

IRON SHIPS.

Rev 16/11/65

No. 2470 Survey held at Stockton Date 17 January to 15th November 1865
 on the S.S. Brig "LORD BYRON" Master

Tonnage under tonnage deck 689.30 Built at Stockton When built 1865 Launched 25 July 65

Ditto of poop 58.92 By whom built Richardson Duck & Co Owners Anglo Greek Steam Navigation Co

Ditto of engine room 168.750 Total Register tonnage 589.50 Port belonging to London Destined Voyage Mediterranean

Surveyed while Building, Afloat, or in Dry Dock While Building for 600 Tons scale

Length aloft 200.8 Extreme Breadth 29.6 Depth from top of Upper Deck Beam to top of Floor 17.3 Power of Engines 140 No. of Decks Two

Dimensions of Ship per Register, length 200.5 breadth 29.4 depth 17.45

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	$8\frac{1}{8} \times 2\frac{3}{8}$	$7 \times 2\frac{3}{4}$	Plates in Garboard Strakes, breadth and thickness	$33\frac{1}{2} \times \frac{10}{16}$	$30 \times \frac{10}{16}$
" if plate iron, breadth and thickness			Ditto from Garboard to upper part of Bilges	$9\frac{1}{16}$	$9\frac{1}{16}$
Stem, if bar iron, moulding and thickness	$8\frac{1}{8} \times 2\frac{3}{8}$	$7 \times 2\frac{3}{4}$	" from upper part of Bilge to a perpendicular height from upper side of Keel of $\frac{3}{4}$ ths the entire depth of Hold	$8\frac{1}{16}$	$8\frac{1}{16}$
" if plate iron, breadth and thickness			" from $\frac{3}{4}$ ths depth of Hold to lower edge of Sheerstrake	$7\frac{1}{16}$	$7\frac{1}{16}$
Stern-post, if bar iron, moulding and thickness	$9 \times 4\frac{1}{4}$	$7 \times 5\frac{1}{2}$	" Sheerstrake, breadth and thickness	$33\frac{1}{2} \times \frac{9\frac{1}{16}}{16}$	$30 \times \frac{9\frac{1}{16}}{16}$
" if plate iron, breadth and thickness			Butt Straps to outside plating, breadth and thickness	$9 \times \frac{7}{16}$	$8\frac{1}{2} \times \frac{7}{16}$
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	$29\frac{1}{2} \times \frac{8}{16}$	$28\frac{1}{2} \times \frac{8}{16}$
Double across Keel <u>4 feet</u>			Angle Iron on ditto	$5 \times 3\frac{1}{2} \times \frac{8}{16}$	$4\frac{1}{2} \times 3\frac{1}{2} \times \frac{7}{16}$
Frames, Size of Angle Iron, single or double	$4 \times 3 \times \frac{7}{16}$	$4 \times 3 \times \frac{7}{16}$	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	$11 \times \frac{8}{16}$	$10\frac{3}{4} \times \frac{8}{16}$
" Reversed Iron, if to every frame or every other frame	$3 \times 2\frac{1}{2} \times \frac{6}{16}$	$3 \times 2\frac{1}{4} \times \frac{6}{16}$	Diagonal Tie Plates on ditto (5 pairs)	$11 \times \frac{8}{16}$	$10\frac{3}{4} \times \frac{8}{16}$
Floors, depth and thickness of Floor Plate at mid line	$19 \times \frac{8}{16}$	$19 \times \frac{8}{16}$	Planksheer, materials and scantlings		
" Ditto ditto at Bilge Keelson	$9 \times \frac{8}{16}$	$9 \times \frac{8}{16}$	Waterway ditto ditto	<u>Gutter</u>	
" Size of Reversed Angle Iron, and No. one at top of Floor Plate	$3 \times 2\frac{1}{2} \times \frac{6}{16}$	$3 \times 2\frac{1}{4} \times \frac{6}{16}$	Flat of Upper Deck, thickness and material	$3\frac{1}{2} \times \frac{1}{16}$	$3\frac{1}{2}$
