

IRON SHIPS.

Dec 7/7/56.

No. 6572 Survey held at Shields Date July 3rd 1856
on the Paddle Wheel Steamer "Pioneer" Master Thomas Robson Bone
Tonnage Gross 136 $\frac{22}{100}$ Engine Room 76 $\frac{21}{100}$ Register 60 $\frac{01}{100}$ Built at Shields
When Built 1856 By whom built J. Q. Marshall Owners Robert Ekkef
Port belonging to Southampton Destined Voyage Southampton
If Surveyed Afloat or in Dry Dock While building and afloat.

Feet.		Inches.		Feet.		Inches.		Feet.		Inches.		Horse No.	
Length aloft	113	3/10	Extreme Breadth	20	1/10	Depth from Beam to top of Floor	9	7/10	Power of Engines	80			
Distance between Floors amidships	1	6		1	6								
" " " forward and aft	1	6		1	6								
" " Ribs amidships	1	6		1	6								
" " " forward and aft	1	6		1	6								
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	3 1/2	2 1/2	5/16	2 1/2	2	5/16							
" depth & thickness of Plate at mid line	8	5/16	X	9	1/4								
" " " " at turn of bilge	-	-											
" Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	3	3	3/8	2	2	1/4							
Ribs, Size of Angle Iron, single or double	3 1/2	2 1/2	5/16	2 1/2	2	5/16							
to "Bilge" Reversed Iron, if to every frame or every frame	3	3	3/8	2	2	1/4							
Beams, Deck (No. 29) double or single Angle Iron	4	3	7/16	-	-	-							
" " depth & thickness of plate amidships													
" " double or single Angle Iron, on lower edge	3 ft			3 ft									
" " average space between													
" " if wood (No.) sided & moulded													
" Hold, (No.) double or single Angle Iron													
" " 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	1/2 in plate with angle iron												
" Engine " " " " "	4 1/4 x 2 1/2												
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	3/8 plate with angle iron												
" Side or Bilge	6 x 3 x 1/2												
" Number	See other side												
Stem, if bar iron, moulding and thickness	5	1 1/2	5 1/2	1 1/2									
" if plate iron, breadth and thickness													
Stern-post, if bar iron, moulding and thickness	5	1 1/2	5 1/2	1 1/2									
" if plate iron, breadth and thickness													
Keel, if bar iron, depth and thickness	5	1 1/2	5 1/2	1 1/2									
" if plate iron, breadth and thickness													
Garboard Plates, thickness	3/8	9/16	5/16										
" to bilge	5/16	9/16	1/4										
Bilge	5/16	9/16	1/4										
" to Wales	5/16	9/16	1/4										
Wales	5/16	9/16	1/4										
Topsides	1/4	6/16	1/4										
Sheerstrakes	1/4	6/16	1/4										
Planksheers	5/16	9/16	1/4										
Gunwale Plate or Stringer	11	3	2 1/4										
Waterway	10	5/16	9	1/4									
Deck	Yellow Pine	2 1/2	2 1/2										
Ceiling in flat													
Bilge Planks inside													
Ceiling from Bilge to Clamps													
Hold Beam Clamps													
" " Shelf													
" " Stringers													
Ceiling between Decks													
Stringers													
Deck Beam Clamps													
" " Shelf													
Stringers in Hold													
Deck, Lower													

Transoms, material or, if none, in what manner compensated for. *Plate & Angle iron*
 Knight-heads " *Foreign Oak* } Bulkheads, N^o. *4* Thickness of *1/4*
 Hawse Timbers " } are they free from defects? *Yes*

The Ribs extend in one length from Keel to Gunnwale rivetted through plates with ($\frac{3}{8}$ in.) rivets, about ($\frac{1}{4}$) apart.
The reverse angle irons on the floors extend in one length across the middle line from Keel to above Bilge

Keelson, if wood, length of search ~~if iron~~, how are the various lengths connected? *Shifted*

Plates, Garboard, ~~double or~~ single rivetted to keel, with rivets ($\frac{3}{4}$ ins.) diameter averaging ($\frac{3}{8}$ in.) from centre to centre of rivet.
 „ edges from Garboards to turn of bilge, worked ~~carvel with a lining piece (— in.) thick, or~~ clenchler, ~~double or~~ single rivetted; rivets ($\frac{5}{8}$ in.) diameter, averaging ($\frac{2}{4}$ ins.) from centre to centre of rivets.

„ butts from Garboards to turn of bilge, worked carvel with a lining piece ($\frac{5}{16}$) thick, ~~double or~~ single rivetted; rivets ($\frac{7}{8}$ in.) diameter, averaging ($2\frac{1}{4}$ 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 wales, worked ~~carvel with a lining piece () thick, or~~ clencher, ~~double or~~ single rivetted; rivets ($\frac{5}{8}$ in.) diameter, averaging ($2\frac{1}{4}$ ins.) from centre to centre of rivets.

