

# IRON SHIPS.

No. 3174 Survey held at Ninghorn Date 14<sup>th</sup> May 1864  
 on the Steamer "South Australia" Master John Pain  
 Tonnage Gross 538.01 Net 433.43 Engine Room 197.60 Register 435.83 Built at Ninghorn

When Built 1864 By whom built John Rey Owners Samuel White  
Launched April 7<sup>th</sup> 1864  
Port belonging to Newcastle Destined Voyage Australia  
If Surveyed Afloat or in Dry Dock While Building

Feet. Inches.		Feet. Inches.		Feet. Inches.		Feet. Inches.		Horse No.	
Length aloft		Extreme Breadth		Depth from top of Upper Deck		Beam to top of Floor		Power of Engines	
225 0		26 3		15 0		180			
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.	
21		21	21	21		21		21	
Floors, Size of Angle Iron, and No. one at bottom of Floor Plate		Inches in Ship.	Inches required per Rule.	Inches in Ship.		Inches required per Rule.		Inches in Ship.	
3 3/4		3 3/4	3 3/4	3 3/4		3 3/4		3 3/4	
,, depth and thickness of Floor Plate at mid line		1 1/2	1 1/2	1 1/2		1 1/2		1 1/2	
,, depth and thickness of Floor Plate at Bilge Keelson		9	9	9		9		9	
,, Size of Reversed Angle Iron, and No. one at top of Floor Plate		3 2 3/4	3 2 1/2	3 2 3/4		3 2 1/2		3 2 3/4	
Frames, Size of Angle Iron, single or double		3 3/4	3 3/4	3 3/4		3 3/4		3 3/4	
,, ,, Reversed Iron, if to every frame or every other frame		3 2 3/4	3 2 1/2	3 2 3/4		3 2 1/2		3 2 3/4	
Beams, Deck (No. 55) double Angle Iron or Bulb Iron with double Angle Iron on top		2 3/4	2 3/4	2 3/4		2 3/4		2 3/4	
,, ,, depth & thickness of plate amidships		6 1/2	6 1/2	6 1/2		6 1/2		6 1/2	
,, ,, double or single Angle Iron, on lower edge		-	-	-		-		-	
,, ,, average space between		42 inches	42 inches	42 inches		42 inches		42 inches	
,, ,, if wood (No. -) sided & moulded		-	-	-		-		-	
,, Hold, or Lower Deck (No. 26) double Angle Iron or Bulb Iron with double Angle Iron on top		2 3/4	2 3/4	2 3/4		2 3/4		2 3/4	
,, ,, depth & thickness of plate amidships		6 1/2	6 1/2	6 1/2		6 1/2		6 1/2	
,, ,, double or single Angle Iron, on lower edge		-	-	-		-		-	
,, ,, average space between		42 inches	42 inches	42 inches		42 inches		42 inches	
,, ,, if wood (No. -) 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		-	-	-		-		-	
,, Side or Bilge		-	-	-		-		-	
,, Number		-	-	-		-		-	
Stem, if bar iron, moulding and thickness		8	8	8		8		8	
,, if plate iron, breadth and thickness		-	-	-		-		-	
Stern-post, if bar iron, moulding and thickness		8 1/4	8 1/4	8 1/4		8 1/4		8 1/4	
,, if plate iron, breadth and thickness		-	-	-		-		-	
Keel, if bar iron, depth and thickness		8	8	8		8		8	
,, if plate iron, breadth and thickness		-	-	-		-		-	
Garboard Plates, thickness..		-	-	-		-		-	
From Garboard to upper part of Bilge		-	-	-		-		-	
From upper part of Bilge to Sheerstrakes		-	-	-		-		-	
Sheerstrakes		-	-	-		-		-	
Breadth & thickness of Butt Straps to outside plating		8 1/2	8 1/2	8 1/2		8 1/2		8 1/2	
Planksheers		-	-	-		-		-	
Gunwale Plate or Stringer on ends of Up. Dk Beams		-	-	-		-		-	
Angle Iron on ditto		-	-	-		-		-	
Waterway		-	-	-		-		-	
Deck		-	-	-		-		-	
Ceiling in Hold		-	-	-		-		-	
Ceiling betwixt Decks		-	-	-		-		-	
Beam Clamps		-	-	-		-		-	
,, Shelf		-	-	-		-		-	
,, Stringer Plates on ends of Hold or Lower Dk Beams		-	-	-		-		-	
Ceiling between Decks		-	-	-		-		-	
Stringer or Tie Plates outside Hatchways		-	-	-		-		-	
Deck Beam Clamps		-	-	-		-		-	
,, Shelf		-	-	-		-		-	
Stringers in Hold		-	-	-		-		-	
Deck, Lower		-	-	-		-		-	
Deck, Upper, how fastened to Beams		-	-	-		-		-	

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads „ Iron } Bulkheads, No. Four Thickness of 6/16 6/16  
Hawse Timbers „ Iron } are they free from defects? Three extend to upper Deck  
„ „ how secured to the sides of the ship Double frames & Broad beam

The Frames or Ribs extend in one length from Keel to Gumwater rivetted through plates with ( $\frac{3}{4}$  in.) rivets, about (6 ins) apart.

