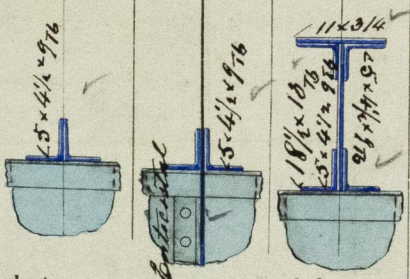


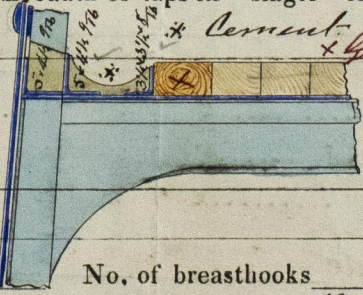
# IRON SHIPS.

No. 1919 Survey held at Belfast Date 5<sup>th</sup> October 1868  
 on the new ship "Star of Greece" Master W. J. Shaw  
 Tonnage under tonnage deck 1192.81 Built at Belfast When built 1868 Launched September 19<sup>th</sup>  
 Ditto of poop garboard deck 37.49 By whom built Harland & Wolff Owners James & Henry Ho  
 Ditto of engine room top of fore hatch 42.55  
 Total Register tonnage 1224.21 Port belonging to Belfast Destined Voyage Calcutta via Liverpool  
 Gross Tonnage 1288.43  
 If Surveyed while Building, Afloat, or in Dry Dock Specially surveyed 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
<u>224</u>			<u>35</u>			<u>22</u>		<u>6</u>			<u>two</u>
Dimensions of Ship per Register, length <u>224</u> breadth <u>35</u> depth <u>22</u>											
Keel, <u>N</u> bar iron, depth and thickness			<u>8 1/2 x 3</u>			<u>9 x 3</u>			Plates in Garboard Strakes, breadth and thickness		
" if plate iron, breadth and thickness			<u>8 1/2 x 3</u>			<u>8 1/2 x 3</u>			Ditto from Garboard to upper part of Bilges		
Stem, <u>N</u> bar iron, moulding and thickness			<u>8 1/2 x 3</u>			<u>8 1/2 x 3</u>			" from upper part of Bilge to a perpendicular height from upper side of Keel of <u>3</u> ths the entire depth of Hold		
" if plate iron, breadth and thickness			<u>8 1/2 x 3</u>			<u>8 1/2 x 3</u>			" from <u>3</u> ths depth of Hold to lower edge of Sheerstrake		
Stern-post, <u>N</u> bar iron, moulding and thickness			<u>8 1/2 x 3</u>			<u>8 1/2 x 3</u>			" Sheerstrake, breadth and thickness		
" if plate iron, breadth and thickness			<u>8 1/2 x 3</u>			<u>8 1/2 x 3</u>			Butt Straps to outside plating, breadth and thickness		
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		
Frames, Size of Angle Iron, single or double			<u>5</u>			<u>3</u>			Angle Iron on ditto		
" Reversed Iron, <u>N</u> to every frame or every frame			<u>3 1/2</u>			<u>3</u>			Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		
Floors, depth and thickness of Floor Plate at mid line			<u>24 1/2</u>			<u>10 1/2</u>			Diagonal Tie Plates on ditto		
" Ditto ditto at Bilge Keelson			<u>4 1/2</u>			<u>10 1/2</u>			Planksheer, materials and scantlings		
" Size of Reversed Angle Iron, and No. <u>2</u> at top of Floor Plate			<u>3 1/2</u>			<u>3</u>			Waterway ditto ditto		
Beams, Deck (N <sup>o</sup> . ) double Angle Iron, Plate, Tee, or Bulb Iron			<u>9 x 8</u>			<u>5 1/4</u>			Flat of Upper Deck, thickness and material		
" double or single Angle Iron, on edge			<u>4 1/2</u>			<u>10 1/2</u>			How fastened to Beams		
" average space between			<u>4 1/2</u>			<u>10 1/2</u>			Ceiling betwixt Decks and in Hold, thickness and material		
Hold, or Lower Deck (N <sup>o</sup> . ) double Angle, Tee, Plate, or Bulb Iron			<u>9 x 8</u>			<u>5 1/4</u>			Clamps or Spirketting " ditto		
" double or single Angle Iron, on edge			<u>4 1/2</u>			<u>10 1/2</u>			Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		
" average space between			<u>4 1/2</u>			<u>10 1/2</u>			Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		
Paddle, sided and moulded, thickness of Plate size of Angle Iron			<u>4 1/2</u>			<u>10 1/2</u>			Stringers in Hold		
Engine " " " "			<u>4 1/2</u>			<u>10 1/2</u>			Flat of Lower Deck, thickness and material		
Keelson, single or double plate, box, or intercostal			<u>4 1/2</u>			<u>10 1/2</u>			Main piece of Rudder, diameter at head		
" Size of Plates			<u>4 1/2</u>			<u>10 1/2</u>			" " " at heel		
" Size of Angle Irons			<u>4 1/2</u>			<u>10 1/2</u>			(Can the Rudder be unshipped afloat)		
" Side, single or d'ble, plate, box, or intercostal			<u>4 1/2</u>			<u>10 1/2</u>			Bulkheads, N <sup>o</sup> . <u>3</u> Thickness of		
" Bilge (N <sup>o</sup> . <u>2</u> ) at each Bilge, single, or double, plate, or box			<u>4 1/2</u>			<u>10 1/2</u>			" Height up <u>to upper deck</u>		