„ butts from bilge to wales, worked carvel with a lining piece ($\frac{3}{16}$) thick, ~~double or~~ single rivetted; rivets ($\frac{3}{8}$ in.) diameter, averaging ($2\frac{1}{2}$ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? *Yes*

edges of wales and to planksheers, worked ~~carvel with a lining piece () thick, or~~ clencher, ~~double or~~ single rivetted; rivets ($\frac{1}{2}$ in.) diameter averaging ($2\frac{1}{4}$ ins.) from centre to centre of rivets.

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	" "	" " + 10

Deck Beams, how secured to the side

Hold	"	"	
Paddle	"	"	with angle iron

No. of breasthooks 2 crutches how are pointers compensated? Plate and Angle iron
What description of iron is used for the angle iron and bar iron in the vessel? No. 1. Marshall Builder's Signature

Sand to be of the best

IRON 432-01

1079 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases sufficiently wide to take the rivets and support the strain on them? *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 all solid with sliver pieces, or are they in short lengths? *Long lengths*
 Do the holes for rivetting plate to lining piece, or plate to plate, &c., answer 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*
 Was the plating caulked internally in the wake of the frames or ribs? *No*

Her Masts, Yards, &c., are in *good* condition, and sufficient in size and length.
 She has **SAILS.**

N^o.
 / Fore Sails,
 Fore Top Sails,
 Fore Topmast Stay Sails,
 / Main Sails,
 Main Top Sails,
 and 1 Lib

CABLES, &c.

	Fathoms.	Inches.
Chain	150	11/16
Hemp Stream Cable	80	9 1/2
Hawser	25	5 1/2
Towlines	25	3 1/2
Warp		
All of <i>good</i> quality.		

ANCHORS, and their weights.

N ^o .	Weight.
2	4-0-2
	3-1-2

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

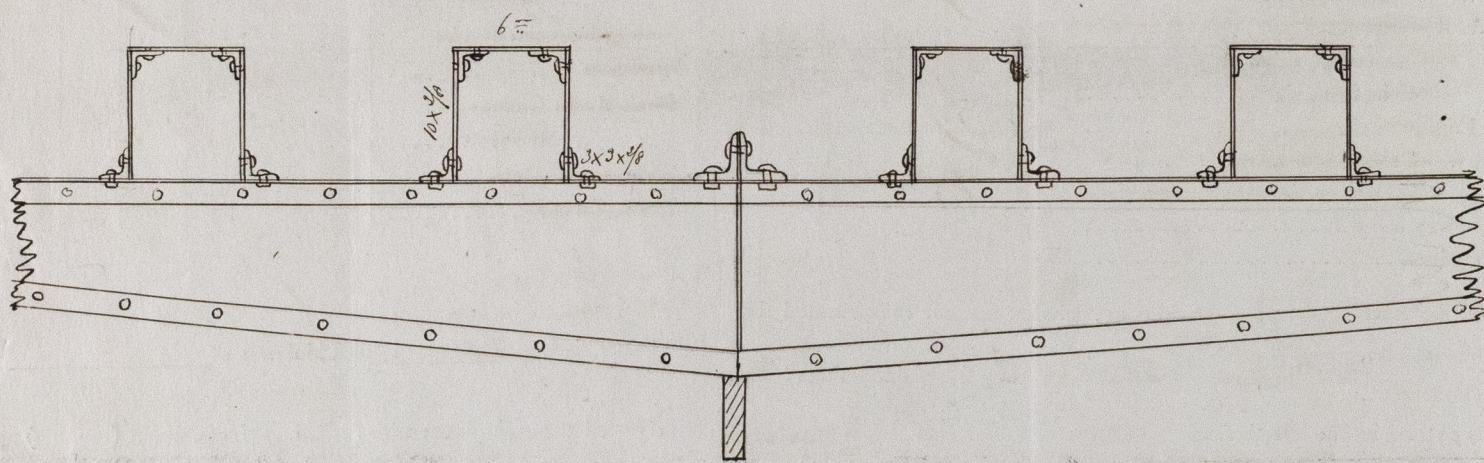
She has *a 16 ft* Long Boat and *a 14 ft Life Boat*

The present state of the Windlass is *good* Capstan and Rudder *good* Pumps *good*

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

1st. On the several parts of the frame, when in place, and before the plating was wrought *March*
 2nd. On the plating during the progress of rivetting *March*
 3rd. When the beams were in and fastened, and before the decks were laid *April*
 4th. When the ship was complete, and before the plating was finally coated *May*
 5th. After the ship was launched *June 28th*

This vessel has been specially surveyed while building per order No *103*.
 Is fitted with two masts — Testing certificates of Chain cables produced
 Is intended for Towing purposes —



In what manner are the surfaces preserved from oxidation? *Red lead and linseed oil*

I am of opinion this Vessel should be classed *A1*

The amount of the Fee£ 2 : : : is received by me,

Special£ 8 : 10 : :

Certificate (if required)£ : : : :

Committee's Minute *11th July 1856*

Character assigned *A1 for 6 Years*

Build of Iron

John Maxwell

The butts of this Vessel are all single rivetted — but as she is intended only for towing & service in the above circumstances two 7 10th July 1856 JHC