

# IRON SHIPS.

Rec 29/4/65

No. 3224 Survey held at Leith Date 25<sup>th</sup> April 1865  
 on the Steam Vessel Staffa Master Cuddes  
 Tonnage under tonnage deck 699.33 Built at Leith When built 1864.5 Launched 30<sup>th</sup> January 65  
 Ditto of poop or spar deck 46.45 By whom built Messrs. J. & M. Morton & Co. Owners London & Edinburgh Ship Co.  
 Ditto of engine room 750.45  
 Total Register tonnage 595.33 Port belonging to Leith Destined Voyage Baltic  
 If Surveyed while Building, Afloat, or in Dry Dock While Building

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.	N <sup>o</sup> . of Decks
228	0		28	0		16	2		120		Two
Dimensions of Ship per Register, length <u>230.3</u> breadth <u>28.2</u> depth <u>16.0</u>											
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule.								
" if plate iron, breadth and thickness	7 x 2 3/4		7 x 2 3/4								
Stem, if bar iron, moulding and thickness	7 1/4 x 2 3/4		7 x 2 3/4								
" if plate iron, breadth and thickness	7 x 5 1/2		7 x 5 1/2								
Stern-post, if bar iron, moulding and thickness	7 x 5 1/2		7 x 5 1/2								
" if plate iron, breadth and thickness											
Distance of Frames from moulding edge to moulding edge, all fore and aft	20		21								
Frames, Size of Angle Iron, single or double	4 3 4		4 3 4								
" " Reversed Iron, if to every frame or every alternate frame	3 2 3/4 6		3 2 3/4 6								
Floors, depth and thickness of Floor Plate at mid line	19		9 1 1/2								
" Ditto ditto at Bilge Keelson	14		9 4								
" Size of Reversed Angle Iron, and No. one at top of Floor Plate	3 2 3/4 6		3 2 3/4 6								
Beams, Deck (N <sup>o</sup> . 56) double Angle Iron, Plate, Tee, or Bulb Iron	4		4								
" " double or single Angle Iron, on upper edge	3 2 1/2 6		3 2 1/2 5								
" " average space between	40 ins		49 ins								
" Hold, or Lower Deck (N <sup>o</sup> . 35) double Angle, Tee, Plate, or Bulb Iron	4		4								
" " double or single Angle Iron, on upper edge	3 2 1/2 6		3 2 1/2 5								
" " average space between	60 ins		60 ins								
" Paddle, sided and moulded, thickness of Plate size of Angle Iron											
" Engine " " " " "											
Keelson, single or double plate, box, or intercostal	12		11								
" Size of Plates top of foundation	12		11								
" Size of Angle Irons 14 in. N <sup>o</sup> .	4 1/2 3 1/2 7		4 1/2 3 1/2 7								
" Side, single or double, plate, box, or intercostal											
" Bilge (No. 3) at each Bilge, single, or double, plate, or box with Double Angle Irons	4 1/2 3 1/2 7		4 1/2 3 1/2 7								
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.											
Knight-heads, and Hawse Timbers <u>Iron</u>											
The Frames extend in one length from <u>Keel</u> to <u>Gunnwale</u> rivetted through plates with (3/4 in.) rivets, about (6 in.) apart.											
The reverse angle irons on the floors extend in one length across the middle line from <u>top of keel</u> to <u>top of gunwale</u> rivetted through plates with (3/4 in.) rivets, about (6 in.) apart.											
" " " on the frames " " " from <u>Gunnwale</u> to <u>Gunnwale</u> alternately											
Keelson, how are the various lengths of plates or angle irons connected? <u>Both straps double rivetted</u>											
Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (3/4 ins.) diameter, averaging (3 ins.) apart.											
" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart.											
" Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart.											
Do the butt straps lap over and rivet through the lands of the strake below? <u>Yes</u>											
" 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 1/2 in.) apart.											
Do the butt straps lap over and rivet through the lands of the strake below? <u>Yes</u>											
" Edges of Sheerstrake, double or single rivetted? At upper edge <u>3/4 rivets - 3 ins apart</u> At lower edge <u>3/4 rivets - 3 ins apart</u>											
" Butts from bilge to planksheers, worked carvel with butt straps (as plates) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (3 ins)											
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? <u>3/4 rivets</u>											
Planksheer, how secured to the plating of the sides Explain by sketch <u>See Section</u>											
Waterway " " planksheer and to the Beams if necessary.											
Deck Beams, how secured to the side? <u>Welded into plates rivetted to Frames</u>											
Hold or Lower Deck ditto <u>Do</u>											
Paddle " " No. of breasthooks <u>Four</u> crutches											
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? <u>Glasgow Rail</u>											
Manufacturer's name or trade mark <u>Glasgow Iron Co.</u>											
We certify that the above is a correct description of the several particulars therein given.											
Builder's Signature <u>Messrs. J. &amp; M. Morton &amp; Co.</u> Surveyor's Signature <u>Edmund Couchman</u>											

