

# IRON SHIPS.

Request for S.S. *1881*

Rec'd 19/1/60

Survey held at Glasgow Date 15<sup>th</sup> Dec<sup>r</sup> 1880

Ship "Copernicus" Master [Signature]

Age Gross — Engine Room — Register 698.28 Built at Glasgow

Built 1864 Launched 3<sup>rd</sup> Nov<sup>r</sup> 1864 By whom built W. Stephen & Sons

Port belonging to Hamburg Destined Voyage New York

Keel laid — Surveyed Afloat or in Dry Dock whilst building

Inches in Ships.	Inches required per Rule.	Inches in Ships.	Inches required per Rule.	Inches in Ships.	Inches required per Rule.	Inches in Ships.	Inches required per Rule.
163	21	30	21	10	5		
Stem, if bar iron, moulding and thickness ....				Stem, if plate iron, breadth and thickness ....			
Stern-post, if bar iron, moulding and thickness ....				Stern-post, if plate iron, breadth and thickness ....			
Keel, if bar iron, depth and thickness ....				Keel, if plate iron, breadth and thickness ....			
Garboard Plates, Breadth and thickness 2.0				From Garboard to upper part of Bilge			
From upper part of Bilge to Sheerstrakes				Sheerstrakes, Breadth and thickness 2.0			
Butt Straps to outside plating, Breadth and thickness 2.0				Planksheers			
Gunwale Plate or Stringer on ends of Up. Dk Beams				Angle Iron on ditto			
Diagonal Tie Plates on Beams				Waterway			
Deck				Ceiling in Hold			
Ceiling betwixt Decks				Beam Clamps or Spirketting			
Stringer Plates on ends of Hold or Lower Dk Beams				Ceiling between Decks			
Stringer or Tie Plates outside Hatchways				Deck Beam Clamps or Spirketting			
Deck, Lower				Deck, Upper, how fastened to Beams			
Bulkheads, N° One				Bulkheads, N° Two			

ms, material Iron Plate, if none, in what manner compensated for. —

heads, and Hawse Timbers Iron Frames

frames or Ribs extend in one length from middle line to gunwale rivetted through plates with ( $\frac{3}{4}$  in.) rivets, about ( $\frac{5}{8}$  in.) apart.

verse angle irons on the floors extend in one length across the middle line from upper part of bilge to ditto

" " " on the frames " " " from middle line to gunwale

on, how are the various lengths of plates or angle irons connected? by lining pieces

Garboard, double or single rivetted to keel & at upper edge, with rivets ( $\frac{1}{2}$  in.) diameter averaging ( $\frac{1}{2}$  in.) from centre to centre of rivet.

Edges from Garboards to upper part of bilge, worked carvel with a lining piece ( $\frac{1}{2}$  in.) thick, or clencher, double or single rivetted; rivets ( $\frac{1}{2}$  in.) diameter, averaging ( $\frac{1}{2}$  ins.) from centre to centre of rivets.

Butts from Keel to turn of bilge, worked carvel with a lining piece ( $\frac{3}{8}$  to  $\frac{1}{2}$ ) thick, double or single rivetted; rivets ( $\frac{1}{2}$  in.) diameter, averaging ( $\frac{1}{2}$  ins) 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 sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; rivets ( $\frac{1}{2}$  in.) diameter, averaging ( $\frac{1}{2}$  in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Edge of Sheerstrake, double or single rivetted? Double

Butts from bilge to planksheers, worked carvel with a lining piece ( $\frac{1}{2}$  to  $\frac{3}{8}$ ) thick, double or single rivetted; rivets ( $\frac{1}{2}$  in.) diameter averaging ( $\frac{1}{2}$  ins.) from centre to centre of rivets. Breadth of laps in double rivetting of rivets Breadth of laps in single rivetting of rivets

Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double

sheer, how secured to the plating of the sides Explain by sketch See Bulwarks

way " " planksheer and to the Beams if necessary. Gutter Waterway

Beams, how secured to the side? Welded knees rivetted to frames

or Lower Deck " Ditto Ditto

of breasthooks Five crutches Five how are pointers compensated? As pointed and punched

description of iron is used for the angle iron and plate iron in the vessel? Glasgow and Co. Builder's Signature W. Stephen & Sons

3881 Iron

**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? 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, 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 in corners of B

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length.

Tested by R. Burrell

N <sup>o</sup> .	SAILS.	CABLES, &c.		ANCHORS, and their weights.	
		Tested at <u>Musey</u>	Fathoms.	Inches.	Tested to <u>52 fms</u>
<u>2</u>	Fore Sails,	Board <u>1/2" 1/2" 1/2" 1/2" 1/2"</u>			Bower, <u>20 15</u>
	Fore Top Sails,	Chain <u>4 1/2 Fms</u>	<u>300</u>	<u>1 3/4</u>	Stream, <u>1 10</u>
	Fore Topmast Stay Sails,	Hempen Stream Cable	<u>90</u>	<u>8 1/2</u>	
	Main Sails,	Hawser <u>Stud</u>	<u>65</u>	<u>7 1/2</u>	
	Main Top Sails,	Towlines	<u>90</u>	<u>6</u>	
		Warp	<u>90</u>	<u>4</u>	Kedge, <u>2 10</u>
	and	All of <u>Good</u> quality.			

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

She has 2 2 2 Long Boat and 10 fut Cassia 10 fut Gigs

The present state of the Windlass is new Capstan new and Rudder new Pumps new

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

- 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 Built under spec
  - 2nd. On the plating during the progress of rivetting Survey and seen on the following
  - 3rd. When the beams were in and fastened, and before the decks were laid June 13, 20, 22, 27, 30, July 5, 8, 13
  - 4th. When the ship was complete, and before the plating was finally coated 27, 29, Aug 3, 9, 12, 16, 20, 23, 29, Sep
  - 5th. After the ship was launched 7, 10, 14, 21, Oct 3, 4, 10, 18, 22, 28, 31, Dec 10, 17, 19, Dec 2

This ship is double Rivetted throughout, fitted with an extra Standed in Hold, full Poop and Forecastle.

The Belt of Plating marked B on accompanying tracing has been increased to 90 to compensate for Belt marked A being a 70 to Him as sanctioned by Committee's letter of the 15<sup>th</sup> August 1864

Fore and main masts framed of three Plates 50 & 50 lands overlaid and double Rivetted. Butts triple can Rivetted.

In what manner are the surfaces preserved from oxidation? Flat of Bottom with Portland Cement remainder red lead and Patent

I am of opinion this Vessel should be classed A

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

Doc W Special .....£ 34 18 : 5

Certificate (if required) .....£ gratis

Committee's Minute 20 December 1864

Character assigned A

1000.P/

W

A. Darling

This sailing Barge of Iron app to be within 129 and 111 (disturbing my Report to Committee dated 1 of ships seen building in Glasgow) I am of opinion that is eligible for Classification as recommended on Dec 30/64

