

IRON SHIPS.

No. 8248 Survey held at Sunderland Date November 16th 1864
 on the Barque "Onyx" Master Hatch
 Tonnage under tonnage deck 398-35 Built at Sunderland When built 1864 Launched Nov 16th
 Ditto of poop or spar deck 21-38 By whom built James Laing Owners Robt. Matherly & Co
 Ditto of engine room _____
 Total Register tonnage 419-73 Port belonging to Sunderland Destined Voyage Odessa
 If surveyed while Building, Afloat, or in Dry Dock Whilst 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. of Decks
136	6		25	10		16	3				One

(Dimensions of Ship per Register, length 136-5 breadth 25-8 depth 16-55)

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	16ths required per Rule.	Inches in Ship.	Inches required per Rule.	16ths required per Rule.
Keel, if bar iron, depth and thickness.....	6 1/2 x 2 1/2	6 3/4 x 2 1/2						
„ if plate iron, breadth and thickness	6 1/2 x 2 1/2	6 3/4 x 2 1/2						
Stem, if bar iron, moulding and thickness	6 1/2 x 2 1/2	6 3/4 x 2 1/2						
„ if plate iron, breadth and thickness	6 1/2 x 2 1/2	6 3/4 x 2 1/2						
Stern-post, if bar iron, moulding and thickness	6 1/2 x 2 1/2	6 3/4 x 2 1/2						
„ „ if plate iron, breadth and thickness	21	21						
Distance of Frames from moulding edge to moulding edge, all fore and aft								
Frames, Size of Angle Iron, single or double ..	3	3	5 3/4	2 3/4	7			
„ „ Reversed Iron, 5 to every frame	2 1/2	2 1/2	5 3/4	2 3/4	6			
Floors, depth and thickness of Floor Plate at mid line	17	-	7	3 1/2	7			
„ Ditto ditto at Bilge Keelson	8	-	7	3 1/2	7			
„ Size of Reversed Angle Iron, and No. single at top of Floor Plate	2 1/2	2 1/2	5 3/4	2 3/4	6			
Beams, Deck (Nº. 33) double Angle Iron, Plate, Tee, or Bulb Iron	6 1/2	-	6	6 1/4	6			
„ „ double or single Angle Iron, on upper edge	2 1/2	2 1/2	5	2 1/2	5			
„ „ average space between	3	6	3	6				
„ Hold, or Lower Deck (Nº. 23) double Angle, Tee, Plate, or Bulb Iron	6 1/2	-	6	6 1/4	6			
„ „ double or single Angle Iron on upper edge	2 1/2	2 1/2	5	2 1/2	5			
„ „ average space between	3	6	3	6				
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron								
„ Engine „ „ „ „								
Keelson, single or double plate, box, or intercostal	12	-	9	11 1/2	9			
„ Size of Plates								
„ Size of Angle Irons	3 1/2	3	6	4	3			
„ Side, single or double, plate, box, or intercostal								
„ Bilge (No. one) at each Bilge, single, or double, plate, or box	3 1/2	3	6	4	3			
Transoms, material _____ or, if none, in what manner compensated for.								
Knight-heads, and Hawse Timbers								
The Frames extend in one length from _____ to _____ rivetted through plates with (3/4 in.) rivets, about (6 in.) apart.								
The reverse angle irons on the floors extend in one length across the middle line from _____ to _____								
„ „ „ on the frames „ „ „ & from _____ to _____ alternately								
Keelson, how are the various lengths of plates or angle irons connected? <u>With butt straps</u>								
Plates, Garboard, double or _____ rivetted to keel, double or _____ at upper edge, with rivets (1 1/8 x 3/4 ins.) diameter, averaging (3 1/2 in.) apart.								
„ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.								
„ Butts from Keel to turn of bilge, worked carvel with butt straps (8/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.								
Do the butt straps lap over and rivet through the lands of the strake below? <u>No</u>								
„ Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart.								
Do the butt straps lap over and rivet through the lands of the strake below? <u>No</u>								
„ Edges of Sheerstrake, double or single rivetted? At upper edge <u>Single rivetted 8 angles</u> At lower edge <u>Double rivetted</u>								
„ Butts from bilge to planksheers, worked carvel with butt straps (6 x 8) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart. Breadth of laps in double rivetting (4 1/8) Breadth of laps in single rivetting (2 1/2)								
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? <u>Double rivetted</u>								
Planksheer, how secured to the plating of the sides { Explain by sketch } <u>See sketch here with</u>								
Waterway „ „ planksheer and to the Beams { if necessary. } <u>See sketch here with</u>								
Deck Beams, how secured to the side? <u>With knee plates</u>								
Hold or Lower Deck ditto <u>Ditto</u>								
Paddle „ „								
No. of breasthooks <u>Four</u> crutches								
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?								
Manufacturer's name or trade mark <u>Mouney Dixon and Hotley Bristol Iron Co.</u>								
We certify that the above is a correct description of the several particulars therein given.								
Builder's Signature <u>James Laing</u> Surveyor's Signature <u>Rey. Matherly</u>								

