

# IRON SHIPS.

No. 6421 Survey held at Shields Date March 1<sup>st</sup> 18 56.  
 on the Barque (Screw) Baotia Master (Rest)  
 Tonnage Gross 950, 53 Engine Room 304, 17 Register 646, 36 Built at Shields.  
 When Built 1856 By whom built J. D. Marshall Owners John Dudgeon.  
 Port belonging to London Destined Voyage Black Sea (via) Liverpool.  
 If Surveyed Afloat or in Dry Dock On the Slip. Launched 8<sup>th</sup> Dec 18 55.

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
.....	220	1	.....	29	45	.....	22	7	.....	140
Distance between Floors amidships	18	in				from Mid <sup>le</sup> Deck Bm to top of floor	15	ft 6		
" " " forward and aft	18	"				Stem, if bar iron, moulding and thickness	8	by 2 1/2		
" " Ribs amidships	18	"				" if plate iron, breadth and thickness				
" " " forward and aft	18	"				Stern-post, if bar iron, moulding and thickness	9	by 5		Propeller frame proportionally larger in wake of Rudder Spindle.
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	4 1/2	by 3	8 1/2	in		" if plate iron, breadth and thickness				
" depth & thickness of Plate at mid line	18	in	by 1 1/2			Keel, if bar iron, depth and thickness	8	by 2 1/2		
" " " at turn of bilge	4 1/2	"	1 1/2			" if plate iron, breadth and thickness				which is scarp'd 8 is 9 by 1 1/2
" Size of Reversed Angle Iron, and No. at top of Floor Plate	4	by 3	3	by 3		Garboard Plates, thickness	3/4	1/16		
Ribs, Size of Angle Iron, single or double	4 1/2	by 3	8 1/2			" to bilge	5/8	5/8		
" Reversed Iron, to every frame	4 1/2	by 3	8 1/2			Bilge	5/8	5/8		
" " every other frame	4 1/2	by 3	8 1/2			" to Wales	1/2	1/2		5/8 aft end 6 1/2
Beams, Deck (N <sup>o</sup> . 60) double or single	8	in	deep by 1/2	in		Wales	1/2	1/2		9/16 16 1/2
" Angle Iron	2 1/2	by 2 1/2	Angle Iron			Topsides	3/16	7/16		9/16
" depth & thickness of plate amidships			above Bulk Plate			Sheerstrakes	3/8	1/2		1 1/16
" double or single Angle Iron, on lower edge						Planksheers	East India Seal	6	in	by 11
" average space between	3	feet				Gunwale Plate or Stringer	Iron	2 1/4	by 7/16	fit home to 7 1/2
" if wood (N <sup>o</sup> . ) sided & moulded						Waterway	East India Seal	6	in	7 1/2
" Hold, (N <sup>o</sup> . 24) double or single	10	in	deep 4 1/2	by 3		Deck	Spar and middle	3	in	as per Rule
" Angle Iron on both edges	4 1/2	by 3	Angle Iron on both edges			Ceiling in flat	Rock Elm	3	by 2 1/2	
" depth & thickness of plate amidships						Bilge Planks inside	"	2 1/2	to 3	in
" double or single Angle Iron, on lower edge						Ceiling from Bilge to Clamps				
" average space between	6	to 9	feet apart			Hold Beam Clamps	4	by 3	Angle Iron	Stringers rivetted above and below the Beams to which they are also bracketted rivetted to the reversed Iron on the Ribs and running fore and aft
" if wood (N <sup>o</sup> . ) sided & moulded						" Shelf				
" Paddle, wood, sided and moulded or if Iron, size of Plate	5/8	1/2	in			" Stringers				
" Engine						Ceiling between Decks				
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	5	by 3				Stringers				
" Side or Bilge	6	in	by 3			Deck Beam Clamps				
" Number	two					" Shelf				
Transoms, material	Iron Plate					Stringers in Hold				
Knight-heads	East India Seal					Deck, Lower				
Hawse Timbers	Ribs & Plating									
The Ribs extend in one length from	Keel to Gunwale of Spar Deck									
The reverse angle irons on the floors extend in one length across the middle line from	Side to Side									
" " " on the ribs	up to deck Stringer every other and remainder up to Light Marked									
Keelson, if wood, length of scarp										
Plates, Garboard, double or single rivetted to keel, with rivets (1/8 in.) diameter averaging (3 in.) from centre to centre of rivet.										
" edges from Garboards to turn of bilge, worked carvel with a lining piece (in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets.										
" butts from Garboards to turn of bilge, worked carvel with a lining piece (5/8) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No										
" edges from bilge to wales, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets.										
" butts from bilge to wales, worked carvel with a lining piece (1/2) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No										
" edges of wales and to planksheers, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter averaging (2 1/2 in.) from centre to centre of rivets.										
Planksheer, how secured to the plating of the sides										
Waterway	planksheer and to the Beams									
Side trussing	in wake of Rib 2 at foremast & main mast two plates 8 1/2 by 3/8 how secured									
Deck trussing	10 in by 3/8 Running fore and aft rivetted to the Beams.									
Deck Beams, how secured to the side	By double Brackets									
Hold	By Brackets and Angle Iron Layed horizontally									
Paddle	and Rivetted on to the Beams and Reversed Irons									
No. of breasthooks	three crutches compensated									
What description of iron is used for the angle iron and bar iron in the vessel?	Best Ship Iron from Staffordshire &c									



