

# IRON SHIP.

19657  
Rec 13/11/77

No. 13752 Survey held at Newcastle Date, First Survey 28<sup>th</sup> May Last Survey 31<sup>st</sup> Oct 1877.

On the Iron S.S. "Puperra" Master Ockenden

TONNAGE under } 1232.95 ONE OR TWO DECKED, THREE DECKED VESSEL.  
 Tonnage Deck }  
 Ditto of Third, Spar, }  
 or Awning Deck }  
 Ditto of Poop, or }  
 Raised Or. Dk. }  
 Ditto of Houses }  
 on Deck } 48.49  
 Ditto of Forepart }  
 Hatch } 3.62  
 Gross Tonnage } 1285.06  
 Less Crew Space } 38.09  
 } 1246.97  
 Less Engine Room } 411.22  
 Register Tonnage } 835.75  
 as cut on Beam }

Built at Newcastle  
 When built 1877 Launched Sep 25<sup>th</sup> 77  
 By whom built Palmer's Shipbuilding & Iron Co.  
 Owners John Cory  
 Port belonging to Cardiff  
 Destined Voyage Alexandria  
 & Surveyed while Building, Afloat, or in Dry Dock.

Official Number

PLATE CASE

LENGTH on deck as per Rule 238 Feet. 7 Inches. BREADTH Moulded... 32 Feet. 0 Inches. DEPTH top of Floors to Upper Deck Beams 20 Feet. 2 Inches. Power of Engines ... 120 Horse. No. of Decks with flat laid one No. of Tiers of Beams two

Dimensions of Ship per Register, length, 240 breadth, 32.2 depth, 20.0

	Inches in Ship.			Inches per Rule.		
	In. Ship.	In. Ship.	16ths. In Ship.	Inches per Rule.	Inches per Rule.	16ths. per Rule.
KEEL, depth and thickness	9	2 1/2	9	9	2 1/2	9
STEM, moulding and thickness	8 1/2	2 1/2	8 1/2	8 1/2	2 1/2	8 1/2
STERN-POST for Rudder do. do.	8 1/2	5	8 1/2	8 1/2	5	8 1/2
for Propeller				24		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24			(Class 100 A)		
FRAMES, Angle Iron, for 3/4 length amidships	4 1/2	3	8	4 1/2	3	8
Do. for 1/2 at each end	4 1/2	3	7	4 1/2	3	7
REVERSED FRAMES, Angle Iron	3	3	7	3	3	7
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	22 1/2	9	22 1/2	9		
thickness at the ends of vessel	10/16	4	10/16	4		
depth at 3/4 the half-bdth. as per Rule	11	45	11	45		
height extended at the Bilges	45		45			
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	5 1/2	3	7	5 1/2	3	7
Single or double Angle Iron on Upper edge	7 1/2	7/16	bulb at hatch	7 1/2	7/16	bulb at hatch
Average space	24		24			
BEAMS, Main, or Middle Deck Single or double 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 double Ang. Iron, Plate or Tee Bulb Iron	8 1/2	8	8 1/2	8		
Single or double Angle Iron on Upper Edge	4	3	7	4	3	7
Average space	eight frames		eight frames			
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	17	12	17	12		
" Rider Plate	11	12	11	12		
" Bulb Plate to Intercoastal Keelson						
" Angle Irons	5	4	9	5	4	9
" Double Angle Iron Side Keelson	Tank girders		Tank			
" Side Intercoastal Plate	as per		Tank			
" do Angle Irons	Mid section					
" Attached to outside plating with angle iron						
BILGE Angle Irons						
" do Bulb Iron	Tank girders		Sidings			
" do Intercoastal plates riveted to plating for length						
BILGE STRINGER Angle Irons	5	4	9	5	4	9
Intercoastal plates riveted to plating for length						
SIDE STRINGER Angle Irons						

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
Flat Keel Plates, breadth and thickness	36	11	36	11
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied		10		10
fm up. part of Bilge to lr. edge of Sh'rstrake		10		10
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upper or Spar Dk. Sh'rstrake.	40	12	40	12
Up. or Spar Dk. Sh'rstrake, breadth & thickness		6		6
Butt Straps to outside plating, breadth & thickness	16 3/4	9 3/4	15 5/16	9 5/16
Lengths of Plating	10 feet		10 ft	
Shifts of Plating, and Stringers	4		4	
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	34	10	34	10
Angle Iron on ditto	5.4	9	5.4	9
Tie Plates fore and aft, outside Hatchways	Iron deck		Iron deck	
Diagonal Tie Plates on Beams No. of Pairs,				
Planksheer material and scantling	Iron			
Waterways do. do.	Iron 6		Iron 6	
Flat of Upper Deck do. do.	by rivets		rivets	
How fastened to Beams				
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				
Waterways materials and scantlings				
Flat of Middle Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	32	9	32	9
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No. 2	4.4	9	4.4	9
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material	Wood sparring			
in hold do. do.	2 1/2		2 1/2	
Main piece of Rudder, diameter at head	6 1/4		6 1/4	
do. at heel	3 1/4		3 1/4	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 4 Thickness of	6/16			
Height up	Three to upper deck, after one to 2 <sup>d</sup> deck with iron plate			
How secured to sides of ship	between double frames			
Size of Vertical Angle Irons	3, 3, 7/16 and distance apart 30 ins.			
Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight-heads. Hawse Timbers. Iron  
 Windlass Iron patent Pall Bitt Iron

