IRON SHIP. (17th April 1882) 15925

No. 15925 Survey held at Newcastle Date, First Survey 28th Sept 81. Last Survey 31st March 1882.

On the Iron Three masted Sr. Rigged Screw Steamer "Mareca"

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

Tonnage under Tonnage Deck	2074.85
~~of Third, Spar, Awning Deck~~	
of Poop, ~~or Qr. Dk.~~	68.15
of Houses on Deck — Bridge	52.61
— chart	3.62
of ~~Forecastle~~ Excess of Hatches	12.10
Tonnage	2211.33
Crew Space	79.07
	2132.26
Engine Room	707.63
Register Tonnage cut on Beam	1424.63

	Feet.
Half Breadth (moulded)	18.50
Depth from upper part of Keel to top of Upper Deck Beams	26.50
Girth of Half Midship Frame (as per Rule)	40.46
1st Number	85.46
1st Number, if a 3-Decked Vessel .. deduct 7 feet	78.46
Length	298.33
2nd Number	23407
Proportions— Breadths to Length	8.06
Depths to Length—Upper Deck to Keel	11.26
Main Deck ditto	15.70

Master L. O. Moen
Built at Newcastle
When built 1881-82 Launched 4th March 1882
By whom built Messrs. Palmers & Co.
Owners Porteous & Senier
Residence 4 Gt. St. Helens, London
Port belonging to London
Destined Voyage Boston Via Hartlepool & London
If Surveyed while Building, Afloat, ~~or~~ and in Dry Dock.

Report recd 8/4/82 sent to Lon. 15/4/82

	Feet.	Inches.
Length on deck as per Rule	298	4
Breadth—Moulded	37	0
Depth top of cellular Floors to Upper Deck Beams	23	3
Do. do. Main Deck Beams	15	9

Power of Engines: 250 Horse. No. of Decks with flat laid: Two. No. of Tiers of Beams: Three.

Dimensions of Ship per Register, length, 300.2 breadth, 37.3 depth, 23

	Inches in Ship			Inches per Rule		
Keel, depth and thickness (+ side bar)	49 × 11/16			11/16		
Stem, moulding and thickness	10 × 2 3/4			10 × 2 3/4		
Stern-Post for Rudder do. do. / for Propeller	10 × 5 1/2			10 × 5 1/2		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 ins			24 ins (Class 100 A)		
	Inches In Ship	Inches In Ship	16ths In Ship	Inches per Rule	Inches per Rule	16ths per Rule
Frames, Angle Iron, for 3/5 length amidships	5	3	8	5	3	8
do. for 1/5 at each end	5	3	7	5	3	7
Reversed Frames, Angle Iron	3 1/2	3	8	3 1/2	3	8
Floors, depth and thickness of Floor Plate at mid line for half length amidships; thickness at the ends of vessel; depth at 3/4 the half-bdth. as per Rule; height extended at the Bilges	On cellular bottom principle with solid floors 6/16 as per Sketch					
Beams, Upper, ~~Spar, or Awning~~ Deck	-	7 1/2	7	-	7 1/2	7
~~Angle or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	3	3	6	3	3	6
~~Angle or~~ double Angle Iron on Upper edge						
Average space	alternate frames					
Beams, Main, or Middle Deck	6	3	9	6	3	9
Angle ~~or d'ble~~ Ang. Iron, ~~Plate or Tee Bulb Iron~~	-	-	-	-	-	-
~~Angle, or double Angle Iron, on Upper Edge~~						
Average space	On every frame					
Beams, Lower Deck— Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	-	-	-	-	-	-
Angle or double Angle Iron on Upper Edge	-	-	-	-	-	-
Average space	-	-	-	-	-	-
Beams, Hold, ~~or Orlop~~— ~~Angle or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	-	10	10	-	10	10
~~Angle or~~ double Angle Iron on Upper Edge	4	4	9	4	4	9
Average space .. 8 frame spaces & as per Profile						
Keelsons Centre line, single ~~or double~~ plate, ~~box, or Intercostal, Plates~~			11			11
Rider Plate; Bulb Plate to Intercostal Keelson; Angle Irons; Double Angle Iron Side Keelson; Side Intercostal Plate; do. Angle Irons; Attached to outside plating with angle iron	On the cellular Bottom principle as per Midship Section with fore & aft sides and solid floors upon alternate frames & on every frame in Engine and Boiler spaces.					
Bilge Angle Irons; do. Bulb Iron; do. Intercostal plates riveted to plating for ... length						
Bilge Stringer Angle Irons	6	4	9	6	4	9
Intercostal plates riveted to plating for 3/5 length	-	-	9	-	-	9
Side Stringer Angle Irons	-	-	-	-	-	-

