

Composed by
IRON SURVEY

No. 3533

Rev. 6/4/64

No. 18639 Survey held at Liverpool Date Sept 19/63 March 30th 1864
 on the Ship Van Cappellen Master Sewell
 Tonnage Gross 834 $\frac{9}{100}$ Engine Room Register 834 $\frac{9}{100}$ Built at Liverpool
 When Built 1863 1/864 By whom built J. W. Vernon & Son Owners Sandback & Guinea
 Port belonging to Liverpool Destined Voyage Australia
 If Surveyed Afloat or in Dry Dock Whilst building under Special Survey.

Length aloft	Feet.	Inches	Extreme Breadth	Feet.	Inches	Depth from top of Upper Deck	Feet.	Inches	Power of Engines	Horse No.					
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.			
Floors, Size of Angle Iron, and No. / at bottom of Floor Plate	4 $\frac{1}{2}$	3	8 $\frac{1}{16}$	4 $\frac{1}{2}$	3	8 $\frac{1}{16}$	21	21	Stem, if bar iron, moulding and thickness	8	2 $\frac{3}{4}$	7 $\frac{1}{2}$	3		
" depth and thickness of Floor Plate at mid line	21	9 $\frac{1}{16}$	9 $\frac{1}{16}$	20 $\frac{3}{4}$	9 $\frac{1}{16}$	9 $\frac{1}{16}$			" plate iron, breadth and thickness	-	-	-	-		
" depth and thickness of Floor Plate at Bilge Keelson	15	-	-	-	-	-			Stern-post, if bar iron, moulding and thickness	8	2 $\frac{3}{4}$	7 $\frac{1}{2}$	3		
" Size of Reversed Angle Iron, and No. / at top of Floor Plate	3	3	7 $\frac{1}{16}$	3	3	7 $\frac{1}{16}$			" plate iron, breadth and thickness	-	-	-	-		
Frames, Size of Angle Iron, single or double Reversed Iron, & to every frame	4 $\frac{1}{2}$	3	8 $\frac{1}{16}$	4 $\frac{1}{2}$	3	8 $\frac{1}{16}$			Keel, if bar iron, depth and thickness	8	2 $\frac{3}{4}$	7 $\frac{1}{2}$	3		
Beams, Deck (N°. 52) double Angle Iron	8	8 $\frac{1}{16}$		7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$			" plate iron, breadth and thickness	-	-	-	-		
Excluding Hold Beams & Bulb Iron with double Angle & Nut Wheat Iron on top	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Garboard Plates, thickness	2 $\frac{1}{2}$ 10 in	12 $\frac{1}{16}$ full	12 $\frac{1}{16}$			
" depth & thickness of plate amidships	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			From Garboard to upper part of Bilge	11 $\frac{1}{16}$	11 $\frac{1}{16}$	Ends			
" double or single Angle Iron, bottom edge	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			From upper part of Bilge to Sheerstrakes	10 $\frac{1}{16}$ - 10 $\frac{1}{16}$ - 9 $\frac{1}{16}$	10 $\frac{1}{16}$ 9 $\frac{1}{16}$	8 $\frac{1}{16}$			
" average space between	3 $\frac{1}{2}$ 6	-	-	3 $\frac{1}{2}$ 6	-	-			Sheerstrakes	2 $\frac{1}{2}$ 8 in wide	11 $\frac{1}{16}$ 11 $\frac{1}{16}$	-	1 $\frac{1}{16}$		
" Keel (N°.) sided & mounted	-	-	-	-	-	-			Breadth & thickness of Butt Straps to outside plating	9 $\frac{1}{2}$	10 $\frac{1}{2}$ - 21 in	14 $\frac{1}{16}$ 11 $\frac{1}{16}$ - 11 $\frac{1}{16}$ - 9 $\frac{1}{16}$			
Hold, or Lower Deck (N°. 49)	8	8 $\frac{1}{16}$		7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$			Plankshears	None					
Hold Beams & Bulb Iron with double Angle Iron on top	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Gunwale Plate or Stringer on ends of Up. Dk Beams	3 $\frac{1}{2}$ 9 $\frac{1}{16}$	2 $\frac{1}{2}$ 8 $\frac{1}{16}$	9 $\frac{1}{16}$			
" depth & thickness of plate amidships	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Angle Iron on ditto	14	8 $\frac{1}{16}$				
" double or single Angle Iron, bottom edge	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Waterway	5	4 - 9 $\frac{1}{16}$	5 - 4 - 8 $\frac{1}{16}$			
" average space between	3 $\frac{1}{2}$ 6	-	-	3 $\frac{1}{2}$ 6	-	-			Deck	4		3 $\frac{1}{2}$			
" Keel (N°.) sided & mounted	-	-	-	-	-	-			Ceiling in Hold	2 $\frac{1}{2}$					
Hold, or Lower Deck (N°. 49)	8	8 $\frac{1}{16}$		7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$			Ceiling betwixt Decks	None					
Hold Beams & Bulb Iron with double Angle Iron on top	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Beam Clamps	-					
" depth & thickness of plate amidships	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			" Shelf	-					
" double or single Angle Iron, bottom edge	2 $\frac{3}{4}$	3	6 $\frac{1}{16}$	2 $\frac{1}{4}$	3	6 $\frac{1}{16}$			Stringer Plates on ends of Hold or Lower Dk Beams	-					
" average space between	3 $\frac{1}{2}$ 6	-	-	3 $\frac{1}{2}$ 6	-	-			Ceiling between Decks	-					
" Keel (N°.) sided & mounted	-	-	-	-	-	-			Stringer or Tie Plates outside Hatchways	-					
Rabbets, Keel, sided and mounted										Deck Beam Clamps	-				
Keel, sided and mounted, iron, size of plate, Box , give sketch & dimensions										" Shelf	-				
Side or Bilge ... Intercostal plate	18 $\frac{1}{2}$ 9 $\frac{1}{16}$									Stringers in Hold	6	6 $\frac{1}{16}$	5	4 - 8 $\frac{1}{16}$	
Number										Deck, Lower	5	4	5	4 - 8 $\frac{1}{16}$	
Transoms, material	None									Deck, Upper, how fastened to Beams	5	4	5	4 - 8 $\frac{1}{16}$	
Knight-heads	None														
Hawse Timbers	None														

