

IRON SHIPS.

No. 8247 Survey held at London Date 20th June to 2nd November 1864
 on the Bk ~~Named~~ Knowsley Master W. J. J. J.
 Tonnage under tonnage deck 612.47 Built at Pallion When built 1864 Launched 15th October
 Ditto of poop 24.97 By whom built R. Oswald & Co. Owners A. J. J. J.
 Total Register tonnage 647.35 Port belonging to London Destined Voyage for sale
 Surveyed while Building, Afloat, or in Dry Dock While building Vide Note


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
160.0		29.3		19				One
(Dimensions of Ship per Register, length 160.5 breadth 29.3 depth 19)								
Keel, if bar iron, depth and thickness	Inches in Ship		Inches required per Rule		Plates in Garboard Strakes, breadth and thickness			
" if plate iron, breadth and thickness	8 x 2 1/4		7 x 2 3/4		Ditto from Garboard to upper part of Bilges			
Stem, if bar iron, moulding and thickness	8 x 2 1/4		7 x 2 3/4		" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold			
" if plate iron, breadth and thickness	8 x 2 1/4		7 x 2 3/4		" from 3/4ths depth of Hold to lower edge of Sheerstrake			
Stern-post, if bar iron, moulding and thickness	8 x 2 1/4		7 x 2 3/4		" Sheerstrake, breadth and thickness			
" if plate iron, breadth and thickness	8 x 2 1/4		7 x 2 3/4		Butt Straps to outside plating, breadth and thickness			
Distance of Frames from moulding edge to moulding edge, all fore and aft	21 inches		21 inches		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness			
Frames, Size of Angle Iron, single or double	4 x 3		4 x 3		Angle Iron on ditto			
" Reversed Iron, if to every frame	4 x 3		4 x 3		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways			
" every alternate frame	4 x 3		4 x 3		Diagonal Tie Plates on ditto			
Floors, depth and thickness of Floor Plate at mid line	19		20		Planksheer, materials and scantlings			
" Ditto ditto at Bilge Keelson	8 1/4		8		Waterway ditto ditto			
" Size of Reversed Angle Iron, and No. at top of Floor Plate	3 2 1/2		3 2 1/2		Flat of Upper Deck, thickness and material			
Beams, Deck (Nº 44) double Angle Iron, Plate, Tee, or Bulb Iron	4 1/2		7		" how fastened to Beams			
" double or single Angle Iron, on edge	3 2 1/2		6		Ceiling betwixt Decks and in Hold, thickness and material			
" average space between	3 feet 6 inches		3 feet 6 inches		Clamps or Spirketting ditto			
" Hold, Lower Deck (Nº 40) double Angle, Tee, Plate, or Bulb Iron	4 1/2		8		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness			
" double or single Angle Iron, on edge	3 2 1/2		6		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams			
" average space between	3 feet 6 inches		3 feet 6 inches		Stringers in Hold			
" Paddle, sided and moulded, thick-ness of Plate size of Angle Iron	4 1/2		8		Flat of Lower Deck, thickness and material			
" Engine	4 1/2		8		Main piece of Rudder, diameter at head			
Keelson, single or double plate, box, or intercostal	17		8 1/4		" " at heel			
" Size of Plates	16 1/2		8		(Can the Rudder be washed afloat)			
" Size of Angle Irons	8		3		Bulkheads, Nº 2 Thickness of			
" Side, single or double, plate, box, or intercostal	8		3		" Height up Upper Deck			
" Bilge (No. one) at each Bilge, single, or double, plate, or box	5		3 1/2		" how secured to the sides of the ship			
Transoms, material	Iron		or, if none, in what manner compensated for		" size of vertical angle irons and their distance apart			
Knight-heads, and Hawse Timbers	Iron		or, if none, in what manner compensated for		The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (2 3/4) apart.			
The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (2 3/4) apart.	The reverse angle irons on the floors extend in one length across the middle line from Flat to Upper part of Bilges							
" " " on the frames " " " from Flat to Upper part of Bilges	Keelson, how are the various lengths of plates or angle irons connected? Butts straps double rivetted							
Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (1/2 in.) 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 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 in.) apart.	Butts from Keel to turn of bilge, worked carvel with butt straps (11/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 in.) apart.							
" Butts from Keel to turn of bilge, worked carvel with butt straps (11/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 in.) apart.	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 3/4 in.) apart.							
" 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 3/4 in.) apart.	Edges of Sheerstrake, double or single rivetted? At upper edge Single R. to Birdmark &c. At lower edge Double R.							
" Edges of Sheerstrake, double or single rivetted? At upper edge Single R. to Birdmark &c. At lower edge Double R.	Butts from bilge to planksheers, worked carvel with butt straps (11/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 in.) apart. Breadth of laps in double rivetting (4 1/2 in.) Breadth of laps in single rivetting (none)							
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	Planksheer, how secured to the plating of the sides							
Planksheer, how secured to the plating of the sides	Waterway " " planksheer and to the Beams							
Waterway " " planksheer and to the Beams	Deck Beams, how secured to the side?							
Deck Beams, how secured to the side?	Hold or Lower Deck ditto							
Hold or Lower Deck ditto	Paddle " "							
Paddle " "	No. of breasthooks							
No. of breasthooks	What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?							
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?	Manufacturer's name or trade mark							
Manufacturer's name or trade mark	We certify that the above is a correct description of the several particulars therein given.							
We certify that the above is a correct description of the several particulars therein given.	Builder's Signature							
Builder's Signature	Surveyor's Signature							

Butts and edges of Plating & Stringers. Chain-plates

Are there any rivets which either break into or have been put through the seams or butts of the plating? *Very few these in the butts*

the number of Plates and Angle Irons, mode of rivetting, quality of Materials, and if stamped with Maker's name.

Fore and Main Masts and bowsprit from 24 inches in diameter to the
 Partners, each framed of two plates in the circumference 3/4 inch thick, edges angle
 riveted and butts double riveted. Strengthened with three angle irons 3 x 3 x 6/16 -
 Makers Name. Blechaw Vaughan



General Remarks.

This is a sister ship to the "Spirit of the Morning," "Corrientes" & "Carrizal"
No: 8200, 8013 and 8032 excepting that this ship has a raised poop of
35 tons.

The butts of the keelstrake and deck stringer are triple riveted and the hold beam stringer is let out and riveted to the outside plating. The ledge keelsons and stringers in hold are formed of double angle irons $5 \times 3\frac{1}{2} \times 76$ with a bulk plate between $7\frac{1}{2} \times 7\frac{1}{16}$ the broad flange of the angle irons being wrought to the single reversed angle irons and double riveted thru's. The diagonal tieplates are compensated for, as sanctioned in the Secretary's letter of the 15th March, '64. The floors, like those in the sister ships are one inch deficient in depth. But the box keelson is considerably in excess of the rules and as in the former cases may meet with the consideration of the Committee.

Committee's Minute 8th November 18 64

Character assigned