Beams, Deck (No. 57) double Angle Iron, Plate, Tee or Bulb Iron	$7\frac{1}{2} \times \frac{7}{16}$	$7\frac{1}{2} \times \frac{7}{16}$	" how fastened to Beams	$5/8 \text{ B.I.W.}$	
" double single Angle Iron, on top edge	$3 \times 3 \times \frac{5}{16}$	$2\frac{3}{4} \times 2\frac{1}{2} \times \frac{5}{16}$	Ceiling betwixt Decks and in Hold, thickness and material	$2\frac{1}{2} \times 2 \times \frac{1}{16}$	
" average space between	<u>3 feet 6 ins</u>	<u>3 feet 6 ins</u>	Clamps or Spiketting ditto		
Hold, or Lower Deck (No. 34) double Angle, Tee, Plate, or Bulb Iron	$7\frac{1}{2} \times \frac{7}{16}$	$7\frac{1}{2} \times \frac{7}{16}$	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	$2\frac{1}{2} \times \frac{8}{16}$	$2\frac{1}{2} \times \frac{8}{16}$
" double or single Angle Iron on top edge	$3 \times 3 \times \frac{5}{16}$	$2\frac{3}{4} \times 2\frac{1}{2} \times \frac{5}{16}$	Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	$11 \times \frac{8}{16}$	$10\frac{3}{4} \times \frac{8}{16}$
" average space between	<u>3 feet 6 ins and 2nd and 4th</u>	<u>2nd and 4th</u>	Stringers in Hold ... double Ang. Iron	$5 \times 3\frac{1}{2} \times \frac{8}{16}$	$4\frac{1}{2} \times 3\frac{1}{2} \times \frac{8}{16}$
" Paddle, sided and moulded, thickness of Plate size of Angle Iron			Flat of Lower Deck, thickness and material		
" Engine " " " "			Main piece of Rudder, diameter at head	<u>5</u>	<u>5</u>
Keelson, single or double plate, box or iron-plate	$13\frac{1}{4} \times \frac{7}{16}$	$12\frac{1}{2} \times \frac{7}{16}$	" " " at heel	<u>3</u>	<u>3</u>
" Size of Plates			(Can the Rudder be unshipped afloat) <u>Yes</u>		
" Size of Angle Irons	$5 \times 3\frac{1}{2} \times \frac{8}{16}$	$4\frac{3}{4} \times 3\frac{1}{2} \times \frac{8}{16}$	Bulkheads, No. <u>5</u> Thickness of <u>1/16</u>		<u>1/16</u>
" Side, single or double, plate, box or iron-plate			" Height up <u>to main deck</u>		
" Bilge (No. one) at each Bilge, single, or double, plate, or box	$5 \times 3\frac{1}{2} \times \frac{8}{16}$	$4\frac{3}{4} \times 3\frac{1}{2} \times \frac{8}{16}$	" how secured to the sides of the ship <u>Double frames, Sineas, Minors</u>		

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

Knight heads, and Hawse Timbers Blocks 9.0.

The Frames extend in one length from Keel to Gunwale rivetted through plates with ($\frac{3}{4}$ in.) rivets, about (6 ins) apart.

The reverse angle irons on the floors extend in one length across the middle line from Top of Bilge to Top of Bilge

" " " on the frames " " " from Top of Bilge to Gunwale on alternate frames.

Keelson, how are the various lengths of plates or angle irons connected? Butts shifted, strapped & Rivetted with 1 inch Rivets 3/8 apart.

Plates, Garboard, double rivetted to keel, double at upper edge, with rivets ($\frac{3}{4}$ ins.) diameter, averaging (2 3/4 in.) apart.

" Edges from Garboards to upper part of bilge, worked clencher, double rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 3/4 ins.) apart.