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 3 3/8 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to 2<sup>d</sup> dk stringer angle and to upp<sup>d</sup> dk 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 7/8 in. diameter, averaging 3 7/8 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 7/8 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 7/8 ins. from centre to centre.

Butts of three 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 7/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 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 6 times Breadth of laps of plating in single riveting 3 1/2 times

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble and double

Waterway, how secured to Beams by rivets (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Knees riveted to frames No. of Breasthooks, 4 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Palmer's Shipbuilding & Iron Co.

Manufacturer's name or trade mark, FOR Palmer's Shipbuilding & Iron Co. Ltd

The above is a correct description.

Builder's Signature, R. W. Ametrany Surveyor's Signature, T. Moverly

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

IRON 474-0526

1965 Iron

**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? *a few*

Masts, Bowsprit, Yards, &c., are *all* 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 *Three masts of wood.*

NUMBER for EQUIPMENT 17339		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.	
No.	SAILS.	CABLES, &c. Chain	270	1 9/16	43 9/10	270.1 9/2	43 9/10	Bowers	1	23.3.14	23.15.2.14	23.2.0	} 23 10/20
					61 4/10		61 4/10		1	23.2.0	23 1/2	23.2.0	
<i>One</i>	Fore Sails,	Chain	L.T.P.H.	R. Powell	Dup	219.77	L.T.P.H. R. Powell Dup 219.77	Stream	1	20.0.0	20 3/4	19.3.25	20 14/20
<i>Full</i>	Fore Top Sails,												
<i>Suit</i>	Fore Topmast Stay Sails	Chain											
	Main Sails,	Hamp Strm Cbl	90	1	18	90.1							
	Main Top Sails,	Hawser ...	90	10	27	90.9 1/2							
		Towlines ...	90	7		90.6							
		Warp ...	90	7		90.6							
		quality <i>good</i>											

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* Life Boats and *two* others. The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*

**Engine Room Skylights.**—How constructed? *Enclosed Bulk<sup>h</sup> with iron top; lights in the side* How secured in ordinary weather? *Rivets*

What arrangements for deadlights in bad weather? *glass bulk eye in the iron bulk & lights in the side*

**Coal Bunker Openings.**—How constructed? *of iron* How are lids secured? *bars* Height above deck? *12'*

**Scuppers, &c.**—What arrangements for clearing upper deck of water, in case of shipping a sea? *ports and scuppers cut in the bulwarks*

**Cargo Hatchways.**—How formed? *of iron*

State size **Main Hatch** *16.0 x 10.0* **Forehatch** *19.9 x 10.0* **Quarterhatch** *16.0 x 10.0*

If of extraordinary size, state how framed and secured? *✓*

What arrangement for shifting beams? *web plates and shifting beams*

**Hatches,** If strong and efficient? *Yes.*

Order for Special Survey No.	DATE	1st.	2nd.	3rd.	4th.	5th.
110	29 May 1877	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
		1877 May 20, June 5, 14, 22, 25, July 2, 4, 6, 12.	13, 17, 20, 27, 28, 30, Aug 3, 8, 11, 13, 16, 23, 25.	30, Sep 3, 4, 6, 7, 12, 14, 18, 25, Oct 2, 4, 8, 10.	12, 15, 17, 18, 19, 24, 25, 31.	

**General Remarks** (State quality of workmanship, &c.) *This vessel has been built in accordance with the appended approved tracings of midship section, longitudinal elevation and deck plan, and in accordance with the rules for the contemplated class and the Committee's letter of 17<sup>th</sup> April 1877. She has a bridge deck amidships, and is fitted with N.B. tanks in the fore & after holds and under the machinery extending for 164 feet, these tanks were satisfactorily tested to the load line in my presence. Strong beams are fitted between the engines and boilers. The upper deck is completely of iron 9/16 thick. The workmanship throughout is very good.*

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement & paint* Outside *paint*

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

The amount of the Entry Fee ... £ 5 : : : is received by me, *P. Young*  
 Special Certificate ... £ 56 : 3 : 6 12 Nov 1877  
*on 12 4 7 Jan*

Committee's Minute 13<sup>th</sup> November, 1877.

Character assigned *100 A 1*  
*Lloyd's Register of Shipping*  
*100 A 1*  
*104*  
*104 B*  
*double bottom 164 ft*

This vessel appears eligible to be classed as recommended by Lloyd's Register of Shipping