987 Iron 432

**Workmanship.** Are the lands or laps of the clenchwork in all cases sufficiently wide to take the rivets and support the strain on them? *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? *Good*  
Do the fillings between the ribs and plates fill in all solid with sliver pieces, or are they in short lengths? *Solid pieces.*  
Do the holes for rivetting plate to lining piece, or plate to plate, &c., answer well to each other? *well* and are the rivet holes well and sufficiently countersunk in the outer plate? *well*  
Are there any rivets which either break into or have been put through the seams or butts of the plating? *None seen*  
Was the plating caulked internally in the wake of the frames or ribs? *not usual.*

*She has Six Bulkheads up to the height of Middle Deck secured to double Angle Iron at the sides of Vessel. The Plates are 3/8 and 1/2 thick Lower Plate 1/2 in. and Stiffened by Convex iron bars 1 1/2 thick by 3 in. broad, and 2 feet apart.*

Her Masts, Yards, &c., are in *good* condition, and sufficient in size and length. ✓

She has SAILS.			CABLES, &c.		ANCHORS, and their weights.		
N <sup>o</sup> .		Fathoms.		Inches.	N <sup>o</sup> .		
<i>Single Suit of Sails</i>	Fore Sails,	270	Chain .....	1 1/2	3	Bower,	26" 1" 0 } Rogers
	Fore Top Sails,	75	Hawser Chain .....	1	1	Stream,	26" 1" 0 } Pat <sup>n</sup>
	Fore Topmast Stay Sails,	80	<del>Hempen Stream Cable</del> .....	1	1	Kedge,	25" 0" 0
	Main Sails,	80	Hawser .....	7	1		5" 2" 0
	Main Top Sails,	80	Towlines .....	6			2" 0" 6
and <i>well found</i>			Warp .....	5 1/4			
<i>Galvanized Wire</i>			All of <i>best</i> quality.				
Her Standing and Running Rigging is _____ sufficient in size and <i>good</i> in quality.							

She has *a Safety* Long Boat and *two Gigs & jolly Boats*

The present state of the Windlass is *efficiently* Capstan *Potent* and Rudder *5 in. diam* Pumps *efficiently*  
*double Winches* *Brown & Harfield's* *efficient* but cannot unship it without removing the Shaft

#### GENERAL REMARKS.

Statement and date of repairs; extent of corrosion (if any) both internally and externally; and condition of rivets.

*The Specification of this Vessel was submitted for approval and the Committees suggestions with reference to the Angle Iron for Keelson, also with regard to the size of Chains & Weights of Anchors (as per Letter of 31<sup>st</sup> August last) have been carried out? as vide references. -*

*Is fitted with "Beattie's Propeller" outside the Propeller frame, the ends of Plating for its support are all treble rivetted, and there is a thwartship or Transom Plate to every Rib above. - Has two flush laced decks with three tiers of Beams. -*

*Specialty Survey'd Per Order No. 159 for G. St. 1.*

In what manner are the surfaces preserved from oxidation? *By Red lead and other Paint*  
*As the last Iron Ship Reported (No. 6396) By reason of the deterioration from the Rules I do not feel justified in classing any class.*  
I am of opinion this Vessel should be classed \_\_\_\_\_

The amount of the Fee .....£ 5 : - : is received by me, *Samuel Penny.*

Special .....£ 47 : 10 :

Certificate (required) .....£ - : - :

Committee's Minute *20<sup>th</sup> March 1856*

Character assigned *A 1 for 14 Years*

*Genl Committee Minute 17<sup>th</sup> April 1856*

*Classing confirmed*

*Built of Iron*  
*LD*

*See list to record of this Vessel for the favorable consideration of the Committee for the 6<sup>th</sup> of May 1856*