

3304

IRON SHIPS.

Rev 7/9/63

[Handwritten initials]

Survey held at Newcastle Date 10th April to 9th Sept 1863

Ship "Latona" Master J. Mitchell

Tonnage Gross 699.06 Engine Room 165 Register 534.06 Built at Newcastle

When Built 1863 Launched 15th Aug 63 By whom built Messrs Palmer Bros & Co

Agents Pickernell & Co Port belonging to London Destined Voyage (India)

Surveyed Afloat or in Dry Dock Special building

Length aloft	Feet	Inches	Extreme Breadth	Feet	Inches	Depth from top of Upper Deck	Feet	Inches	Beam to top of Floor	Feet	Inches	Power of Engines	Horse									
212	-		30.25	-		16.95	-		16.95	-		100										
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	18		18		Stem, if bar iron, moulding and thickness		7		2 3/4		7		2 3/4									
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	4	3	7/8	4	3	7/16	Stern-post, if bar iron, moulding and thickness		8		4 3/4		7		5 1/2							
depth and thickness of Floor Plate at mid line	24		8/16		17		Keel, if bar iron, depth and thickness		7		2 3/4		7		2 3/4							
depth and thickness of Floor Plate at Bilge Keelson	4		8/16		8/16		Garboard Plates, Breadth and thickness		30		4/8		30		4/8							
Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	3	3	6/16	3	2 3/4	6/16	From Garboard to upper part of Bilge		J.B. Richards		9/16		9/16		9/16							
Frames, Size of Angle Iron, single	4	3	7/16	4	3	7/16	From upper part of Bilge to Sheerstrakes		Don		8/16		8/16		8/16							
Reversed Iron, to every frame	3	3	6/16	3	2 3/4	6/16	Sheerstrakes, Breadth and thickness		Stockton		35		4 1/2		30		9/16					
Beams, Deck (No. 38) double Angle Iron, Plate or Bulb Iron	7	7/16	7	7/16	Planksheers		Gunwale Plate or Stringer on ends of Up. Dk Beams		Iron Bulwarks		27 1/2		2 1/8		21		8/16					
double single Angle Iron on upper edge	2 1/2	2 1/2	5/16	2 1/2	2 1/2	5/16	Angle Iron on ditto		4 1/2		3 1/2		8/16		4 1/2		3 1/2		7/8			
average space between	3 feet		3 feet		Diagonal Tie Plates on Beams		Waterway		Gutter - see sketch		10 1/2		3/4		10 1/2		8/16					
Hold, or Lower Deck (No. 36) double Angle Iron, Plate or Bulb Iron	7	7/16	7	7/16	Deck		Ceiling in Hold		Yellow pine		3 1/2		3 1/2									
double single Angle Iron on upper edge	2 1/2	2 1/2	5/16	2 1/2	2 1/2	5/16	Ceiling betwixt Decks		Sparling		2 1/2											
average space between	3 feet		3 feet		Beam Clamps or Spircketing		Shelf															
Paddle, wood, sided and moulded or if Iron, size of Plate					Stringers in Hold		Deck, Lower		Double A J		4 1/2		5 1/2		7/16		4 1/2		3 1/2		7/16	
Keelson, single plate, box or intercostal	2 1/2	3	8/16	2 1/2	3	8/16	Deck, Upper, how fastened to Beams		by screwbolts & nuts													
Size of Angle Irons between floors	3	3	4/8	3	3	4/8	Bulkheads, No. 4		Thickness of		6/16											
Ditto Bilge (No. one) on each side	4 1/2	3 1/2	7/16	4 1/2	3 1/2	7/16	Transoms, material		Iron													
Transoms, material					Knight-heads, and Hawse Timbers				Iron													

The Frames or Ribs extend in one length from stark side to stark side rivetted through plates with (3/4 in.) rivets, about (6) apart.

The reverse angle irons on the floors extend in one length across the middle line from stark side to stark side and from thence in other lengths to Hold Beam Stringer & Gunwale alternately

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

Plates, Garboard, double ~~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 (1/2 in.) thick, or clencher, double ~~single~~ rivetted; rivets (2 in.) diameter, averaging (3 in.) from centre to centre of rivets.