IRON438-0235



4082 Lm  
Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter 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? Yes  
Do the holes for rivetting plate to frames, butt straps, 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? No

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. off wood. (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.

She has SAILS. CABLES, &c. ANCHORS, and their weights.

No.		Chain	Fathoms.	Inches.	Tested to Tons.	No.	Weight.	Tested to Tons.
/	Fore Sails,	Chain	240	1 7/16	34.5.0	/	18.3.18	19.14.0
/	Fore Top Sails,	Hempen Stream Cable	90	8		/	18.2.24	19.13.0
/	Fore Topmast Stay Sails,	Hawser	90	1 1/2		/	15.1.14	16.14.2
/	Main Sails,	Towlines	90	10				
/	Main Top Sails,	Warp	180	5				
	and others as usual for a single sail	All of	good	quality.				
	Her Standing and Running Rigging	Wire & Hempen	sufficient in size and	good	in quality.			
	She has	One	Long Boat and	Four others				
	The present state of the Windlass is	efficient	Capstan	D. W.	and Rudder	and	Pumps	efficient

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Specially  
No. 119 Surveys held 2nd. On the plating during the progress of rivetting Surveyed from  
Date 28<sup>th</sup> March 1864 while building 3rd. When the beams were in and fastened, and before the decks were laid  
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated 22<sup>nd</sup> February 1864  
No. 1 Date 1 Section 18. 5th. After the ship was launched to 25<sup>th</sup> April 1865

State if she has a Spar Deck None Poop Full and Forecastle

General Remarks,

The length of this vessel measures 14.13 Breadths, and 8.16 Depths, the Section and particulars of the Builders proposed extra longitudinal strength was submitted, and sanctioned by the Committee in their letter dated 28<sup>th</sup> April 1864. - A Water tight Tank is fitted in midships 13 feet 4 ins long cutting off the Main Frames and secured by Angle Iron and plates as per letter and Section submitted, and approved by the Committee's letter dated 25<sup>th</sup> June 1864. - This vessel is chain rivetted in all Butts, and double rivetted throughout excepting the three edges marked 1. 2. 3 in the Section, the Nelson plate and Angle Irons are slightly under the requirements of the Rules, but compensated for by a Spirketting plate 18 x 3/16 on the Hold Beams and sanctioned by the Committee's letter dated 27<sup>th</sup> August 1864. - Severally badly fitted and butted Floor plates have been fitted with double Butt straps and all the recommendations made in conjunction with Mr. Martin have been carried out to my satisfaction.

In what manner are the surfaces preserved from oxidation? Inside Permented with Portland Cement and Three Coats of Red Lead  
Ditto ditto Outside Three Coats of Red Lead, and One of Black Varnish on the Bottom

I am of opinion this Vessel should be Classed A. 1.  
The amount of the Fee .....£ 5: 0: 0 is received by me,  
Special .....£ 37: 6: 0  
Certificate (if required) .....£ 42: 6: 0

Committee's Minute 1<sup>st</sup> May 1865

Character assigned A 1

David Bouchman  
This Iron Screw Steamer appears to be No. 1 in my Report to Committee, dated Aug<sup>st</sup> last, of Ships seen building in Lloyd's Register to which I beg reference.  
I am of opinion she is eligible for Class as recommended above