

# IRON SHIP.

Thursday, 3rd Jan 1886

No. 5926 Survey held at Hull Date, First Survey April 9th 85 Last Survey 1st May 1886

On the Iron Steam Steamer "Pera"

**TONNAGE** under Tonnage Deck 1868.78  
 Ditto of Third, Spar or Awning Deck. 154.34  
 Ditto of Poop, or Raised Qr. Dk. 161.46  
 Ditto of Houses, on Deck 52.54  
 Ditto of Forecastle 53.24  
 Gross Tonnage 2263.12  
 Less Crew Space 65.95  
 2197.17  
 Less Engine Room 724.29  
 Register Tonnage as cut on Beam 1473.18

**ONE, OR TWO-DECKED, THREE-DECKED VESSEL.**  
**SPAR, OR AWNING-DECKED VESSEL.**  
 Half Breadth (moulded) 18.4  
 Depth from upper part of Keel to top of Upper Deck Beams 23.9  
 Girth of Half Midship Frame (as per Rule) 38.0  
 1st Number 80.3  
 1st Number, if a 3-Decked Vessel .. deduct 7 feet  
 Length 308.5  
 2nd Number 24,442  
 Proportions— Breadths to Length .. 8.3  
 Depths to Length— Upper Deck to Keel .. 12.9  
 Main Deck ditto ..

Master Miller  
 Built at Hull  
 When built 1886 Launched March  
 By whom built Hartley  
 Owners Walter Bailey  
 Residence Hull  
 Port belonging to Hull  
 Destined Voyage Cardiff  
 If Surveyed while Building, Afloat, or in Dry Dock Building and afloat

**LENGTH** on deck as per Rule 308 6  
**BREADTH** Moulded 36 10  
**DEPTH** top of Floors to Upper Deck Beams 20 5  
 Do. do. Main Deck Beams ..  
 Power of Engines 180  
 No. of Decks with flat laid 1  
 No. of Tiers of Beams 1