Transoms, material Iron or, if none, in what manner compensated for.  
 Knight-heads, and Hawse Timbers Iron  
 The Frames extend in one length from Keel to Gunwale rivetted through plates with (1/8 in.) rivets, about (4 in.) apart  
 The reverse angle irons on the floors extend in one length across the middle line from 2 to 5 feet on to each side alternately to hold beams together  
 " " " on the frames " " " from 5 to 8  
 Keelson, how are the various lengths of plates or angle irons connected? With butt straps  
 Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (1 1/8 x 1/8 ins.) diameter, averaging (3 1/2 in.) apart.  
 " Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (1/8 in.) diameter, averaging (3 ins.) apart.  
 " Butts from Keel to turn of bilge, worked carvel with butt straps (13 x 12) thick, double or single rivetted; with rivets (1/8 in.) diameter, averaging (3 ins.) apart.  
 " Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; with rivets (1/8 in.) diameter, averaging (3 in.) apart.  
 " Edges of Sheerstrake, double or single rivetted? At upper edge Single At lower edge Double  
 " Butts from bilge to planksheers, worked carvel with butt straps (11 x 10 x 12) thick, double or single rivetted; with rivets (1/8 in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting (5 in) Breadth of laps in single rivetting (3 in)  
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?  
 Planksheer, how secured to the plating of the sides { Explain by sketch }  
 Waterway " " planksheer and to the Beams { if necessary. }  
 Deck Beams, how secured to the side? Keel plates welded & rivetted to frames  
 Hold or Lower Deck ditto The same as above  
 Paddle " " The same as above  
 No. of breasthooks 5 crutches 5



What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Plates from Northumberland Iron Works  
 Manufacturer's name or trade mark Angle Iron from Hopkins & Co.  
 We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature Harland & Wolff Surveyor's Signature W. J. Shaw



6596 Iron

**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? Filled in solid  
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? a few

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. West Cumberland Hematite Iron)

Plating Fore & Main Mast, Bowsprit, Fore & Main Lower Yard, and Lower Topsail Yards are of Iron  
Plating Plating Three angle Irons  $3\frac{1}{2} \times 3\frac{1}{4}$  in each mast and Bowsprit, the entire length, three angle Irons  $3 \times 2\frac{1}{2} \times 5\frac{1}{16}$  averaging 45 feet long in each lower Yard, and three angle Irons same as above 39 feet long in Topsail Yards. Butts fastened with two, three, and four tier of Chain rivetting