" Butts from Keel to turn of bilge, worked carvel with butt straps ($9\frac{1}{16}$) thick, double rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 3/4 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

" Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 1/2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

" Edges of Sheerstrake, double or single rivetted? At upper edge single to Iron Bulbworks At lower edge Double

" Butts from bilge to planksheers, worked carvel with butt straps ($9\frac{1}{16}$) thick, double rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (2 3/4 ins.) apart. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)

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

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

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

Deck Beams, how secured to the side? Beam ends turned, and knees welded.

Hold or Lower Deck ditto Same as Deck.

No. of breasthooks 4 crutches 2

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? For

Manufacturer's name or trade mark "Daphnia's" "Skene's" "Stockton"

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Richardson, Duck & Co Surveyor's Signature James Purdie



Workmanship. Are the lands or laps of the benchwork in all cases in breadth at least five and a half times the diameter of the rivets in rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single-rivetting is admitted? They are
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They are
 Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid single pieces
 Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? They do. and are the rivet holes well and sufficiently countersunk in the outer plate? Sufficiently countersunk
 Are there any rivets which either break into or have been put through the seams or butts of the plating? a few in Butts

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.

4393 fm

Sunderland

Sunderland House. Oct. 23. 1865

She has SAILS.	CABLES, &c.	ANCHORS, and their weights.
Fore Sails,	Chain 270	Bowers, Rodgers... 3
Fore Top Sails,	Hamper Stream Cable 90	Stream, (.stock included) 1
Fore Topmast Stay Sails,	Hawser 90	Kedges, 2
Main Sails,	Towlines 90	
Main Top Sails,	Warp 90	
and	All of <u>good</u> quality.	

Her Standing and Running Rigging Wire Hemp Manila sufficient in size and good in quality.
 She has 2 Sigs Long Boats and 1 Solly - 1 fig and one Dingy
 The present state of the Windlass is an oak Capstan 12 and Rudder good Pumps 3 - 6 in Brass & Wilson's pattern with 3 valves

Order for Special Survey	DATES of Surveys held while building	1st.	2nd.	3rd.	4th.	5th.
No. <u>221</u>		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the progress of rivetting	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	After the ship was launched
Date <u>3rd February 65</u>						
Order for Ordinary Survey	as per Section 18.					
No. _____						
Date _____						

State if she has a Spar-Deck _____ Poop and Forecastle _____

General Remarks,
 she is fitted with Poop and fore-castle frames to top height. Plating 6/16 thick for poop and 5/16 + in fore-castle - 3/4 Rivets. Poop Beams. Iron Bars of angle iron rivelled together - one 5 x 3 x 5/16 other 3 x 2 1/2 x 5/16 stringer plates on beam ends. 2 1/2 x 5/16 with angle iron on top - 4 x 3 x 5/16 - 2 in plates. 9 1/2 x 7/16. Waterway of Red Pine or J.O. 12 x 5 decks of Y.P. 3 in. fastened with 5/8 iron from top.
 she is fitted with Wash Plates 20 1/2 x 5/16 with double angle irons rivelled on top of floor plates. 5 x 3 1/2 x 5/16 - for 70 feet amidships - also - 3 extra angle irons 5 1/2 x 4 1/2 x 9/16 fitted as deck beams in fore hold - these with the extra Bulkhead to compensate for the deficiency in the Reverse Bars - (see Secretary's letters 27 Feb'y - 10th & 22nd March 65 -) Richardson, Duck & Co.

In what manner are the surfaces preserved from oxidation? Inside Bottom cemented - all sheers etc
 Ditto ditto Outside inside & outside with 3 coats of paint.

I am of opinion this Vessel should be Classed B
 The amount of the Fee £ 5 : 0 : 0 is received by me,
Mr. M.C. Special £ 37 : 18 : 0
 Certificate (if required) £ : : :

James Fordie

Committee's Minute 17th November 65
 Character assigned B

