

IRON SHIP.

17296
Rec 18/11/76

No. 1237 Survey held at Newcastle Date, First Survey 23rd August 1875 Last Survey 30th October 1876.

On the Iron Riveted Screw Steamer "Pera" Master J. Osborne

TONNAGE under Tonnage Deck } <u>1662.16</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Newcastle</u>
Ditto of Third, Spar, or Awning Deck. } <u>42.79</u>	SPAR, OR AWNING-DECKED VESSEL.	When built <u>1876</u> Launched <u>19th Sept 1876.</u>
Ditto of Poop, or Raised Or. Dk. } <u>36.21</u>	HALF BREADTH (moulded) Feet. <u>16.9</u>	By whom built <u>A. Leslie & Co.</u>
Ditto of Houses on Deck } <u>13.89</u>	DEPTH from upper part of Keel to top of Upper Deck Beams Feet. <u>26.6</u>	Owners <u>J. Moss & Co.</u>
Ditto of Forecastle Hatchways } <u>38.65</u>	GIRTH of Half Midship Frame (as per Rule) Feet. <u>39.4</u>	Port belonging to <u>Liverpool</u>
Gross Tonnage <u>1823.40</u>	1st NUMBER Deduct <u>7</u>	Destined Voyage <u>Liverpool</u>
Less Crew Space <u>57.68</u>	1st NUMBER, if a THREE-DECKED VESSEL <u>45.58</u>	If Surveyed while Building, Afloat, or in Dry Dock. <u>While building</u>
Less Engine Room <u>1766.02</u>	LENGTH <u>282.6</u>	
Register Tonnage as out on Beam } <u>1182.44</u>	2nd NUMBER <u>21357</u>	
	PROPORTIONS —Breathths to Length <u>8.4</u>	
	Depths to Length—Upper Deck to Keel <u>10.66</u>	
	Main Deck ditto <u>14.9</u>	

LENGTH on deck as per Rule Feet. <u>282</u> Inches. <u>8</u>	BREADTH Moulded Feet. <u>33</u> Inches. <u>6</u>	DEPTH top of Floors to Upper Deck Beams Feet. <u>26</u> Inches. <u>6 1/2</u>	Power of Engines <u>250</u>	Horse. <u>250</u>	N ^o . of Decks with flat laid <u>Two</u>	N ^o . of Tiers of Beams <u>Three</u>
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Dimensions of Ship per Register, length, 284.4 breadth, 33.75 depth, 24.4

	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	<u>9 1/2 x 2 1/2</u>	<u>9 1/2 x 2 1/2</u>						
STEM , moulding and thickness	<u>9 x 2 1/2</u>	<u>9 x 2 1/2</u>						
STERN-POST for Rudder do. do.	<u>9 x 5</u>	<u>9 x 5</u>						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>24</u>	<u>24</u>						
FRAMES , Angle Iron, for 3/4 length amidships	<u>5 x 3</u>	<u>5 x 3</u>	<u>8</u>	<u>8</u>				
Do. for 1/2 at each end	<u>5 x 3</u>	<u>5 x 3</u>	<u>7</u>	<u>7</u>				
REVERSED FRAMES , Angle Iron	<u>3 x 3</u>	<u>3 x 3</u>	<u>7</u>	<u>7</u>				
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	<u>23 1/2 x 9</u>	<u>23 1/2 x 9</u>						
thickness at the ends of vessel	<u>9</u>	<u>9</u>						
depth at 3/4 the half-bdth. as per Rule	<u>11 1/2</u>	<u>11 1/2</u>						
height extended at the Bilges	<u>47</u>	<u>47</u>						
BEAMS , Upper, Spar, or Awning Deck } Single or double Angle Iron, Plate or Tee Bulb Iron	<u>4 x 7</u>	<u>4 x 7</u>	<u>7</u>	<u>7</u>				
Single or double Angle Iron on Upper edge	<u>3 x 3</u>	<u>3 x 3</u>	<u>6</u>	<u>6</u>				
Average space	<u>alternate frames</u>							
BEAMS , Main, or Middle Deck } Single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 1/2 x 3</u>	<u>5 1/2 x 3</u>	<u>8</u>	<u>8</u>				
Single or double Angle Iron, on Upper Edge	<u>24</u>	<u>24</u>						
Average space	<u>24</u>	<u>24</u>						
BEAMS , Lower Deck, Hold, or Orlop } Single or double Angle Iron, Plate or Tee Bulb Iron	<u>8 x 8</u>	<u>8 x 8</u>	<u>8</u>	<u>8</u>				
Single or double Angle Iron on Upper Edge	<u>3 x 3</u>	<u>3 x 3</u>	<u>6</u>	<u>6</u>				
Average space	<u>As longitudinal plan</u>							
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	<u>18 x 13</u>	<u>18 x 13</u>						
" Rider Plate	<u>11 x 13</u>	<u>11 x 13</u>						
" Bulb Plate to Intercostal Keelson	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" Angle Irons	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" Double Angle Iron Side Keelson	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" Side Intercostal Plate	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" do. Angle Irons	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" Attached to outside plating with angle iron	<u>3 x 3</u>	<u>3 x 3</u>	<u>7</u>	<u>7</u>				
BILGE Angle Irons	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
" do. Bulb Iron	<u>8</u>	<u>8</u>						
" do. Intercostal plates riveted to plating	<u>8</u>	<u>8</u>						
BILGE STRINGER Angle Irons	<u>5 1/2 x 4</u>	<u>5 1/2 x 4</u>	<u>9</u>	<u>9</u>				
Intercostal plates riveted to plating for half length	<u>10 1/2 x 8</u>	<u>10 1/2 x 8</u>						
SIDE STRINGER Angle Irons attached to plating	<u>3 x 3</u>	<u>3 x 3</u>	<u>7</u>	<u>7</u>				

