

**IRON SHIPS.**

No. 14022 Survey held at Birkenhead Date Oct 10 1858 to June 25 1859  
on the Ship Edith Byrne Master Flannery  
Tonnage Gross Engine Room Register 729  $\frac{44}{100}$  Built at Birkenhead  
When Built 1857 By whom built Peto Brassey & Co. Owners A. E. Byrne & Co.  
Port belonging to Liverpool Destined Voyage Calcutta  
If Surveyed Afloat or in Dry Dock While Building, under Special Survey

**Horse No.**

**Feet. Inches.**

**Length aloft** ..... 165 1

**Extreme Breadth**..... 30 2

**Depth from top of Upper Deck** } **Feet. Inches.**

**Beam to top of Floor**..... } 20 3

**Power of Engines**.....

**Inches. In Ship. 16ths required per Rule.**

**Description of Iron.**

**Material.**

**Sketches:**

**Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft** } **Inches in Ship.**

**Floors, Size of Angle Iron, and No. at bottom of Floor Plate**..... 4 1/2 3 9/16 4 1/4 3 8/16

**" depth and thickness of Floor Plate at mid line**..... 2 1 - 1/2 20 - 8/16

**" depth and thickness of Floor Plate at Bilge Keelson**..... 4 1/2 - 1/2 - - -

**" Size of Reversed Angle Iron, and No. at top of Floor Plate**..... 3 3 3/8 3 2 3/4 3/8

**Frames, Size of Angle Iron, single or double**.....

**" " Reversed Iron, if to every frame or every frame**..... 3 3 3/8 3 2 3/4 3/8

**Beams, Deck (N° 57) Double Angle Iron**.....

**" Bulb Iron with double Angle Iron on top**..... 2 1/2 2 1/2 3/8 2 1/2 2 1/2 3/8

**" depth & thickness of plate amidships**.....

**" double or single Angle Iron on lower edge**.....

**" average space between**..... 3 feet

**" if wood (N° ) sided & moulded**.....

**" Hold, or Lower Deck (N° 49)**.....

**" double Angle Iron on Bulb Iron with double Angle Iron on top**..... 2 1/2 2 1/2 3/16

**" depth & thickness of plate amidships**..... 9 1/2

**" double or single Angle Iron on lower edge**..... 2 1/2 2 1/2 7/16

**" average space between**..... 3 feet

**" if wood (N° ) sided & moulded**.....

**" Paddle, wood, sided and moulded or if Iron, size of Plate**.....

**Engine**.....

**Keelson, wood, sided & moulded iron, size of plate, if Box, give sketch & dimensions**..... 2 1/2 1/2

**" Side or Bilge**.....

**" Number**.....

**Transoms, material**..... or, if none, in what manner compensated for.

**Knight-heads**..... are they free from defects?

**Hawse Timbers**.....

**Bulkheads, N° one at each end Thickness of 3/4 plates, angle iron 3X 2 1/2 - 3/8**

**The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (3/16 in.) rivets, about ( 7 ) apart.**

**The reverse angle irons on the floors extend in one length across the middle line from Middle line to Hold beams on alternate frames**

**" " " on the frames " " " from near the Keelson to Gunwale on alternate frames - The Butts connected with butt piece**

**Keelson, how are the various lengths of plates or angle irons connected? Single Iron & Butt piece**

**Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (3/4 ins.) diameter averaging ( 2 in.) from centre to centre of rivet.**

**" Edges from Garboards to upper part of bilge, worked carvel with a lining piece ( in.) thick, or clencher, double or single rivetted ; rivets (3/4 in.) diameter, averaging ( 2 ins.) from centre to centre of rivets.**

**" Butts from Keel to turn of bilge, worked carvel with a lining piece (7x5/8) thick, double or single rivetted ; rivets (3/4 in.) diameter, averaging ( 2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes & above also.**

**" Edges from bilge to planksheer, worked carvel with a lining piece ( ) thick, double or single rivetted ; rivets (3/4 in.) diameter, averaging ( 2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes & above also**

**" Butts from bilge to planksheers, worked carvel with a lining piece (7x9/16) thick, or clencher, double or single rivetted ; rivets (3/4 in.) diameter averaging ( 2 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (3 1/2 ) Breadth of laps in single rivetting (all angles)**

**Planksheer, how secured to the plating of the sides** { Explain by sketch, }

**Waterway " " planksheer and to the Beams** { if necessary. }

**Side trussing non breadth and thickness of plates how secured? 2 Plates 10x1/2 (on each side of Plate) all four fastened to Beam &**

