

# IRON SHIPS.

No. 7688 Survey held at Shields Date June 4<sup>th</sup> Rec 6/6/59  
 on the Paddle Wheel Steamer Pioneer Master Pilot pro tem 18 59  
 Tonnage Gross 94<sup>98</sup>/<sub>100</sub> Engine Room 43<sup>95</sup>/<sub>100</sub> Register 50<sup>93</sup>/<sub>100</sub> Built at Shields  
 When Built 1859 By whom built Marshall Bros Owners Colonial Government  
 Port belonging to not fixed Destined Voyage cape of Good Hope  
 Surveyed Afloat or in Dry Dock While building and afloat

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.
89	4	10	18	5	10	9	5	10	40	
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	2 1/2	2 1/2	3/8	2 1/2	2 1/2	3/8				
depth and thickness of Floor Plate at mid line	10	5/16	9	5/16						
depth and thickness of Floor Plate at Bilge Keelson	3	5/16	2 1/2	5/16						
Size of Reversed Angle Iron, and No. at top of Floor Plate	2 1/4	2 1/4	5/8	2 1/4	2 1/4	5/8				
Frames, Size of Angle Iron, single or double	2 1/2	2 1/2	3/8	2 1/2	2 1/2	3/8				
Reversed Iron, if to every frame	2 1/4	2 1/4	5/8	2 1/4	2 1/4	5/8				
Beams, Deck (No. 21) double Angle Iron or Bulb Iron with double Angle Iron on top	4 1/2	4 1/2	4 1/2	5/16						
depth & thickness of plate amidships	4 1/2	4 1/2								
double or single Angle Iron, on lower edge										
average space between	3ft	3ft								
if wood (No. ) sided & moulded										
Hold, or Lower Deck (No. ) double Angle Iron or Bulb Iron with double Angle Iron on top										
depth & thickness of plate amidships										
double or single Angle Iron, on lower edge										
average space between										
if wood (No. ) sided & moulded										
Paddle, wood, sided and moulded or if Iron, size of Plate	30 x 12 x 7/16									
Engine	13 x 3/8 with angle irons 4 1/2 x 3									
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	12 1/2 x 5/16 with angle irons 2 1/2 x 2 1/2 x 5/16									
Side or Bilge	2 1/2 x 2 1/2 x 5/16									
Number	2									

Transoms, material or, if none, in what manner compensated for. With plate & angle iron  
 Knight-heads Yak Bulkheads, No. 4 Thickness of 1/4  
 Hawse Timbers Yak are they free from defects? how secured to the sides of the ship With double frames  
 size of vertical angle iron and their distance apart 2 1/2 x 2 1/4 x 30" apart  
 The Frames or Ribs extend in one length from Keel to Stringer rivetted through plates with ( 5/8 in.) rivets, about ( 5 ) apart.  
 The reverse angle irons on the floors extend in one length across the middle line from Above Bilge to Above Bilge  
 on the frames from Above Bilge to Above Bilge  
 Keelson, how are the various lengths of plates or angle irons connected? Shifted  
 Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets ( 7/8 ins.) diameter averaging ( 3/4 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 ( 5/8 in.) diameter, averaging ( 2 1/4 ins.) from centre to centre of rivets.  
 Butts from Keel to turn of bilge, worked carvel with a lining piece ( 5/8 ) thick, double or single rivetted; rivets ( 5/8 in.) diameter, averaging ( 2 1/4 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 ( in. ) thick, double or single rivetted; rivets ( 5/8 in.) diameter, averaging ( 2 1/4 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 ( 1/2 ) thick, or clencher, double or single rivetted; rivets ( 5/8 in.) diameter averaging ( 2 1/4 ins.) from centre to centre of rivets. Breadth of laps in double rivetting ( 3/4 ) Breadth of laps in single rivetting ( in )  
 Planksheer, how secured to the plating of the sides { Explain by sketch, } Bolted to Stringer  
 Waterway planksheer and to the Beams if necessary.  
 Side trussing breadth and thickness of plates how secured?  
 Deck trussing Platu 7 x 5/16 Rivetted to Beams  
 Deck Beams, how secured to the side? With plate knees rivetted to Ribs  
 Hold or Lower Deck With angle iron rivetted to Plating  
 Paddle With angle iron rivetted to Plating  
 No. of breasthooks 2 crutches 1 how are pointers compensated? With plate and Angle Iron  
 What description of iron is used for the angle iron and plate iron in the vessel? Marshall Brothers Builder's Signature  
Best Ship Iron



1912. 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? 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? Some few

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

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N <sup>o</sup> .			Fathoms. Inches.	N <sup>o</sup> .	Weight.
<i>one butt</i>	Fore Sails,	Chain .....	120 11/16	Bower, .....	2 4-0-24
	Fore Top Sails,	Hempen Stream Cable .....	90 5		4-0-14
	Fore Topmast Stay Sails,	Hawser .....	90 3	Stream, .....	1 1-2-13
	Main Sails,	Towlines .....			
	Main Top Sails,	Warp .....		Kedge, .....	
and		All of <u>good</u> quality.			

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

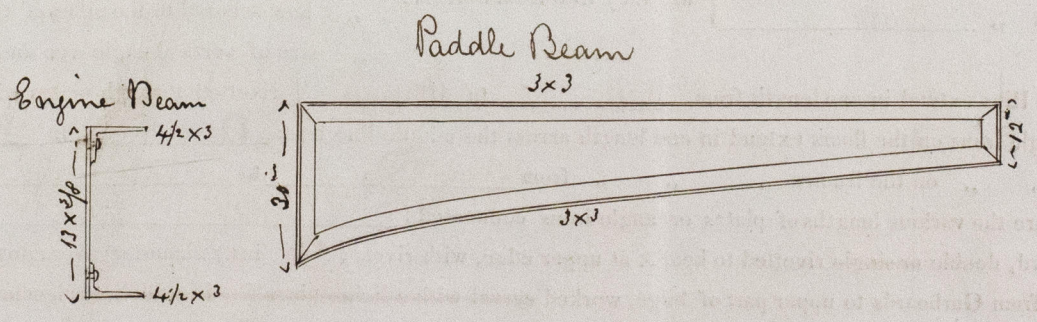
She has one Long Boat and ✓

The present state of the Windlass is good Capstan ✓ and Rudder ✓ Pumps 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 At various times while
  - 2nd. On the plating during the progress of rivetting under Special Survey.
  - 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

Has been built under Special Survey as per order No. 274  
In the Engine Room there are four additional Keelsons (Box) 9x6x5/16 thick secured to the floors with Angle Iron - Is schooner rigged - Testing certificates of Chain cables produced.



In what manner are the surfaces preserved from oxidation? With Red Lead and Linseed Oil paint.

I am of opinion this Vessel should be classed Q.A.

The amount of the Fee .....£ 1 : 0 : 0 is received by me,

*James M.* Special .....£ 9 : 10 : 0

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

Committee's Minute 7<sup>th</sup> June 18.59

Character assigned 1 for 9 Years

*John Maxwell*

*I concur in the above Recommendation*