel"
Temp. A.D.C.P.

Surveyor to Lloyd's Register of British and Foreign Shipping

This vessel has been
examined & approved
in accordance with the
Rules & the Committee's
Circulars & is
eligible to be classed
as recommended
25th Steel deck 2 1/2 in.