

# IRON SHIP.

No. 12020 Survey held at South Shields Date, First Survey 12<sup>th</sup> February Last Survey 14 July 1877

On the S.S. "Virginia Schillegi" Yard Number 85 Master J. Anderson

TONNAGE under Deck 1040.37 ONE, OR TWO DECKED, THREE DECKED VESSEL.

Ditto of Third, Spar, or Awning Deck

Ditto of Reop, or Raised Qr. Dk. 112.50

Ditto of Houses on Deck 23.61

Ditto of Forecastle 45.56

Gross Tonnage 1290.04

Less Crew Space 55.95

Less Engine Room 412.81

Register Tonnage 821.28

as cut on Beam

~~SPAR, OR AWNING DECKED VESSEL.~~

HALF BREADTH (moulded) 16.0

DEPTH from upper part of Keel to top of Upper Deck Beams 19.4

GIRTH of Half Midship Frame (as per Rule) 31.9

1st NUMBER 673

1st NUMBER, if a THREE DECKED VESSEL

deduct 7 feet

LENGTH 254

2nd NUMBER 17094

PROPORTIONS—Breadths to Length 7.9

Depths to Length—Upper Deck to Keel 12.9

Main Deck ditto

Built at South Shields

When built 1870 Launched 1870

By whom built Messrs. Handhead, Lupton

Owners Messrs. H. C. Hartman & Co.

Port belonging to London

Destined Voyage Alexandria

If Surveyed while Building, Afloat, or in Dry Dock.

while building & afloat.

LENGTH on deck as per Rule 254 Breadth Moulded 32 DEPTH top of Floors to Upper Deck Beams 18 Power of Engines 150 No. of Decks with flat laid 2 No. of Tiers of Beams 2

Dimensions of Ship per Register, length, 254 breadth, 32 depth, 17.8

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
KEEL, depth and thickness	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2				
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2						
STERN-POST for Rudder do. do.	3 8 1/2 x 5	3 8 1/2 x 5						
for Propeller	24	24						
Distance of Frames from moulding edge to moulding edge, all fore and aft								
FRAMES, Angle Iron, for 3/4 length amidships	4 x 3 7/8	4 x 3 7/8	4 x 3 7/8	4 x 3 7/8				
Do. for 1/2 at each end	4 x 3 7/8	4 x 3 7/8						
REVERSED FRAMES, Angle Iron	3 x 3 6	3 x 3 6						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	19 x 8	19 x 8						
thickness at the ends of vessel	7	7						
depth at 3/4 the half-bdth. as per Rule	9 1/2	9 1/2						
height extended at the Bilges	30	30						
BEAMS, Upper, Spar, or Awning Deck	8 x 8	8 x 8						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3 6	3 x 3 6						
Single or double Angle Iron on Upper edge	on alternate frames							
Average space								
BEAMS, Main or Middle Deck								
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron								
Single, or double Angle Iron, on Upper Edge								
Average space								
BEAMS, Lower Deck, Hold or Orlop								
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 8	8 x 8						
Single or double Angle Iron on Upper Edge	3 x 3 6	3 x 3 6						
Average space	on alternate frames							
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	16 x 12	16 x 12						
" Rider Plate	9 x 10	9 x 10						
" Bulb Plate to Intercostal Keelson	5 x 4 9	5 x 4 9						
" Angle Irons	23 x 8	23 x 8						
" Double Angle Iron Side Keelson	5 x 4 9	5 x 4 9						
" Side Intercostal Plate	5 x 4 9	5 x 4 9						
" do. Angle Irons	3 1/2 x 3 1/2	3 1/2 x 3 1/2						
" Attached to outside plating with angle iron								
BILGE Angle Irons	5 x 4 9	5 x 4 9						
" do. Bulb Iron	8 x 8	8 x 8						
" do. Intercostal plates riveted to plating for length								
BILGE STRINGER Angle Irons	5 x 4 9	5 x 4 9						
Intercostal plates riveted to plating for length								
SIDE STRINGER Angle Irons	5 x 4 9	5 x 4 9						

	Inches in Ship	16ths in Ship	Inches required	16ths required
Flat Keel Plates, breadth and thickness	36	11	36	11
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	36	14	36	14
fm up. part of Bilge to lr. edge of Sh'rstrake	9		9	
Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn to Up or Spar Dk. Sh'rstrake	36	14	36	14
Up or Spar Dk. Sh'rstrake, breadth & thickness	9 3/4	9 15/16	9 3/4	9 15/16
Butt Straps to outside plating, breadth & thickness	5		5	
Lengths of Plating	2		2	
Shifts of Plating, and Stringers				
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	57	11	57	11
Angle Iron on ditto	57 4 x 9		57 4 x 9	
Tie Plates fore and aft, outside Hatchways	12	10	12	10
Diagonal Tie Plates on Beams No. of Pairs				
Planksheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.				
How fastened to Beams				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
In the Stringer Plate attached to the outside plating				
Angle Irons on ditto No.				
Tie Plates, outside Hatchways				
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	24	9	24	9
Is the Stringer Plate attached to the outside plating?	yes			
Angle Irons on ditto, No.	4 x 4 x 9		4 x 4 x 9	
Stringer or Tie Plates, outside Hatchways	57 4 x 9		57 4 x 9	
Flat of Lower Deck				
Ceiling between Decks, thickness and material				
in hold do. do.				
Main piece of Rudder, diameter at head	6 3/4		6	
do. at heel	3 1/4		3 1/4	
Can the Rudder be unshipped afloat?	yes			
Bulkheads No. 4 Thickness of	6 1/16			
Height up	upper deck			
How secured to sides of ship	by double frames			
Size of Vertical Angle Irons	3 1/2 x 7/8			
and distance apart	30 ins.			
Are the outside Plates doubled two spaces of Frames in length?	yes			

