

IRON SHIP.

1666
Rev. 10/1/18

No. 139 Survey held at Hamburg Date, First Survey December 1875 Last Survey 8th July 1876

On the Iron Sailing Vessel, "Melpomene" (Ship) Master P. Moloen

TONNAGE under Tonnage Deck } <u>959.0</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third, Spar, or Awning Deck. } <u>42.4</u>	SPAR, OR AWNING-DECKED VESSEL.
Ditto of Poop, or Raised Qr. Dk. } <u>24.5</u>	HALF BREADTH (moulded) <u>16.5</u> Feet.
Ditto of Houses on Deck } <u>4.16</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>22.8</u>
Ditto of Forecastle } <u>4.16</u>	GIRTH of Half Midship Frames (as per Rule) <u>33.6</u>
Gross Tonnage } <u>1060</u>	1st NUMBER <u>72.9</u>
Less Crew Space } <u>28.6</u>	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
Less Engine Room } <u>1031.4</u>	LENGTH <u>195.0</u>
Register Tonnage as cut on Beam } <u>1031.4</u>	2nd NUMBER <u>14216</u>
	PROPORTIONS —Breathths to Length <u>under 6 breadth</u>
	Depths to Length—Upper Deck to Keel <u>195. = 8 1/2</u>
	Main Deck ditto .. <u>22.8. = 8 1/2</u>

Built at Hamburg
 When built 1876 Launched 22^d June 1876
 By whom built Reiherstieg Schiffwerft und Maschinenfabrik
 Owners B. Wencke, Senr.
 Port belonging to Hamburg
 Destined Voyage Rangoon (via England)
 If Surveyed while Building, Afloat, or in Dry Dock.

Official Number

LENGTH on deck as per Rule ... 195 Feet. 0 Inches. **BREADTH**—Moulded... 33 Feet. 0 Inches. **DEPTH** top of Floors to Upper Deck Beams ... 20 Feet. 11 1/2 Inches. **Power of Engines** ... 20 Horse. **N^o. of Decks with flat laid** one. **N^o. of Tiers of Beams** two.

Dimensions of Ship per Register, length, 195 breadth, 33 depth, 22' 10"

	Inches in Ship.	Inches per Rule.						
KEEL , depth and thickness	8 - 2 3/8	✓	8 - 2 3/8	✓				
STEM , moulding and thickness	7 1/4 - 2 3/8	✓	7 1/4 - 2 3/8	✓				
STERN-POST for Rudder do. do. for Propeller	7 1/4 - 2 3/8	✓	7 1/4 - 2 3/8	✓				
Distance of Frames from moulding edge to moulding edge, all fore and aft	23"		23"					
FRAMES , Angle Iron, for 2/3 length amidships	4 1/2	3	8	4 1/2	3	7	8	4 1/2
Do. for 1/3 at each end	4 1/2	3	7	4 1/2	3	7	8	4 1/2
REVERSED FRAMES , Angle Iron	3	3	7	3	3	7	8	3
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	8	8	8	8				
depth at 3/4 the half-bdth. as per Rule	45	40	45	40				
height extended at the Bilges	45	40	45	40				
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8	8	8				
Single or double Angle Iron on Upper edge	3	3	6	3	3	6	6	3
Average space	46	46	46	46				
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8	8	8				
Single or double Angle Iron on Upper Edge	3	3	6	3	3	6	6	3
Average space	46	46	46	46				
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8	8	8				
Single or double Angle Iron on Upper Edge	3	3	6	3	3	6	6	3
Average space	46	46	46	46				
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	14	11	14	11				
" Rider Plate	11	11	11	11				
" Bulb Plate to Intercostal Keelson	5	3 1/2	7	5	3 1/2	7	7	5
" Angle Irons	5	3 1/2	7	5	3 1/2	7	7	5
" Double Angle Iron Side Keelson	5	3 1/2	7	5	3 1/2	7	7	5
Wash Side Intercostal Plates for half length	5	3 1/2	7	5	3 1/2	7	7	5
" do. Angle Irons	5	3 1/2	7	5	3 1/2	7	7	5
" Attached to outside plating with angle iron	5	3 1/2	7	5	3 1/2	7	7	5
BILGE Angle Irons	5	3 1/2	7	5	3 1/2	7	7	5
" do. Bulb Iron	5	3 1/2	7	5	3 1/2	7	7	5
" do. Intercostal plates riveted to plating for length	5	3 1/2	7	5	3 1/2	7	7	5
BILGE STRINGER Angle Irons	5	3 1/2	7	5	3 1/2	7	7	5
Intercostal plates riveted to plating for length	5	3 1/2	7	5	3 1/2	7	7	5
SIDE STRINGER Angle Irons	5	3 1/2	7	5	3 1/2	7	7	5