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

Knight-heads None are they free from defects? Bulkheads, N°. 2 to Upper deck Thickness of 6 $\frac{1}{16}$

Hawse Timbers None how secured to the sides of the ship Single Rib & knee plates

" size of vertical angle iron and their distance apart 3 \times 3 - 7 $\frac{1}{16}$ - 2 - 6

The Frames or Ribs extend in one length from Keel to Gunwale riveted through plates with 7/8 in. rivets, about (7) apart.

The reverse angle irons on the floors extend in one length across the middle line from flat of bilge to above the bilge on the opposite side

" " " on the frames " " " from bilge to above the bilge on the opposite side

Keelson, how are the various lengths of plates or angle irons connected? Butt Stays

Plates, Garboard, double ~~single~~ riveted to keel & at upper edge, with rivets (7/8 ins.) diameter averaging (3 $\frac{1}{2}$ 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 riveted; rivets (7/8 in.) diameter, averaging (3 $\frac{1}{2}$ ins.) from centre to centre of rivets.

" Butts from Keel to turn of bilge, worked carvel with a lining piece (10 $\frac{1}{2}$ x 7/8) thick, double ~~or~~ single riveted; rivets (7/8 in.) diameter, averaging (3 $\frac{1}{2}$ ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the stave below? Yes in alternate staves

" Edges from bilge to plankshears, worked ~~carvel with a lining piece~~ () thick, double ~~or~~ single riveted; rivets (7/8 in.) diameter, averaging (3 $\frac{1}{2}$ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the stave below? Yes in alternate staves

" Butts from bilge to plankshears, worked carvel with a lining piece (10 $\frac{1}{2}$ x 7/8 - 21 - 11 $\frac{1}{2}$ - 10 $\frac{1}{2}$ - 11 $\frac{1}{2}$) thick, or clencher, double ~~or~~ single riveted; rivets (7/8 in.) diameter, averaging (3 $\frac{1}{2}$ ins.) from centre to centre of rivets. Breadth of laps in double rivetting (5) Board back lap in single riveting ()

Plankshears, how secured to the plating of the sides Explain by sketch, { None - See Sketch on the other side

Waterway " plankshears and to the Beams if necessary.