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Iron Patent Pall Bitt Iron

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to H.B.S.A.I. and to gunwale alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? yes And butts properly shifted? yes.

PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/6 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double & single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Breadth of laps of plating in double riveting 4 1/2 & 5 1/4 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double riveted

Waterway, how secured to Beams iron gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? welded keels riveted No. of Breasthooks, 5 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? see back of report

Manufacturer's name or trade mark, see back report

The above is a correct description.

Builder's Signature, Handhead, Lupton & Co. Surveyor's Signature, R. P. Webb.

Are the butts of plating planed or otherwise fitted? *planed* From 11034  
 to the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *yes*  
 Are the fillings between the ribs and plates solid single pieces? *yes*  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *fairly so.*  
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*  
 Do any rivets break into or through the seams or butts of the plating? *a few*

Masts, Bowsprit, Yards, &c., are *wood* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.  
 State also Length and Diameter of Lower Masts and Bowsprit *✓*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
SAILS.	CABLES, &c.	270	1 1/16	47.10.0.0	1 1/16	47.10.0.0	Bowers	3	25.1.7	25.14.0.21	25.2.0	25.3.0.0
	Chain								25.2.16	25.8.0.14	25.2.0	
	Fore Sails,								21.0.0	21.14.0.14	21.2.0	22.2.0.0
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,											
CABLES, &c.	Hempen Stream	80	1		1		Stream	1	10.2.0		10.2.0	
	Cable	90	10		10							
	Hawser	90	6 1/2									
Towlines		80	6									
	Warp	60	5 1/2									
Kedges		60	4						5.2.14		5.1.0	
									2.3.4		2.3.0	

Standing and Running Rigging *heav* sufficient in size and *good* in quality. She has *2* Life Long Boats and *2* others.  
 The Windlass is *hand patent* Capstan *good* and Rudder *good* Pumps *good and sufficient*  
 Engine Room Skylights.—How constructed? *Solid shutters & bulwarks* How secured in ordinary weather? *lotted down*  
 What arrangements for deadlights in bad weather? *Fair sails*  
 Coal Bunker Openings.—How constructed? *Cast iron pipes* How are lids secured? *By bolts* Height above deck? *12"*  
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Six feet and mooring pipes on each side*  
 Cargo Hatchways.—How formed? *deep iron girders & baulks riveted together*  
 State size Main Hatch *20.0 x 10.0* Forehatch *8.0 x 8.0* Quarterhatch *16.0 x 10.0*  
 If of extraordinary size, state how framed and secured? *ordinary size*  
 What arrangement for shifting beams? *one cross plate beam 25 x 7 1/16 with double angles top & bottom*  
 Hatches, If strong and efficient? *Yes.*

Order for Special Survey No. *871* DATES of  
 Date *22 Nov 1871* Surveys held  
 Order for Ordinary Survey No. *5* while building  
 Date *—* as per  
 No. *85* in builder's yard. Section 18.

General Remarks, *This is a two decked vessel, with a top gallant fore-castle 36 feet long, and a Raised Quarter deck 96 feet long, the stringer plate running through three spaces of frames with double angle iron in it going to seven spaces, whilst the sheet-plate is doubled here for two plates in length, and the bulwark plates are worked 1/16 thick. She is fitted with water ballast tanks, top plating 6/16 thick, before and aft abate the engine room, the fore one being 68 feet long, and the after one 64 feet long.*  
*Manufacturers of Iron.*  
 The frames from Messrs Frayer, Roberts & Co.  
 The beams and stringer bars from S. Tappack & Co.  
 The middle line, & bulkheads from Messrs Bolton, Vaughan & Co.  
 The shell plating from Messrs Bolton, Vaughan & Co.; the Park Gate hardware, and from the Northpool Malleable Iron Co.

State if one, two or three decked vessel, or if spar or cuning decked, and lengths of poop, fore-castle or raised quarter deck, or of double or part double bottom.  
 How are the surfaces preserved from oxidation? Inside *By Parkgate cement & paint* Outside *By paint & cuprous iron*

I am of opinion this Vessel should be Classed *100 A.I. and marked "part double bottom"* provided that the slight deficiency in the weight of the third bower anchor be deemed too trivial for delaying the figure I for stress.

The amount of the Entry Fee ... £ *5* ... is received by me,  
 Special Certificate ... £ *55* ...  
 Date *14 Feb 1873*  
 Signature *R. J. ...*