The reverse angle irons on the floors extend in one length across the middle line from top of spirit holding plate on one side to L<sup>g</sup> on the  
 " " " on the frames " " " from Gumwale to Gumwale other side

Keelson, how are the various lengths of plates or angle irons connected? Butt straps double rivetted

Plates, Garboard, double ~~or single~~ rivetted to keel & at upper edge, with rivets ( $1/10 \frac{3}{4}$  ins.) diameter averaging ( $4 \frac{3}{4}$  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  $\frac{3}{4}$  in. diameter, averaging  $2\frac{3}{4}$  ins.) from centre to centre of rivets.

„ Butts from Keel to turn of bilge, worked carvel with a lining piece ( $\frac{9}{16}$ ) thick, double ~~or single~~ rivetted; rivets ( $\frac{3}{4}$  in.) diameter, averaging ( $2\frac{1}{2}$  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 planksheer, worked ~~carvel with a lining piece~~ <sup>Chucker</sup> ( ) thick, ~~double or single~~ rivetted; rivets ( $\frac{3}{4}$  in.) diameter, averaging ( $\frac{3}{4}$  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  $(\frac{8}{16})$  thick, ~~or cloncher~~, double ~~or single~~ rivetted, rivets  $(\frac{3}{4})$  in.) diameter averaging  $(2\frac{1}{2})$  ins.) from centre to centre of rivets. Breadth of laps in double rivetting  $(\frac{4}{4})$  Breadth of laps in single rivetting  $(2\frac{3}{4})$

Planksheer, how secured to the plating of the sides { Explain by sketch, } See Section  
Waterway „ „ planksheer and to the Beams { if necessary. }

Side trussing ☒ breadth and thickness of plates ☒ how secured? ☒

Deck trussing *Diagonal* " " " " *Sand Pairs 10' x 8' 1/6"*

Deck Beams, how secured to the side? Welded three plates rivetted to Frames in the six points  
Hold or Lower Deck,, Do Do Do

No. of breasthooks Five crutches Four how are pointers compensated? Left stringer connected to paddle

What description of iron is used for the angle iron and plate iron in the vessel? *Scotty Bridge Iron* *Builder's Signature*  
*Hawkeye Crawshaw of Son Angle Iron* *John Wren's*

120N6374-0046

1844



3616 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? None except the upper and lower edges of 13 butts

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

N <sup>o</sup> .		CABLES, &c.		ANCHORS, and their weights.	
		<u>Certificates produced</u>	Fathoms. Inches.	<u>Certificates produced</u>	N <sup>o</sup> . Weight.
/	Fore Sails,	Chain <u>tested to 34 tons</u>	240 13/8	Bower, <u>Testimonial Patent</u>	1 19' 1" 7
/	Fore Top Sails,	Hempen Stream Cable	90 4	Stream,	1 15' 0" 7
/	Fore Topmast Stay Sails,	Hawser	60 1		
/	Main Sails,	Towlines	90 9		
/	Main Top Sails,	Warp	90 5 3/4	Kedge,	1 3' 3" 0
and <u>others as usual</u>		All of <u>good</u> quality.			1 2' 0" 0

Her Standing and Running Rigging Wire & Hemp sufficient in size and good in quality.  
She has One Long Boat and Four others

The present state of the Windlass is efficient Capstan B.W. and Rudder and Pumps efficient

**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 Specially Surveyed
  - 2nd. On the plating during the progress of rivetting
  - 3rd. When the beams were in and fastened, and before the decks were laid from 3<sup>rd</sup> July 1863. to
  - 4th. When the ship was complete, and before the plating was finally coated 11<sup>th</sup> May 1864.
  - 5th. After the ship was launched

Request Note for Special Survey N<sup>o</sup> 107 - 25<sup>th</sup> June 1863.

In what manner are the surfaces preserved from oxidation? Red and Colored Paints four coats outside. Cemented in the Bottoms to Bilges with Portland Cement and Coated with Red Lead above  
I am of opinion this Vessel should be classed A.1.

The amount of the Fee .....£ 5: 0: 0 is received by me,

May 1864 Special .....£ 31: 13: 0

Certificate (if required) .....£ 36: 13: 0

Committee's Minute 20<sup>th</sup> May 1864

Character assigned A.1.

Edwin Bouchman

I concur in the above recommendation

M.C. 19 May 1864  
Please send Certificate to the Ship at Southampton addressed to the Owner.