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Farfield's Patent Pall Bitt

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

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to M. D. S. A. I. and to Gunnwale 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 1/2 in. diameter, averaging 5 3/4 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 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 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 7/16 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 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 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.

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting same

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

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

Beams of the various Decks, how secured to the sides? Welded knees, & knee plates No. of Breasthooks, Five Crutches, Four

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs: - Hawke's

Manufacturer's name or trade mark, Crawshaw & Sons, Gateshead. Plates: Palmer's Garrow.

The above is a correct description.

Builder's Signature, Andrew Leslie & Co. Surveyor's Signature, J. Mowbray & J. H. Cooke.

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

18011469-0053



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* 17290 Iron

Masts, Bowsprit, Yards, &c., are *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 length extreme 73 feet diameter at the partners 24" heel 21" head 15" Fore mast 82 feet diameter same as main mast. masts formed with two plates in the round 1/4" & 1/16" in thickness. Edges single riveted & butts treble riveted, double angle irons 3 1/2" x 3 1/16" in each mast. Makers of Iron Palmer & Co. Jarrow.*

NUMBER for EQUIPMENT 25670		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per 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 .	SAILS.	CABLES, &c.		270	1 1/16	59 1/2	270-1 1/16	59 1/2	32.0.0	30 1/2	32.0.0	30 1/2
	Chain	Chain										
	Fore Sails,	River Wear 9 1/2" of Strain		82 1/2								
	Fore Top Sails,	Date of certificates 16 th Sept 1876.										
	Fore Topmast Stay Sails	Hemp Strm Cbl		90	1 1/16	90-1 1/16						
	Main Sails,	Hawser ...		90	10	11						
	Main Top Sails,	Towlines ...		90	8 1/2	11						
	and Rigging wire	Warp ...		90	4	7						
	Standing and Running Rigging	quality Good.		180	5 1/2	7						
		Hemp										

The Windlass is *Patent Good* Capstan *Good* and Rudder *Wood Good* Pumps *Good*

Engine Room Skylights. How constructed? *Iron trunk, 20" Ribs & Wood Tops* How secured in ordinary weather? *Bolted down*

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

Coal Bunker Openings. How constructed? *Cast iron coverings* How are lids secured? *By bars* Height above deck? *12"*

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

Cargo Hatchways.—How formed? *Iron coverings and headledges riveted together*

State size **Main Hatch** *28 feet x 12 feet* **Fore hatch** *10 feet x 8 feet* **Quarter hatch** *10 ft. x 8 ft. and 12 ft. x 10 ft.*

If of extraordinary size, state how framed and secured? *Trunked iron fore & aft coverings deep coverings & two web plates*

What arrangement for shifting beams? *Two web plates the depth of coverings in the hatch & wood fore & aft in each hatch*

Hatches, If strong and efficient? *Yes Solid hatches*

Order for Special Survey No.	Date	DAIES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
1091	23 July 1875		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
			1075 Aug 22, 27, Sep 1, 7, Oct 5, 13, 20, 27, Nov 4, 9.	16, 17, 26, 29, Dec 8, 15, 21, 23, 29, 31, 1876 Jan 10.	12, 17, 19, 21, 27, 31, Feb 8, 11, 17, 22, 28, March 2, 5, 10.	15, 20, 24, April 3, 7, 11, 21, 25, May 1, 10, 15, 25.	31, June 19, July 14, 19, 21, 24, 27, Aug 2, 4, 9, 10, 15, 17, 25, 31, Sep 5, 8, 11, 13, 15, 18, 25, 28, Oct 2, 5, 9, 16, 18, 23, 25, 26, 30.

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

This is a Three decked vessel built in accordance with the tracings attached, and the Secretary's letters of the 20th July 1875, and the 2nd Nov 76 and otherwise in accordance with the Rules. She has two complete iron decks 6/16 in thickness, and a wood deck 3 1/2" thick is laid upon the upper one. She is fitted with a fore-castle 36 feet, bridge deck 66 feet, and Poop 36 feet in length. A water ballast-tank is fitted under the Boilers and engines and is 52 feet in length, the top plating is 7/16" thick. Tank tested to the load line and found satisfactory. The general quality of the workmanship is good.

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

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

I am of opinion this Vessel should be Classed *100 A1 Three decked.*

The amount of the Entry Fee ... £ 5 : : : is received by me, *T. Young*
 on 17th Nov 1876 Special ... £ 69 : : : 1876
 Certificate ...

(Travelling Expenses, if any, £ —)

Committee's Minute *11th November 1876*

Character assigned *100 A1*

M. W. Barber & Co. Lloyd's Reg. 2 Dks 3 Ins. Buns

