

IRON SHIPS.

Rec 8/11/64

Survey held at Newcastle Date 30 March 1864
 Name of Ship "Principe Umberto" Master John A. Laws
 Tonnage Gross 137.2 Engine Room 250.44 Register 584.41 Built at Newcastle
 When Built 1864 Launched 1864 By whom built John A. Laws
 Owners Italiana di Port belonging to Italiana Destined Voyage Africa
 Surveyed Afloat or in Dry Dock and 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.
151.2			22.35			17.15			240	

Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ships.			Inches required per Rule.			Stem, if bar iron, moulding and thickness	Inches.			16ths required per Rule.	16ths required per Rule.
	Inches.	Inches.	16ths.	Inches.	Inches.	16ths.		Inches.	16ths.	16ths.		
21	21			21			4 1/2	3	4 1/2	2 1/2		
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	4 1/2	3	5/16	4 1/2	3	5/16	Stem-post, if bar iron, moulding and thickness	9	5	4 1/2	5 1/2	
" depth and thickness of Floor Plate at mid line	2 1/2	9/16	14 1/2	10/16			" " if plate iron, breadth and thickness	9	5	4 1/2	5 1/2	
" depth and thickness of Floor Plate at Bilge Keelson	5	9/16	4 3/4	10/16			Keel, if bar iron, depth and thickness	4 1/2	3	4 1/2	2 3/4	
" Size of Reversed Angle Iron, and No. at top of Floor Plate	3	3	4 1/8	3 1/2	3 1/2	4 1/8	" " if plate iron, breadth and thickness	4 1/2	3	4 1/2	2 3/4	
Frames, Size of Angle Iron, single or double	4 1/2	3	5/16	4 1/2	3	5/16	Garboard Plates, Breadth and thickness	3 1/2	7/8	30	12	
" Reversed Iron, if to every frame	3	3	4 1/8	3 1/2	3 1/2	4 1/8	From Garboard to upper part of Bilge	10	1/16	11	16	
" or every beam	3	3	4 1/8	3 1/2	3 1/2	4 1/8	From upper part of Bilge to Sheerstrakes	9	1/16	10	16	
Beams, Deck (No. 10) double Angle Iron	4 1/2	3	5/16	4 1/2	3	5/16	Sheerstrakes, outer	30	1/16	11	16	
" double or single Angle Iron	4 1/2	3	5/16	4 1/2	3	5/16	Breadth and thickness	9	1/16	11	16	
" on top edge	2 1/2	2 1/2	1/16	2 1/2	2 1/2	1/16	Butt Straps to outside plating, Breadth and thickness	9 1/2	5 1/2	11	16	
" average space between	3 1/2		3 1/2				Planksheers	1/4				
" if wood (No.) sided & moulded							Gunwale Plate or Stringer on ends of Up. Dk Beams	30	9/16	30	10	
" Hold, or Lower Deck (No. 5-1) double Angle Iron, Plate, or Bulb Iron	4 1/2	3	5/16	4 1/2	3	5/16	Angle Iron on ditto	5 x 4 x 5/16	3 1/2	3 1/2	8	
" double or single Angle Iron	4 1/2	3	5/16	4 1/2	3	5/16	Diagonal Tie Plates on Beams	11 x 10 x 1/16	10 1/2	10 1/2	19	
" on top edge	2 1/2	2 1/2	1/16	2 1/2	2 1/2	1/16	Waterway	12 x 12 x 1/16				
" average space between	3 1/2		3 1/2				Deck	12 x 12 x 1/16	3 1/2	3 1/2		
" if wood (No.) sided & moulded							Ceiling in Hold	3				
" Paddle, wood, sided and moulded, or if Iron, size of Plate							Ceiling betwixt Decks					
" Engine							Beam Clamps or Spirketting					
Keelson, single plate, box, or intercostal	20 1/2	9	14 1/2	10/16			" Shelf					
" Size of Plates	3	3	4 1/8	3 1/2	3 1/2	4 1/8	" Stringer Plates on ends of Hold or Lower Dk Beams	4 1/2	9/16	21	10	
" Size of Angle Irons	3	3	4 1/8	3 1/2	3 1/2	4 1/8	Ceiling between Decks	3 x 4 x 5/16	3 1/2	3 1/2	8	
Ditto Bilge (No. 2)	5	4	8	11	4 3/4	3 3/4	Stringer or Tie Plates out side Hatchways	3 x 4 x 5/16	3 1/2	3 1/2	8	
Transoms, material							Deck Beam Clamps or Spirketting	5 x 4 x 5/16	3 1/2	3 1/2	8	
Knight-heads, and Hawse Timbers							" Shelf					
The Frames or Ribs extend in one length from							Stringers in Hold	5 x 4 x 5/16	3 1/2	3 1/2	8	
The reverse angle irons on the floors extend in one length across the middle line from							Deck, Lower	3				
" " " on the frames							Deck, Upper, how fastened to Beams	as per Rule				
Keelson, how are the various lengths of plates or angle irons connected?							Bulkheads, No. 4	4 1/2	9/16	21	10	
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (4 1/2 in.) from centre to centre of rivet.							how secured to the sides of the ship	to double frames				
" Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets.							size of vertical angle iron and their distance apart	3 x 3 x 1/16 - 2 ft				
" Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?												
" Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below?												
" Edge of Sheerstrake, double or single rivetted?												
" Butts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter averaging (3 in.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2 in.) Breadth of laps in single rivetting (2 1/2 in.)												
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?												
Planksheer, how secured to the plating of the sides												
Waterway " " planksheer and to the Beams												
Deck Beams, how secured to the side?												
Hold or Lower Deck												
Paddle												
No. of breasthooks	5											
What description of iron is used for the angle iron and plate iron in the vessel?												