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths. per Rule
~~Flat Keel Plates, breadth and thickness~~	-	-	-	-
Plates in Garboard Strakes, br'dth & thickness	36	12	36	12
,, From Garboard to upper part of Bilges	-	11	-	11
,, Of d'bling at Bilge, or increased thickness, and length applied	-	-	-	-
,, From up. prt of Bilge to lr. edge of Sh'rstrake	-	11	-	11
,, Main Sheerstrake, breadth and thickness	40	14	40	14
,, Of d'blng at Sh'stk. & lng. applied	-	-	-	-
,, From M'n. to Upr. or Spar Dk. Sh'rstrake	-	-	-	-
,, Up. or Spar Dk Sh'rstrake, brdth & thickn'ss	-	-	-	-
Butt Straps to outside plating, breadth & thickness	10 to 18 - 9 1/2 & 12 × 9/16 to 15/16			
Lengths of Plating	6 frame spaces			
Shifts of Plating, and Stringers	2 frame spaces			
Gunwale Plate on ends of ~~Awning, Spar, or~~ Upper Deck Beams, breadth and thickness	62	9	62	9
Angle Iron on ditto	4×4×9		4×4×9	
Tie Plates fore and aft, outside Hatchways at end	15	9	15	9
~~Diagonal Tie Plates on Beams No. of Pairs~~ aft	-			
Flat of Up., ~~Spar, or Awning~~ Dk.* Yellow Pine & Iron	3 1/2	5/16	4	
How fastened to Beams: 1st Iron deck rivetted & Wood deck screw bolts & nuts.				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	42	10	42	10
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	4×4×9		4×4×9	
Tie Plates, outside Hatchways	Iron deck			
Diagonal Tie Plates on Beams, No. of pairs				
Flat of Middle Deck* do. do. Iron	-	6	-	6
How fastened to Beams	Rivetted			
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	39	9	39	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 3 & 4	4×4×9		4×4 9	
Stringer or Tie Plates, outside Hatchways	~~Iron deck~~			
Flat of Lower Deck* ~~Iron~~	-	~~6~~	-	~~6~~
Ceiling Battens betwixt Decks, thickness and material				
" in hold do. Baltic Pine	2 1/2		2 1/2	
Main piece of Rudder, diameter at head	7 3/4		7 1/2	
do. at heel	3 3/4		3 3/4	

Can the Rudder be unshipped afloat? Yes
Bulkheads No. 7 No. per Rule 4
" Thickness of 7 & 6/16
" Height up Main deck & as per rule
" How secured to sides of ship Between double frames
" Size of Vertical Angle Irons 3 1/2 × 3 × 8/16 and distance apart 30 ins.
" Are the outside Plates doubled two spaces of Frames in length? Yes

State clearly where plating is 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.

The **FRAMES** extend in one length from Bilges to Gunwale Riveted through plates with 7/8 in. Rivets, about 6 1/2 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend near middle line to Main deck stringer and to Gunwale 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 1/8 in. diameter, averaging 5 1/4 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 7/16 ins. from centre to centre.

" **Butts from Keel to turn of Bilge,** worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/4 ins. from centre to centre.

" **Butts** of 3 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 7/16 ins. from cr. to cr.

" **Butts from Bilge to Main Sheerstrake,** worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 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 1/2 length.

" Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting Nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double ~~or single~~ Riveted? No. of Breasthooks, 5 Crutches, 3 & 2 Transoms

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Palmers Iron

Manufacturer's ~~name~~ or trade mark,

The above is a correct description.
Builder's Signature, Palmers Shipbuilding & Iron Co. Ld. [signature]

Surveyor's Signature, James Sibun
Surveyor to Lloyd's Register of British and Foreign Shipping.

Robt. Edmd. Taylor & Son, Commercial and General Steam Printers, 19, Old Street, Goswell Road, E.C., London.

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

Do the edges of the carvel work and of the butts fay 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 very well

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 Iron in Good condition, and sufficient in size and length. *If of Iron or Steel give Scantling, 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 Mater... and if stamped with Maker's name.*

State also Length and Diameter of Lower Masts and Bowsprit Fore mast length extreme 83'6". Diameter at partners 2... mainmast length extreme 74'1". Diameter 24in. Mizen mast length extreme 66'9" Diam... at partners 20ins. Three plate masts 7/16" to 6/16" edges double rivited, and butts treble rivet... makers of the Iron Palmer's Shipbuilding and Iron Co. (Lim)

