

IRON SHIPS.

No. 1749 Survey held at Belfast
on the Iron Screw Steamer "Persian"

Date 10 February

Recd 9/3/63

18 63

Master —

Tonnage Gross 2075 - Engine Room 304 - 53 Register 1740 - 47 Built at Belfast & Launched 21 Jan'y
When Built 1863 By whom built Harland & Wolff Owners John Dickey Sons & Co

Port belonging to Liverpool

Destined Voyage —

If Surveyed Afloat or in Dry Dock Specially Surveyed while Building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
.....	36	1	8	34	—	24	11	1/2	—
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	5	3 1/2	10 7/8	4	10 7/8	10 7/8	13	6	13	6
„ depth and thickness of Floor Plate at mid line	25	1 1/8	25	1 3/8	13 7/8	13 7/8	9	3 1/2	12	3
„ depth and thickness of Floor Plate at Bilge Keelson	9	4 7/8	—	—	—	—	—	—	—	—
„ Size of Reversed Angle Iron, and No. 2 at top of Floor Plate	3 1/2	3	8 7/8	4 1/2	3 1/2	9 7/8	1 1/2	1 1/8	1 1/2	1 1/8
Frames, Size of Angle Iron, single or double	5	3 1/2	10 7/8	4	10 7/8	10 7/8	12 1/2	13	12 1/2	13
„ „ Reversed Iron, N to every frame or every frame	3 1/2	3	8 7/8	4 1/2	3 1/2	9 7/8	14 7/8	14	15 7/8	15 7/8
Beams, Deck (N°) double Angle Iron or Bulb Iron with double Angle Iron on top	4 x 9 7/8	—	—	—	—	—	9 x 10 1/2	—	—	—
„ „ depth & thickness of plate amidships	6	1 1/4	8 1/2	1 1/8	—	—	—	—	—	—
„ „ double or single Angle Iron, Bulb Iron on lower edge	35	—	—	—	—	—	—	—	—	—
„ „ average space between	35	—	—	—	—	—	—	—	—	—
„ „ if wood (N°) sided & moulded	—	—	—	—	—	—	—	—	—	—
„ Hold, or Lower Deck (N°) double Angle Iron or Bulb Iron with double Angle Iron on top	4 x 9 7/8	—	—	—	—	—	—	—	—	—
„ „ depth & thickness of plate amidships	6	1 1/4	8 1/2	1 1/8	—	—	—	—	—	—
„ „ double or single Angle Iron, Bulb Iron on lower edge	35	—	—	—	—	—	—	—	—	—
„ „ average space between	35	—	—	—	—	—	—	—	—	—
„ „ if wood (N°) sided & moulded	—	—	—	—	—	—	—	—	—	—
„ Paddle, wood, sided and moulded or if Iron, size of Plate	—	—	—	—	—	—	—	—	—	—
„ Engine Room Box 20 x 7 1/2 x 8 1/2 plate 8 7/8	—	—	—	—	—	—	—	—	—	—
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	—	—	—	—	—	—	—	—	—	—
„ Side or Bilge	—	—	—	—	—	—	—	—	—	—
„ Number	5	—	—	—	—	—	—	—	—	—

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads „ d

Hawse Timbers „ d

are they free from defects? Yes Bulkheads, N° 7 in main deck Thickness of 8 1/8 in.

„ how secured to the sides of the ship Riveted between two frames

„ size of vertical angle iron and their distance apart 3 1/4 x 3 x 30 in apart

The Frames or Ribs extend in one length from Keel to Gunwales rivetted through plates with (1 in.) rivets, about (1/2) apart.

The reverse angle irons on the floors extend in one length across the middle line from 3 1/2 to 4 feet on each side alternately to hold Redwood timbers

„ „ „ on the frames „ „ „ from d to d

Keelson, how are the various lengths of plates or angle irons connected? With butt straps

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/2 in.) diameter averaging (3 1/2 in.) from centre to centre of rivet.

„ Edges from Garboards to upper part of bilge, worked carvel with a lining piece (in.) thick, or clenchler, double or single rivetted; rivets (1 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets.

„ Butts from Keel to turn of bilge, worked carvel with a lining piece (1 1/8) thick, double or single rivetted; rivets (1 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? alternately

„ Edges from bilge to planksheer, worked carvel with a lining piece () thick, double or single rivetted; rivets (1 1/2 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? alternately

„ Butts from bilge to planksheers, worked carvel with a lining piece (1 1/2 x 1 1/2) thick, or clenchler, double or single rivetted; rivets (1 1/2 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (2 1/2 x 5) Breadth of laps in single rivetting (—)

Planksheer, how secured to the plating of the sides

Waterway „ „ planksheer and to the Beams

Side trussing „ „ breadth and thickness of plates „ „ how secured?

Deck trussing Iron deck „ „ „ „ „ „ ?