	Inches. In Ship.	16ths. In Ship.	Inches. required	16ths. required
Flat Keel Plates, breadth and thickness	34	10	3	10
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	48	9	9	9
of doubling at Bilge, or increased thickness, and length applied	44	9		
fm up. part of Bilge to lr. edge of Sh'rstrake	44	9		9
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	36	11	36	11
Up. or Spar Dk. Sh'rstrake, brdth & thickness				
Butt Straps to outside plating, breadth & thickness	9 3/4	9	9 3/4	
Lengths of Plating	115			
Shifts of Plating, and Stringers	46			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	40	9	40	9
Angle Iron on ditto	5 x 3 1/2	7	5 x 3 1/2	7
Tie Plates fore and aft, outside Hatchways	11	9	11	9
Diagonal Tie Plates on Beams No. of Pairs,				
Planksheer material and scantling				
Waterways do. do. Joy Iron				
Flat of Upper Deck do. do.	6 x 3 1/2			
How fastened to Beams by bolts & nuts				
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	29	8	29	8
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	3 1/2 x 3 1/2 x 1/2		3 1/2 x 3 1/2 x 1/2	
Stringer or Tie Plates, outside Hatchways	double angle iron 3 1/2 x 3 1/2 x 1/2			
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material	6 x 2 1/4"			
in hold do. do.				
Main piece of Rudder, diameter at head	5		5	
do. at heel	3		3	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. <u>one</u> Thickness of 3/8 and 5/16				
Height up to upper deck				
How secured to sides of ship between two angle iron frames				
Size of Vertical Angle Irons 3 x 3 x 7/16 and distance apart	30			
Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight-heads. Hawse Timbers.
 Windlass Emerson & Paul Ditt Walker's Patent.

The **FRAMES** extend in one length from centre of keel to upper stringer plate Riveted through plates with 3/4 in. Rivets, about 6" apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to 6" above lower stringer plate and to upper stringer plate 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 1/2 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4" diameter, averaging 3 1/4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/4 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 1/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 half length amidships. **Butts of Upper or Spar Sheerstrake**, treble riveted length amidships.
Butts of Main Stringer Plate, treble riveted for half length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for length.
 Breadth of laps of plating in double riveting 9 3/4 Breadth of laps of plating in single riveting length

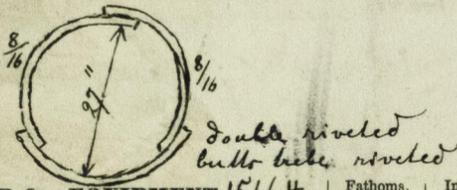
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 Waterway, how secured to Beams of Iron. (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? By kneeplates No. of Breasthooks, Crutches,
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Of best English & Scotch Firms
 Manufacturer's name or trade mark,

The above is a correct description.
 Builder's Signature, Reiherstieg Schiffwerft und Maschinenfabrik Surveyor's Signature, Emil Padduratz
 Surveyor to Lloyd's Register of British and Foreign Shipping.

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? No.

Masts, Bowsprit, Yards, &c., are of Iron 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 Main mast 77' x 27". Fore mast 75' x 27". Mizzen mast 70' x 23 1/2"
Bowsprit 31' x 26 1/2"



NUMBER for EQUIPMENT 15164.		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o . Full rigged Sailing Vessel. and	SAILS.						Bowers	1	28. 1. 0	27. 6. 3. 0	27. 3. 0	January 3 rd
	Fore Sails,	270	1 1/16	January 19, 76				1	27. 3. 0	26. 18. 3. 0	27. 3. 0	April 8 th
	Fore Top Sails,	90	1 5/16	March 29, 76.				1	23. 3. 21	23. 16. 2. 7	23 5/10	February 29 th
	Fore Topmast Stay Sails			Smart.								
	Main Sails,	90	9				Stream	1	10. 1. 14.	10. 10. 0. 0	11. 0. 0.	March 29 th
	Main Top Sails,	90	5 1/2				Kedges	1	5. 1. 21.	6. 17. 0. 0.	5. 2. 0.	" "
	CABLES, &c.											
Chain												
River Wear Commission A. Hartness												
Hmpn Strm Cbl												
Hawser ...												
Towlines ...												
Warp ...												
quality												

Standing and Running Rigging is sufficient in size and good in quality. She has one (25') Long Boat and two other ones 24 ft Long
 The Windlass is Emerson & Walker's Patent. Capstan and Rudder and Pumps in good condition

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

What arrangements for deadlights in bad weather? No dead lights.

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? Two ports 24 x 16 and three ports 24 x 24 on each side.

Cargo Hatchways.—How formed? Of plates 7/16 ins. thick. 16 ins. above deck

State size Main Hatch 10 ft x 7 ft. Forehatch 6 ft x 5 ft. Quarterhatch 7 ft 8 ins. x 7 ft.

If of extraordinary size, state how framed and secured?

Arrangement for shifting beams?

Are they strong and efficient? Yes.

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 } Built under Special Survey.
 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 }

General Remarks (State quality of workmanship, &c.)

All the materials are of best English and Scotch Iron and the workmanship is exceedingly good.
Length of Poop 45 ft x 6 ft 9 ins. height.
Forecastle 22 ft x 4 ft 6 ins. "
House on deck 30' x 14' 6" x 6' 6".

State if one, two, or three, decked vessel, or if open, or running decked; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside cemented and painted Outside Bottom: Patent Paint. above three Paint-coats.

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

The amount of the Entry Fee ... £ 5. : 0. : 0. is received by me, }
 Special ... £ 53. : 0. : 0. 187 }
 Certificate ... 0. : 5 : 0.

(Travelling Expenses, if any, £)

Committee's Minute 11th July 1876

Character assigned 100 A 1

C.P. J.W.

