

IRON SHIPS.

No. 2470 Survey held at Stockton Date 17 January to 15 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 Blacking Owners Anglo Irish & Co. Ltd. London
 Ditto of engine room 168.75 Port belonging to London Destined Voyage Mediterranean
 Total Register tonnage 589.50 Gross tonnage 758.00
 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	$33\frac{1}{2} \times \frac{9}{16}$	$30 \times \frac{9}{16}$
" 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	$33\frac{1}{2} \times \frac{9}{16}$	$30 \times \frac{9}{16}$
" 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	$29\frac{1}{2} \times \frac{9}{16}$	$28\frac{1}{2} \times \frac{9}{16}$
Double across Keel <u>4 feet</u>			Angle Iron on ditto	$5 \times 3\frac{1}{2} \times \frac{9}{16}$	$4\frac{1}{2} \times 3\frac{1}{2} \times \frac{9}{16}$
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	$11 \times \frac{9}{16}$	$10\frac{3}{4} \times \frac{9}{16}$
" 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	$11 \times \frac{9}{16}$	$10\frac{3}{4} \times \frac{9}{16}$
Floors, depth and thickness of Floor Plate at mid line	$19 \times \frac{9}{16}$	$19 \times \frac{8}{16}$	Planksheer, materials and scantlings	<u>Gutter</u>	
" Ditto ditto at Bilge Keelson	$9 \times \frac{8}{16}$	$9 \times \frac{8}{16}$	Waterway ditto ditto	$3\frac{1}{2} \times \frac{9}{16}$	$3\frac{1}{2}$
" 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	$5\frac{1}{8}$	$5\frac{1}{8}$
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	$5\frac{1}{8}$	$5\frac{1}{8}$
" double single Angle Iron, on 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	$2\frac{1}{2} \times 2\frac{1}{2}$	
" 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	$2\frac{1}{2} \times \frac{9}{16}$	$2\frac{1}{2} \times \frac{9}{16}$
" double or single Angle Iron on 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	$11 \times \frac{9}{16}$	$10\frac{3}{4} \times \frac{9}{16}$
" average space between	<u>3 feet 6 ins</u>	<u>2nd and 4th</u>	Stringers in Hold	$5 \times 3\frac{1}{2} \times \frac{9}{16}$	$4\frac{1}{2} \times 3\frac{1}{2} \times \frac{9}{16}$
" Riddle, 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 intercostal	$13\frac{1}{4} \times \frac{7}{16}$	$12\frac{1}{2} \times \frac{7}{16}$	" " " at heel	<u>3</u>	<u>3</u>
" Size of Plates	$5 \times 3\frac{1}{2} \times \frac{9}{16}$	$4\frac{3}{4} \times 3\frac{1}{2} \times \frac{9}{16}$	(Can the Rudder be unshipped afloat) <u>Yes</u>		<u>6</u>
" Size of Angle Irons			Bulkheads, No. 5 Thickness of	$\frac{1}{6}$	$\frac{1}{6}$
" Side, single or double, plate, box, or intercostal			" Height up	<u>20 main deck</u>	
" Bilge (No. one) at each Bilge, single, or double, plate, or box	$5 \times 3\frac{1}{2} \times \frac{9}{16}$	$4\frac{3}{4} \times 3\frac{1}{2} \times \frac{9}{16}$	" how secured to the sides of the ship	<u>Double frames. Sineas. Knives.</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, shopped & rivetted with inch rivets 3/8 apart.
 Plates, Garboard, double rivetted to keel, double at upper edge, with rivets ($\frac{3}{4}$ ins.) diameter, averaging ($2\frac{3}{4}$ ins.) apart.

" Edges from Garboards to upper part of bilge, worked clencher, double single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging ($2\frac{3}{4}$ ins.) apart.
 " Butts from Keel to turn of bilge, worked carvel with butt straps ($9\frac{1}{2} \times \frac{10}{16}$) thick, double single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging ($2\frac{3}{4}$ ins.) apart.

" Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging ($2\frac{1}{2}$ in.) apart.
 " Edges of Sheerstrake, double or single rivetted? At upper edge single to iron Bulkheads At lower edge Double

" Butts from bilge to planksheers, worked carvel with butt straps ($9\frac{1}{2} \times \frac{10}{16}$) thick, double single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging ($2\frac{3}{4}$ ins.) apart. Breadth of laps in double rivetting ($4\frac{1}{2}$) Breadth of laps in single rivetting ($2\frac{3}{4}$)

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.? Forde
 Manufacturer's name or trade mark "Hopkins" "Skene" "Stockton"

We certify that the above is a correct description of the several particulars therein given.
 Builder's Signature Richardson, Blacking & 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 piece
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? as 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

one sail complete

She has SAILS.		CABLES, &c.				ANCHORS, and their weights.			
			Fathoms.	Inches.	Tested to Tons.		No.	Weight. Ex. Stock	Tested to Tons.
Fore Sails,	Chain	270	17 1/16	37 1/4	Bowers,	Rodgers...	3	18.1.0	19 1/2
Fore Top Sails,	Hemp Stream Cable	90	13 1/16					18.0.0	19
Fore Topmast Stay Sails,	Hawser	90	9"					15.2.0	16 1/2
Main Sails,	Towlines	90	6 1/2"			Stream, (.stock included)	1	8.0.0	8 1/2
Main Top Sails,	Warp	90	5 1/2"					3.3.0	
	All of <u>good</u> quality.					Kedges,	2	2.0.16	
Her Standing and Running Rigging		<u>Wire Hemp Manila</u> sufficient in size and <u>good</u> in quality.							
She has <u>2 Sails</u>		<u>Long Boat and 1 Lolly - 1 fig and one Dring</u>							
The present state of the Windlass is		<u>in oak</u> Capstan <u>12</u> and Rudder <u>good</u> Pumps <u>3</u> - <u>6 in Brass & Wilson</u> with <u>3</u> branches							

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought seen
No. 221 Surveys held 2nd. On the plating during the progress of rivetting twice each
Date 3rd February 65 while building 3rd. When the beams were in and fastened, and before the decks were laid once
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated while Building
No. Section 18. 5th. After the ship was launched

State if she has a Spar Deck Poop and Forecastle

General Remarks,

she is fitted with Poop and Forecastle frames to top height. Plating 6/16 thick for Poop and 5/16 + in Forecastle - 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. 21 x 5/16 with angle iron on top - 4 x 3 x 5/16 - Tie plates. 9 1/2 x 7/16. Waterway of Red Pine or f.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 iron rivelled in top of floor plates. 5 x 3 1/2 x 5/16 - for 70 feet amidships - also - 3 extra angle iron 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 letter 27 Feb - 10 & 22 March 65 -)

Richardson, Duck & Co.

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

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

Committee's Minute 17 November 65

Character assigned B



Lloyd's Register
Foundation