Dimensions of Ship per Register, length, 310 breadth, 34 depth, 20.1

	Inches in Ship	Inches per Rule		Inches in Ship	Inches per Rule
<b>KEEL</b> , depth and thickness ..	10 + 2 3/4	10 + 2 3/4	<b>PLATES</b> in Garboard Strakes, br'dth & thickness ..	36	16
<b>STEM</b> , moulding and thickness ..	10 + 2 3/4	10 + 2 3/4	From Garboard to upper part of Bilges ..	12	12
<b>STERN-POST</b> for Rudder do. do. ..	10 + 6	10 + 6	Of d'bling at Bilge, or increased thickness, and length applied ..	10 1/2	10 1/2
" " for Propeller ..	10 + 6	10 + 6	From up. prt of Bilge to l.r. edge of Sh'rstrake ..	11	11
Distance of Frames from moulding edge to moulding edge, all fore and aft ..	24 inches	24 inches	Main Sheerstrake, breadth and thickness ..	40	13
			Of d'bling at Sh'stk. & lng. applied ..	32	11
<b>FRAMES</b> , Angle Iron, for 1/2 length amidships ..	5 3/2 8	5 3/2 8	From M'n. to Up. or Spar Dk. Sh'rstrake ..	12	12
Do. for 1/2 at each end ..	5 3/2 4	5 3/2 4	Up. or Spar Dk. Sh'rstrake, br'dth & thickness ..	12	12
<b>REVERSED FRAMES</b> , Angle Iron ..	3 1/2 3 1/2 8	3 1/2 3 1/2 8	Butt Straps to outside plating, breadth & thickness ..	19 1/2	14 1/2
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ..	4 3 4	40 4	Lengths of Plating ..	14 feet	10 feet
thickness at the ends of vessel ..	As per spec	As per spec	Shifts of Plating, and Stringers ..	4 feet	4 feet
depth at 3/4 the half-bdth. as per Rule ..	As per spec	As per spec	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ..	4 1/2	10
height extended at the Bilges ..	As per spec	As per spec	Angle Iron on ditto ..	6 x 4 x 9	6 x 4 x 9
<b>BEAMS</b> , Upper, Spar, or Awning Deck ..	6 3 9	6 3 9	Tie Plates fore and aft, outside Hatchways ..	3	3
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ..	As per spec	As per spec	Diagonal Tie Plates on Beams No. of Pairs ..	Iron 6	Iron 6
Single or double Angle Iron on Upper edge ..	24 inches	24 inches	Flat of Up., Spar, or Awning Dk. ..	3	3
Average space ..	6 3 9	6 3 9	How fastened to Beams ..	3	3
<b>BEAMS</b> , Main, or Middle Deck ..	6 3 9	6 3 9	Stringer Plate on ends of Main or Middle Deck ..	4 1/2	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ..	As per spec	As per spec	Beams, breadth and thickness ..	4 1/2	10
Single, or double Angle Iron, on Upper Edge ..	24 inches	24 inches	Is the Stringer Plate attached to the outside plating? ..	Yes	Yes
Average space ..	6 3 9	6 3 9	Angle Irons on ditto, No. ..	6 x 4 x 9	6 x 4 x 9
<b>BEAMS</b> , Lower Deck ..	10 10 10	10 10 10	Tie Plates, outside Hatchways ..	3	3
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ..	4 4 9	4 4 9	Diagonal Tie Plates on Beams, No. of pairs ..	Iron 6	Iron 6
Single or double Angle Iron on Upper Edge ..	As per spec	As per spec	Flat of Middle Deck, do. do. ..	3	3
Average space ..	4 4 9	4 4 9	How fastened to Beams ..	3	3
<b>BEAMS</b> , Hold, or Orlop ..	4 3 10	40 10	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ..	40	9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ..	As per spec	As per spec	Is the Stringer Plate attached to the outside plating? ..	Yes	Yes
Single or double Angle Iron on Upper Edge ..	4 3 10	40 10	Angle Irons on ditto, No. ..	4 1/2 x 9	4 1/2 x 9
Average space ..	4 3 10	40 10	Stringer or Tie Plates, outside Hatchways ..	15	10
<b>KEELSONS</b> Centre line, single or double plate, box, or Intercoastal Plates ..	4 3 10	40 10	Flat of Lower Deck ..	15	10
" Rider Plate ..	9	9			
" Bulb Plate to Intercoastal Keelson ..	4 4 9	4 4 9			
" Angle Irons ..	4 4 9	4 4 9			
" Double Angle Iron Side Keelson ..	4 4 9	4 4 9			
" Side Intercoastal Plate ..	4 4 9	4 4 9			
" do. Angle Irons ..	3 1/2 3 1/2 4	3 1/2 3 1/2 4			
" Attached to outside plating with angle iron ..	3 1/2 3 1/2 4	3 1/2 3 1/2 4			
<b>UPPER STRONG</b> Angle Irons ..	2 6 3 1/2 8	2 6 3 1/2 8			
do. Bulb Iron ..	3 1/2 3 1/2 8	3 1/2 3 1/2 8			
do. Intercoastal plates riveted to plating for length ..	6 4 9	6 4 9			
<b>UPPER STRONG</b> Angle Irons ..	6 4 9	6 4 9			
Intercoastal plates riveted to plating for length ..	11 9 11	11 9 11			
<b>UPPER STRONG</b> Angle Irons ..	6 4 9	6 4 9			

**FRAMES** extend in one length from Hull to Gunwale Riveted through plates with 7/8 in. Rivets, about 4 apart.  
**REVERSED ANGLE IRONS** on floors and frames extend across middle line to Main, R.A., F. decks and to Lower deck 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 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 4 Strakes at Bilge for 1/2 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 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 5 1/2 Breadth of laps of plating in single riveting  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, 5 Crutches, 4  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates, West-Stockton  
 Manufacturer's name or trade mark, Bulbs & Angles, Stockton No. 1. C. C. Steel, Consort B. B.  
 The above is a correct description.  
 Builder's Signature, Surveyor's Signature, James McNeil  
 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?