**Deck trussing 10 " " " "**

**Deck Beams, how secured to the side? Rivetted to the Gunwale Plate & Frames**

**Hold or Lower Deck " Rivetted to Gunwale or Stringer Plate & Beams**

**Paddle " "**

**No. of breasthooks 6 rib feet crutches 3 rib feet how are pointers compensated? Stringer Plate Clamps & Straps any Iron**

**What description of iron is used for the angle iron and plate iron in the vessel?**

**Builder's Signature**

Isos from Kimmersley to  
Stoke -  
shells  
~~Howe~~ strikes brill plate

IRON 433 - 0023



**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Very near

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? Solid piece

Do the holes for rivetting plate to frames, lining pieces, 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, Yards, &c., are in Good condition, and sufficient in size and length.  
She has SAILS.

N <sup>o</sup> .		CABLES, &c.	Fathoms.		Inches.
2	Fore Sails,	Chain .....	300		1 5/8
2	Fore Top Sails,	Hempen Stream Cable .....	90		10
2	Fore Topmast Stay Sails,	Hawser <u>Chain 1 5/8" 1/2"</u> .....	90		8
2	Main Sails,	Towlines .....	90		5
2	Main Top Sails,	Warp .....			
	and <u>other well found</u>	All of <u>Good</u> quality.			

ANCHORS, and their weights.			N <sup>o</sup> .	Weight.
Bower,	<u>all Patent</u>		3	27-2-10 26-0-14 26-0-7
Stream,	<u>all "</u>		1	9-2-14
Kedge,	<u>all "</u>		1	4-2-1
<u>Recommended another Kedge anchor which was promised to be supplied</u>				

Her Standing and Running Rigging are sufficient in size and Good in quality.

She has one Long Boat and two thereon.

The present state of the Windlass is Good (2 Capstans Good and Rudder Good (2 Pumps Metals Good

**General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.**

DATES of Surveys held while building, as per Section 17.

1st. On the several parts of the frame, when in place, and before the plating was wrought Oct 10<sup>th</sup> 1856

2nd. On the plating during the progress of rivetting Nov 6 - 1856 Dec 1<sup>st</sup> 1856

3rd. When the beams were in and fastened, and before the decks were laid Jan 17 - 1857

4th. When the ship was complete, and before the plating was finally coated I surveyed constantly whilst building

5th. After the ship was launched I after launched

This vessel was built under Special Survey.  
She is double rivetted throughout, and several other parts are stronger than required by the Rules. The Main Intercostal Nelson is very deep & well secured with 4 longitudinal angle Irons and 4 vertical ditto on each floor plate. The lower Bridge Nelson is also an Intercostal one in the Midship body, the middle plate 9x 1/2 is fitted to the outside plating with double angle on ditto, together with double angle Iron on the Ribs, (or on reversed angle Iron on Ribs). She has one more Bridge or side Nelson on each side than required. There is also an additional angle Iron in the Midship body (about 80 feet) fitted on the Hold Beam Stringer Plate & against the outside plating & rivetted to ditto.

The angle Iron on the Gunwale plate is left sided & moulded than given by the Rules but is thicker than required & is secured on the outside of Sheerstrake with the Gunwale plate running to the outside of St. making strong work. Excepting the Topgallant Forecastle she is a very good vessel & in my opinion entitled to the 2<sup>nd</sup> years grade as built for. But respectfully leave the case in the hands of the Committee.

In what manner are the surfaces preserved from oxidation? Red paint  
The builders have not adhered to the Rules in the Hold Beams, having a very large one & small one alternately as shown in the sketch on the other side.

I am of opinion this Vessel should be classed

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

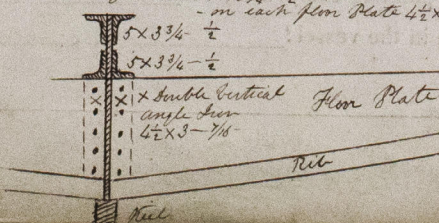
Special ..... £ 30 : 9 : 0 5/8/57

Certificate (if required) ..... £ : :

Committee's Minute 18

Character assigned

Intercostal Nelson 20.9 deep 6 1/2 x 8  
4 angle Irons 5x3 1/2 - 1/2 & 4 vertical angle Irons on each floor plate 4 1/2 x 3 - 3/4



4 angle Irons 6 on plate in middle of floor forming the bridge Nelson.  
5x3 1/2 - 1/2  
A plate 9 by 2 fitted between double angle Iron on outside plating & reversed angle Iron on the Ribs in midship body.