

IRON SHIPS.

2363

No. 8433 Survey held at Newcastle Date October 12th 1861
 on the Martha Screw Collier Hawthorned. Master Wm Russell
 Tonnage Gross 698,73 Engine Room 123,03 Register 575,70 Built at Newcastle
 When Built 1861 By whom built Palmer Brothers. Owners Hugh Taylor.
 Port belonging to London Destined Voyage Petersburgh.
 Surveyed Afloat or in Dry Dock On the Slip & afloat. Launched 10th Aug/61.

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 No.
	199	0		28	05		17	4		
Distance of Frames or Ribs from moulding } edge to moulding edge, all fore and aft }	18		18							
Floors, Size of Angle Iron, and No. 1 at } bottom of Floor Plate	4	3 1/2	7/16	4	3	7/16				
depth and thickness of Floor Plate at } mid line	18		7/16	18		7/16				
depth and thickness of Floor Plate at } Bilge Keelson	5		7/16			7/16				
Size of Reversed Angle Iron, and } No. 1 at top of Floor Plate	3	3	6/16	3	2 3/4	6/16				
Frames, Size of Angle Iron, single or } double	4	3 1/2	7/16	4	3	7/16				
Reversed Iron, if to every frame } or every other frame	3	3	6/16	3	2 3/4	6/16				
Beams, Deck (N ^o . 4 th) double Angle Iron } or Bulb Iron with double Angle } Iron on top	3 1/2	3	6/16	2 7/8	2 5/8	6/16				
depth & thickness of plate amidships }	7		7/16	7		7/16				
double or single Angle Iron, } on lower edge	3 feet			3 feet						
average space between	3 feet			3 feet						
if wood (N ^o .) sided & moulded }										
Hold, or Lower Deck (N ^o . 2 ^o) } double Angle Iron or Bulb Iron } with double Angle Iron on top	3	3	6/16	2 7/8	2 5/8	6/16				
depth & thickness of plate amidships }	7		7/16	7		7/16				
double or single Angle Iron, } on lower edge	3 feet			3 feet						
average space between	3 feet			3 feet						
if wood (N ^o .) 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 1/4		7/16	2 2		7/16				
Side or Bilge	4 1/2	3 3/4	8/16	4 1/2	3 3/2	7/16				
Number	4 1/2	3 3/4	8/16	4 1/2	3 3/2	7/16				

Transoms, material iron or, if none, in what manner compensated for. with angle iron on upper edges

Knight-heads iron plates & ribs Bulkheads, N^o. four Thickness of 6/16

Hawse Timbers iron are they free from defects? no how secured to the sides of the ship double ribs

The Frames or Ribs extend in one length from keel to bilge & Deck rivetted through plates with (3/4 in.) rivets, about (6 ins) apart.

The reverse angle irons on the floors extend in one length across the middle line from side to side

Keelson, how are the various lengths of plates or angle irons connected? by angle irons running fore & aft also at the sides of floors.

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/4 ins.) diameter averaging (4 1/2 ins.) from centre to centre of rivet.

Edges from Garboards to upper part of bilge, worked carvel with a lining piece (3/16 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 1/2 ins.) from centre to centre of rivets.

Butts from Keel to turn of bilge, worked carvel with a lining piece (5/16) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 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 planksheer, worked carvel with a lining piece (3/16) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (2 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

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

Planksheer, how secured to the plating of the sides { Explain by sketch, }
 Waterway " " planksheer and to the Beams { if necessary. } By screw pointed bolts put in from above with nuts below the stringer

Side trussing breadth and thickness of plates how secured? Double angle irons

Deck trussing " " " " ? Diagonal plates six pairs

Deck Beams, how secured to the side? the brackets or knee forged on to the end of each beam.

Hold or Lower Deck " same as upper deck.

Paddle iron deck or platform at each end.

No. of breasthooks cross plates crutches cross plates how are pointers compensated? by ribs & plating

What description of iron is used for the angle iron and plate iron in the vessel? best ship iron.
Consett & Hawthorn's Plates marked - & 10 1/2 long some more.

Builder's Signature
For Palmer Bros & Co
London

IRON435-0181

2563 Em

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? good

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? solid pieces

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? well and are the rivet holes well and sufficiently countersunk in the outer plate? well counter sunk

Are there any rivets which either break into or have been put through the seams or butts of the plating? none seen

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

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.			
N ^o .			Fathoms.	Inches.		N ^o .	Weight.
<i>single sails of and well found.</i>	Fore Sails,	Chain	240	1 1/8	Bower,	3	22.3.10 17.2.19 15.1.16
	Fore Top Sails,	Hempen Stream Cable	90	15/16			
	Fore Topmast Stay Sails,	Hawser	90	8	Stream,	1	5.0.23
	Main Sails,	Towlines	90	4			
	Main Top Sails,	Warp	90	5	Kedge,	1	1.3.26
		All of <u>good</u> quality.					

Her Standing and Running Rigging is sufficient in size and good in quality.

She has a safety Long Boat and stiff

The present state of the Windlass is efficient, Capstan efficient and Rudder efficient, Pumps efficient, one to each Compartment - two double Winches.

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

- 1st. On the several parts of the frame, when in place, and before the plating was wrought during the
- 2nd. On the plating during the progress of rivetting some while
- 3rd. When the beams were in and fastened, and before the decks were laid under special
- 4th. When the ship was complete, and before the plating was finally coated survey
- 5th. After the ship was launched Oct. 1861

*This is sister vessel to the 'Sir Jas' Duke Report
No. 8420.*

*And has the Girdler Keelsons and iron Platform
for water ballast fitted in the same manner as that vessel & others.*

*Has been built under Special Survey
as per Order No. 321.*

Mr. John Sturges, Coal Exchange, E.C.

In what manner are the surfaces preserved from oxidation? two coats of red lead inside and outside
a coat of "peacocks" outside and inside "Days Cement,"
to up 2 turn of 13 days

I am of opinion this Vessel should be classed C. A. 1.

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

Special £ 24.18 : -

Certificate (X required) £ 0 : - : -

Committee's Minute 15th October 1861

Character assigned A 1 for 6 years

Oct 15/61

*She appears eligible
for the class recommended
if the Committee are satisfied
with the condition of the vessel*



Lloyd's Register
Foundation