NUMBER for EQUIPMENT ~~28054~~ 28045

SAILS. N°.		CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntdt.
One suit	Fore Sails,	Chain	270	1 7/8	63 1/4	270 – 1 14/16	Lloyds' P.H. Low Walker R. Burrell Supt. 23 & 24/12/81
		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	Breaking	Strain	88 1/2		
	Fore Top Sails,	Iron Stream Chain	75	1 1/8	22 3/4	75 – 1 2/16	
		~~or Steel Wire~~	Breaking	Strain	34 1/8		
	Fore Topmast Stay Sails,	~~or Hempen Strm Cable~~	100	4	Steel Wire Tested as per Rule Makers Nixon Corbitt & Spencer	100 – 4	
		Towline, ~~Hemp~~	90	3		90 – 9 1/2	
	Main Sails,	or Steel Wire	90	8		90 – 8	
		Hawser	90	6			
	Main Top Sails,	Warp	120	5 1/2			
	and	quality Good	120	5 1/2			

ANCHORS.	N°.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Supt.
Bower Anchors (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	1	35.0.7	32.8.1.21	34.0.0	Lloyds' P.H. Low Walker R. Burrell Supt.
	1	35.0.0	32.7.2.0	34.0.0	
	1	29.0.21	28.0.1.7	29.0.0	
StreamAnchor	1	10.3.7	12.15.1.7	10.3.0	
Kedge ...	1	5.1.26	7.16.1.0	5.2.0	
2nd Kedge ...	1	2.2.14	5.2.2.0	2.2.0	

Standing (Rigging Wire) and Running Rigging Manilla sufficient in size and good in quality. She has 2 Life ~~Long~~ Boats and 2 others

The Windlass is Good Capstans Good and Rudder Good Pumps Good

Engine Room Skylights.—How constructed? Iron trunk to Bridge deck & iron comings & wood tops above. How secured in ordinary weather? Bolted down

What arrangements for deadlights in bad weather? Solid shutters and bulls eyes.

Coal Bunker Openings.—How constructed? Wrought Iron comings How are lids secured? Hatch bars Height above deck? 24ins

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Ten ports each side besides the mooring pipes.

Cargo Hatchways.—How formed? Iron Comings & headledges riveted together.

State size **Main Hatch** 20' x 12' Forehatch 12' x 12' Quarterhatch 20' x 12" & 16' x 12"

If of extraordinary size, state how framed and secured? Ordinary size

What arrangement for shifting beams? Deep web plate in main & large after hatchways. Bulb plate in fore & after hatchways wood fore & afters in each hatchway

Hatches, If strong and efficient? Yes (Solid hatches)

Order for Special Survey No. 1542 Date 13th May/81

Order for Ordinary Survey No. – Date ✓

No. 454 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	1881 Septr 28. Oct. 1.3.10.12.18.22.26.28. Nov. 1.4
2nd.	On the plating during the process of riveting	9.22.24.28. Dec 5.9.12.15.16.20.22.28.3
3rd.	When the beams were in and fastened, and before the decks were laid....	1882 Jany 7.10.13.19.27
4th.	When the ship was complete, and before the plating was finally coated or cemented..	Feby 3.8.10.13.20.22.24.28.
5th.	After the ship was launched and equipped	March 2.6.8.10.14.17.20.22.24.27.29.31

General Remarks (State quality of workmanship, &c.) This Vessel has been constructed in accordance with the rules and approved tracings; on the cellular bottom principle with double bottom all fore and aft; She has a full Poop 28 ft in length Part open Bridge 62 ft in length and an open Top-gallant forecastle 31 feet in length. In addition to the scantlings set forth upon the approved tracing of Midships Section the upper deck Beams have been plated over with 5/16 plates extending from the front of Poop forward. The double bottom tested as per rule and proved satisfactory, and the workmanship and material of a good description

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate for...

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

I am of opinion this Vessel should be Classed 100 A1 Two decks & three tier of beams (One Iron deck and one part Iron...

The amount of the Entry Fee ... ...£ 5 : – : – is received by me, } WHG

Special ... ...£ 48 : 6 : – 15th April 1882 }

Certificate ~~Gratis~~ – : – : –
(to be sent as per margin).

(Travelling Expenses, if any, £ —).

James Gibson T. H. Cook...
Surveyor to Lloyd's Register of British and Foreign Shipp...

Committee's Minute Tuesday April 18th 1882

This submitted this vessel appears eligible to the as recommended viz 100 A1 2 Dks Iron Dk and 3 Tr Bms part Iron Dk 17/4/8..

Character assigned 100 A1 Lloyd's LC 2 Dks 3 Tr Bms

Lloyd's M. BM Iron Dk & pt I Dk