Butts from Keel to turn of bilge, worked carvel with a lining piece (3/8 x 3/8) thick, double ~~single~~ rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? by secondary thin pieces

Edges from bilge to sheerstrake, worked carvel with a lining piece (1/2 in.) thick, or clencher, double ~~single~~ rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? by secondary thin pieces

Edge of Sheerstrake, double ~~single~~ rivetted?

Butts from bilge to planksheers, worked carvel with a lining piece (5/8 x 5/8) thick, double ~~single~~ rivetted; rivets (3/4 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (4) Breadth of laps in single rivetting (2 1/2)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? double rivetted

Planksheer, how secured to the plating of the sides { Explain by sketch }

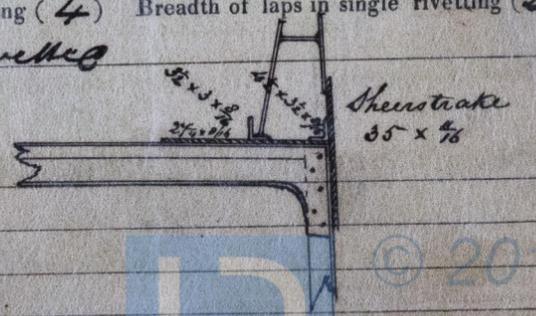
Waterway " " planksheer and to the Beams { if necessary. }

Deck Beams, how secured to the side? by Butt Straps

Hold or Lower Deck, ditto

Paddle " " " "

No. of breasthooks 4 crutches 3 how are pointers compensated?



What description of iron is used for the angle iron and plate iron in the vessel? Frames Brackets

A.C.H. Reversed frames L.W.B. washer

Builder's Signature Palmer Bros & Co

3304 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double riveted 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? Solid with few
 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 Good condition, and sufficient in size and length.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N ^o .		Fathoms.	Inches.	No.	Weight.
<u>One</u>	Fore Sails,	Chain	270	1 6/16	Bower,
<u>Suit</u>	Fore Top Sails,	Stream	90	14/16
<u>and</u>	Fore Topmast Stay Sails,	Hempen Stream Cable	90	8
<u>Six</u>	Main Sails,	Hawser	90	6	Stream,
<u>and</u>	Main Top Sails,	Towlines	90	5
		Warp	90	4	Kedge,
		All of <u>Good</u> quality.			

Her Standing and Running Rigging is done & kept sufficient in size and Good in quality.

She has 2 life boats ~~one~~ Boat and 2 gigs & a pinnace
 The present state of the Windlass is Good Capstan Good and Rudder Good Pumps one in each compartment

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 } Special
 2nd. On the plating during the progress of rivetting } Survey
 3rd. When the beams were in and fastened, and before the decks were laid } per order No. 391.
 4th. When the ship was complete, and before the plating was finally coated }
 5th. After the ship was launched }

This vessel is a sister ship to the "Aurora" Report No 9097 with which a midship section was sent. There is in this vessel an alteration in the waterways - the same being a gutter one as per sketch.

An error was made in the tie plates on beams of upper deck and as compensation for the same an extra one and a half tie plate each side for a length of 62ft has been introduced 10 1/2 x 7/16 also amidships between main and after hatchways.

She has a Raised Quarter deck 37 1/2 ins high. Beams as main deck stronger plates on Beam Ends 27 x 7/16 Tie plates 10 1/2 x 7/16. Waterways Plate 12 x 4 1/4

Certificates of testing Chain Cables as follows
 Chain 270 of 1 6/16 34 1/2 Lbs
 Stream Chain 90 of 1 1/8 13 1/2

Certificates of both anchors and chains have been produced & examined

An allowance of 20 per cent below weights specified in Table 22 allowed by Sec 9 letter to Builders dated 10th April 1863

Blisters were seen by Mr Martin removed & his other recommendations complied with

In what manner are the surfaces preserved from oxidation? By use of lead and cement inside below hull outside use lead and black's composition

I am of opinion this Vessel should be classed 9021
 The amount of the Fee £ 5 : : : is received by me,
 Special £ 34 : 19 : :
 Certificate (if required) £ : : : :

Will B. Davy

Sept 24/63
 This vessel was seen by me while building and is in accordance with the Report of former Surveyors. I am of opinion she is eligible for classing as recommended in the Committee's order satisfied with the weight of materials.

Committee's Minute 23rd September 1863

Character assigned A 1 for 9 Years