Deck Beams, how secured to the side? Keel plates welded & rivetted to frames

Hold or Lower Deck The same as above, and diagonal trussing to masts, hatches, and to stringer plates 12 1/2 x 3 1/2 in

Paddle „ „ „ „ „ „

No. of breasthooks „ „ crutches „ „ how are pointers compensated? By plate Iron rivetted to frames

What description of iron is used for the angle iron and plate iron in the vessel? Messy Steel Iron Builder's Signature

Harland & Wolff

3088 Iron

Workmanship. Are the lands or laps of the stenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes
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
Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Filled in solid
Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

Her Masts, Yards, &c., are in _____ condition, and sufficient in size and length.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N ^o .			Fathoms.	Inches.	N ^o .
	<u>Not on board</u>	<u>Tested by the maker H. P. Parker & Co. at his Works</u>			
Fore Sails,		<u>Chain</u>	<u>300</u>	<u>2</u>	Bower, .. <u>Not on board</u>
Fore Top Sails,		<u>Test 8 1/4 tons</u>			<u>Common</u>
Fore Topmast Stay Sails,		<u>Hemp</u>	<u>90</u>	<u>1 1/8</u>	Stream, .. <u>1</u>
Main Sails,		<u>Hawser</u>	<u>90</u>	<u>10 1/4</u>	
Main Top Sails,		<u>Towlines</u>	<u>90</u>	<u>9</u>	
		<u>Warp</u>	<u>90</u>	<u>7 1/2</u>	Kedge, .. <u>1</u>
		<u>All of</u>	<u>quality.</u>		<u>1</u>

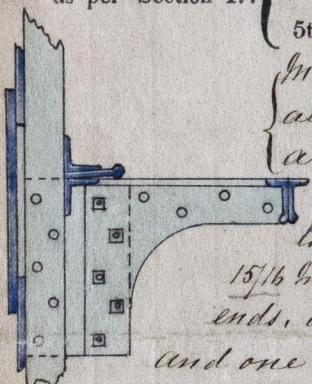
Her Standing and Running Rigging Not on board sufficient in size and _____ in quality.

She has _____ Long Boat and 2 Life Boats 30 feet & 2 others

The present state of the Windlass is Good Capstan 2 Good and Rudder Good Pumps in Good

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17. 1st. On the several parts of the frame, when in place, and before the plating was wrought April 8th 1862
2nd. On the plating during the progress of rivetting August 15th "
3rd. When the beams were in and fastened, and before the decks were laid April 8th "
4th. When the ship was complete, and before the plating was finally coated December 19th "
5th. After the ship was launched February 10th 1863



Mode of securing the orlop beams to the frame, so that they can be easily removed to admit of large packages being stowed, and afterwards replaced without cutting out any rivets or ceiling planks.
This vessel's keel is the same size as the "Arabian" 9 x 3 1/2 in. amidships, tapering to 3 in at ends. She has an inside stake at middle line over keel 239 feet amidships 15 1/6 in. Also an inside stake on each side at bilge 196 feet; and for 152 feet 15 1/6 & 14 1/6 at ends, also one between orlop beam ends and bilge 155 feet; and for 84 feet 14 1/6 & 13 1/6 at ends and one immediately under the ends of truss deck beams 192 feet on each side amidships and for 48 feet 13 1/6 to 12 1/6 at ends, also an inside stake mid to sheerstake 240 feet on each side amidships 108 feet 13 1/6 in, 132 feet 12 1/6 to 11 1/6 at ends. Middle line keelson 25 1/2 x 12 1/6 in, tapering to 10 in at ends, an additional plate rivetted on top 12 x 5 1/8 tapering to 1/2 in at ends. An Intercoastal keelson about midway between the middle line keelson, and the bilge keelson, plates 11 1/6 in to top of floors with bulb iron on top 9 x 8 1/6 for 244 feet amidships, with two angle irons 5 1/2 x 4 1/2 x 10 1/6 in rivetted back to back. Bilge keelson of bulb iron 9 x 1/2 in for 132 feet amidships, rivetted to angle irons as above. Orlop beam stringer of bulb iron 8 x 12 1/4 in rivetted between two angle irons 5 1/2 x 10 1/6 in 153 feet on each side amidships, and single from thence to the ends. The orlop beams are double the size, being of two bars of bulb 6 x 4 x 14 1/6 & 10 1/6 in rivetted back to back averaging 15 feet apart. The truss deck stringer secured to double angle irons on the frames, all fore and aft. The main deck is of Chequer plate same as former vessels. Harland's Patent, weighing 26 lb to the foot amidships, tapering to 15 lb to the ends of vessel. In the fore hold, a watertight iron platform is laid about 3 feet above the floors extending from fore Peak Bulkhead to the Bulkhead, next abaft 42 feet long x 12 in thick rivetted to beams 4 x 3 x 1/2 in. The shell plates are 12 feet long.

The iron and workmanship are excellent.

In what manner are the surfaces preserved from oxidation? The flat of the floor inside, to round the turn of bilge all fore & aft, is covered with Portland Cement, above this together with the entire of hull is coated twice, with a mixture of Red & White lead paint.

I am of opinion this Vessel should be classed 12A

The amount of the Fee £ 5 : : is received by me, Mr. J. J. J.

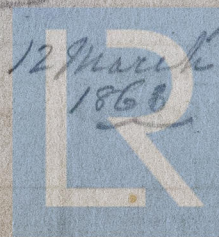
Special £ 103 : 15 : : Mr. J. J. J.

Certificate (if required) £ 108 : 15 : : Mr. J. J. J.

Committee's Minute 13th March 1863

Character assigned A - for 12 Years

I am of opinion
This vessel is eligible
to be classed 12A
12 March 1863



Lloyd's Register
Foundation