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 *throughout 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

*Iron Fore and Main Lower masts as per approved tracing attached, and Secretary's letter dated 4/6/86. The material has been tested and found satisfactory, and is stamped with Maker's name*

**NUMBER for EQUIPMENT**

SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supplied.	ANCHORS.	N <sup>o</sup> .	Weight, Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Machine where Tested & Supplied.
Fore Sails,	Chain <i>272495</i>	<i>940</i>	<i>1 7/8</i>	<i>88 5/16</i>	<i>1 7/8</i>	<i>185</i>	Bower Anchors	<i>1</i>	<i>35.1.18</i>	<i>32.15.0.0</i>	<i>34</i>	<i>185</i>
Fore Top Sails,	Iron Stream Chain	<i>45</i>	<i>1 1/8</i>	<i>63 1/4</i>				<i>1</i>	<i>32.0.2</i>	<i>30.4.1.14</i>	<i>32</i>	
Fore Topmast Stay Sails,	or Steel Wire ..			<i>22 3/4</i>				<i>1</i>	<i>31.1.2</i>	<i>29.13.0.14</i>	<i>31</i>	
	or Hempen Strm Cable .....											
Main Sails,	Towline, Hemp.	<i>100</i>	<i>4"</i>	<i>33</i>	<i>4"</i>		Stream Anchor	<i>1</i>	<i>10.3.6</i>	<i>12.15.1.7</i>	<i>10 3/4</i>	
	or Steel Wire ..	<i>90</i>	<i>9 1/2</i>		<i>9 1/2</i>		Kedge		<i>5.2.19</i>	<i>8.0.2.14</i>	<i>5 1/2</i>	
Main Top Sails,	Hawser .....	<i>90</i>	<i>8</i>		<i>8</i>		2nd Kedge	<i>2</i>	<i>2.2.18</i>	<i>5.5.0.0</i>	<i>2 1/2</i>	
and	Warp .....	<i>120</i>	<i>5</i>									
Good	quality <i>Good</i>	<i>120</i>	<i>4</i>									

Standing and Running Rigging *Good* sufficient in size and *Good* in quality. She has *Four* Long-Boats and *Good*

The Windlass is *Good* Capstans *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Iron Plank & Wood top* How secured in ordinary weather? *Wood beams*

What arrangements for deadlights in bad weather? *Strong glass Bullseyes*

Coal Bunker Openings.—How constructed? *Iron* How are lids secured? *Patented* Height above deck? *12"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Five (5) hinged ports 18" x 12"*  
*and six scuppers on each side*

Cargo Hatchways.—How formed? *Iron Cornings*

State size Main Hatch *14' x 12'* Forehatch *29' 8" x 12' 0"* Quarterhatch *29' x 12'*

If of extraordinary size, state how framed and secured? *dup plate beams &c*

What arrangement for shifting beams?

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *304*

Date *14/3/85*

Order for Ordinary Survey No. *286*

Date *✓*

No. *286* 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

*This vessel has been built under Special Survey, and examined during all stages of Construction (about twice monthly) from 9th April 85 till 4th May 1886.*

State dates of letters respecting this case *25/2/85, 20/2/85, 27/2/85, 4/6/86,*

General Remarks (State quality of workmanship, &c.) *This one decked vessel, with Raised Quarter deck*

*104 feet long, Bridge 58' 6" long, and Forecastle 43' 6" long, has been built under Special Survey, in accordance with the accompanying approved sketch of Midship Section, and the other detailed, approved sketches attached; also, in other respects with the Rules for the 100-A. Class.*

*The Steel used (as per approved Section), has been tested at the Maker's works, and after manipulation by the Builder, was found of good quality; the usual requirements as to the annealing and tempering of the plates have been complied with.*

*The Iron and Steel work is efficiently protected from oxidation by Cement and paint, and the workmanship throughout is good*

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

How are the surfaces preserved from oxidation? Inside *Cement and 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, *th.R.*

Special .....£ *81* : *11* : *6* *20/5 1886*

(to be sent as per margin). Certificate ... *Gratis*

(Travelling Expenses, if any, £ )

Committee's Minute *Friday, 4th June, 1886.* *18*

Character assigned *100-A-1*

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

*It is submitted that this vessel now eligible to be classed 100-A-1 as per 15th (now) 27th Dec. 1885. Cellar Bottom has particular appendage Equipment letter C.*

Lloyd's Register Foundation