3853 Iron
Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter 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? Solid with single pieces
Do the holes for rivetting plate to frames, butt straps, 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, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.)

She has SAILS.			CABLES, &c.			ANCHORS, and their weights.		
No.				Fathoms.	Inches.	Tested to Tons.	Test J.C.	No. Weight. Tested to Tons.
2	Fore Sails,	Chain	.....	240	1 5/8	31	15-10	1 17.1.10 15-10
2	Fore Top Sails,	Hempen Stream Cable	.....	80	9		15-1	1 16.2.26 15-1
2	Fore Topmast Stay Sails,	Hawser	.....	90	1 1/4		15-8	1 17.1.5 15-8
1	Main Sails,	Towlines	.....		6			
2	Main Top Sails,	Warp	.....	90	5			
and spare sails as usual		All of	<u>good</u> quality.					
Her Standing and Running Rigging			<u>Very cheap</u> sufficient in size and			<u>good</u> in quality.		
She has			<u>one</u> Long Boat and			<u>two of hers</u>		
The present state of the Windlass is			<u>good</u> Capstan			<u>Shack</u> and Rudder		
						<u>good</u> Pumps		
						<u>good</u>		

Order for Special Survey	DATES of	1st.	On the several parts of the frame, when in place, and before the plating was wrought	<u>Sept 9th</u>
No. _____	Surveys held	2nd.	On the plating during the progress of rivetting	<u>On various occasions</u>
Date _____	while building	3rd.	When the beams were in and fastened, and before the decks were laid	<u>do</u>
Order for Ordinary Survey	as per	4th.	When the ship was complete, and before the plating was finally coated	<u>Sept 22nd</u>
No. _____	Section 18.	5th.	After the ship was launched	<u>Nov. 16th</u>
Date _____				
State if she has a Spar Deck <u>Half</u> Poop <u>and</u> Forecastle				

General Remarks,

The testing certificates of the Chain cables and Anchors, signed by Mr Robt Burrell, Inspector for Lloyd's, have been produced setting forth the tests applied as above.

This vessel has been found, on measurement, to exceed the tonnage of the scale on which she has been built by twenty tons. Herewith is forwarded a letter from the Builder in explanation of the same. I respectfully leave the claims of the vessel & classification to the consideration of the Committee.

In what manner are the surfaces preserved from oxidation? Inside With Portland Cement & Blue paint & Plaster
Ditto ditto Outside Red lead & Spar varnish Composition

I am of opinion this Vessel should be Classed _____
The amount of the Fee£ 5 : : : is received by me,
Nov 14/64 Special£ " : : :
Certificate (if required)£ : : 5 : :
Committee's Minute 22nd November 1864
24 November 1864

Character assigned

B

2019
Lloyd's Register
Foundation
The frames and timbers
are all of the best
iron & steel but the
and floor plates are
to the 4000 lbs scale
properties of the
with difference & would
recommend the further

21 Nov 1864 JMR