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? *Long lengths*

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.**

CABLES, &c.

ANCHORS, and their weights.

No.			Fathoms.	Inches.		No.	Weight.
	Fore Sails,	Chain <i>Stamps 2104</i>	270	1 1/2	Bower, <i>Stamps 2104</i>	20.0.	
	Fore Top Sails,	Hempen Stream Cable	90	1 1/2	<i>Minaka test</i>	19.4.	
<i>Complete</i>	Fore Topmast Stay Sails,	Hawser	80	8	Stream,	18.3.	
<i>Sails</i>	Main Sails,	Towlines	190	1 1/2			
	Main Top Sails,	Warp	80	8	Kedge,	20	4.2.
and		All of <i>new</i> quality.	160	1 1/2			
			160	4 1/2			

Her Standing and Running Rigging *Complete* sufficient in size and *new* in quality.

She has *2 large boats each Long Boat and 23 x 6.2 x 2.4. 2 Quarter boats each 23 x 5.10 x 2.5.*

The present state of the Windlass is *Patent* Capstan *Complete* and Rudder *Complete* Pumps *2 Hand and 2 Steam*

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	} <i>2 Built - under ci</i> <i>Special Survey</i> <i>per order no 454</i>
	2nd.	On the plating during the progress of rivetting	
	3rd.	When the beams were in and fastened, and before the decks were laid	
	4th.	When the ship was complete, and before the plating was finally coated	
	5th.	After the ship was launched	

This vessel is of similar dimensions to the "Industrious" No 244, of 1883, but under deck, and classed 12.1 but the measurement of this vessel is found to be 72.5 tons under deck, being an increase on the above named vessel of 38.5 tons and on the "Gloss" 39.5 tons. The scantlings are therefore in respect to thickness of plating 1/16 deficient; and the clanking rivetting of lands to upper part of bilges. The upper and lower deck tie plates, together with the mid all line keelson are much beyond the requirements of the Rules, and hold beams placed to every alternate frame, Rule 2-4 1/2. Frame alternately. Under these circumstances, they to leave the Class for the Committee's consideration. With reference to the *Banner* Anchors referred to in Secretary's Letter of the 15th inst. and enclosures, they will be found to be somewhat light in weight by Table 22 of August 13, and the present one. The patent of 18 Cwt. was put on board in lieu of the 15 Cwt. tested at a private machine. The several Certificates are herewith sent. In what manner are the surfaces preserved from oxidation? *Tested at Patent point - new - Cement in bottom*

I am of opinion this Vessel should be classed _____

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

Nov 1884 Special£ 41 : 14

Certificate (if required)£ : : :

Committee's Minute *18th November 1884*

Character assigned *B* 1

M/C

M/C