Plating She has SAILS. CABLES, &c., tested at Chester and Jack Superintendent ANCHORS, tested at Chester and Jack  
Plating 2 Upper & 2 Lower 2 N<sup>o</sup>.  
2 Fore Sails, Chain ..... 57 874 Aug 27 300 11 $\frac{1}{2}$  62.2.0.0  
2 Fore Top Sails, Hempen 168 90 1 18.0.0.0  
2 Fore Topmast Stream Cable 90 13  
2 Stay Sails, Hawser ..... 90 10  
1 Main Sails, Towlines ..... 90 7 $\frac{1}{2}$   
2 Main Top Sails, Warp ..... 90 5  
Kedges ..... 1 8 $\frac{1}{2}$   
1 155  
Bowers Iron 1 124 1385 Aug 27 32.1.21 30.10.0.0  
Rogers 1 10 1386 " 32.1.13 30.10.0.0  
Porters 1 1387 " 27.2.14 26.18.0.0  
Stream ..... 1 48 " 13.1.6 13.0.0.0  
Kedges ..... 1 8 $\frac{1}{2}$  " 6.3.3 7.15.0.0  
1 155 " 3.1.5 5.5.0.0

and well found in other Sails All of Good quality.

Her Standing and Running Rigging Ground to be sufficient in size and Good in quality.

She has a 24 feet Long Boat and Three other boats Good

The present state of the Windlass is Good Capstans 2 Good and Rudder Good Pumps 4 Cast Metal Good

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought April 1868  
No. 34 Surveys held 2nd. On the plating during the progress of rivetting June  
Date 16 March while building 3rd. When the beams were in and fastened, and before the decks were laid May  
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated August  
No. \_\_\_\_\_ 5th. After the ship was launched September  
Date \_\_\_\_\_ Section 18.

State if she has a Spar Deck Raised Quarter deck Peep and or Forecastle

#### General Remarks,

This is a sister ship to the "Star of Persia" having been built off the same lines and like the afore said ship. the tonnage as cut on the main beam has slightly exceeded what was intended. In consequence the scantlings of main piece of Rudder, Stringers, Keel, and Keelsons are slightly under the Rule. The middle line keelson plates is however 18 $\frac{1}{2}$  inches deep amidships, and 11 inches at ends with a plate on top for 50 feet amidships  $3\frac{1}{4}$  inch thick and 11 inches wide. the butt straps of the keelsons are also long and fastened with three to four tier of Chain rivetting amidships. so that the total strength of the keelsons is much in excess of what is required, and similar to what was considered by the Committee sufficient in the case of the "Star of Persia" as per letter dated 21<sup>st</sup> July last.

The quality of the Iron of which this vessel is constructed is remarkably good, and the workmanship throughout first rate

In what manner are the surfaces preserved from oxidation? Inside

Ditto

ditto

Outside

The bottom up to hold stinger is Cemented all round and right fore and aft with Portland Cement. From stinger up painted with two coats oxide of Iron one coat of white lead. Two coats of oxide of Iron. Bottom coated to 15 feet with Lewis Antifouling Grease, from 15 feet to 20 feet with a mixture of red & white lead. And topsides black

I am of opinion this Vessel should be Classed A1

The amount of the Fee ..... £ 5 : 0 : 0 is received by me,

Special ..... £ 61 : 4 : 0

Certificate (if required) ..... £ : : :

Committee's Minute 3<sup>rd</sup> October 1868

Character assigned A1

A & C. P. W. W. S.

It will be observed that Mr Linton has omitted the thickness of the plating of masts & yards if they are according to rule in my opinion the vessel will be classed for Register Class A1 as recommended above  
13 Oct 1868