Side trussing " breadth and thickness of plates " how secured? None

Deck trussing 11 $\frac{1}{2}$ 4 $\frac{1}{16}$ " " 9 $\frac{1}{16}$ " " ? 6 Pairs of diagonal tie plates on both decks.

Deck Beams, how secured to the side? Riveted to Frames and Stringer plates.

Hold or Lower Deck " Riveted to Frames and Stringer plates.

Keelson, Stringer plates & Rib feet connected

No. of breasthooks " crutches " how are pointers compensated? Keelers, Stringer plates & Rib feet connected

What description of iron is used for the angle iron and plate iron in the vessel? Keelers, Stringer plates & Rib feet connected

Builder's Signature Thomas Vernon & Sons Ltd. 1864

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Workmanship. Are the lands or laps of the edges and butts, ~~well made~~ ~~and have holes the~~ breadth at least five times the diameter of the rivets in double riveted edges of the carvel work and of the butts fay together throughout their length without requiring any making good of deficiencies? Well fitted

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? 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? open in butts only.

Lower Masts, Bowports & Lower Yards
Her Masts, Yards, &c., are in fair condition, and sufficient in size and length.

She has SAILS.

N°.

Fore Sails,
Fore Top Sails,
Fore Topmast Stay Sails,
Main Sails,
Main Top Sails,

and

Wind & Tack
Her Standing and Running Rigging

are sufficient in size and good in quality.

She has one Long Boat and three others

The present state of the Windlass is greenhead Capstan 292 ft and Rudder good Pumps three

CABLES, &c.		No. 281+286	
Murray's Patent	Admiralty List	inches.	inches.
Chain	47½ fms Stream	360	15/8
Hempen Stream Cable	75	9	
Hawser	Murray's Patent	81	14/16
Towlines	18 fms Stream	90	9
Warp	76 1/8	90	6
All of	good		

ANCHORS, and their weights.

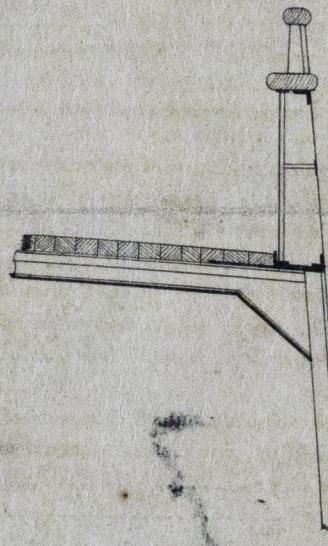
Murray's Patent	Admiralty List	N°.	Weight.
Bower, ♂	Johnstone's Patent	3	30-0-12
"	"	3	30-1-0
"	"	✓	29-8-10
Stream, "	Cutter No. 222	1	9-2-20
Kedge, "	"	2	4-8-20
"	"	2	3-8-16

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
 - 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

During her construction

The Upper Deck runs to within 8 feet from the Sternpost, has a half deck overlapping Main Deck 35 feet, 4 ft 6 in high at the sides of Ship and forming a deck house in the centre.



The upper deck strakes is much wider than required, and has a doubling plate 14 in by 8/16 extending about 130 feet in the ship body, the butts double and treble riveted. The Intercostal Nelson plate 18x9/16 at the wings, also the Bulk Iron 6x6/8 between the double angle iron strakes in lower hold are in except of the Rules. Butt Straps of Sheerstrakes take the frames abeam and before the butts. Pieces of Rib Angle Iron extend across the middle line riveted through the Garboardstrakes, floor plates and frames.

There are 6 pairs of diagonal tie plates on both decks. She is in my opinion entitled to be classed as stated below

Lower Masts & Bowports
Plates 7/16 & 9/16
at head 9/16
3 angles 3x3-7/16

Lower Yards
Plates 6/16 & 7/16
2 angles 2x2-5/16

In what manner are the surfaces preserved from oxidation? Rustpaint & cement.

I am of opinion this Vessel should be classed A 1

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

AMM Special £ 41. 15. 4/4/64

Certificate of required £ Leates

Senhouse Martindale

Committee's Minute April 5th April 1864

Character assigned A 1

*Built under S.S.
(A.C.P.)*



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