

IRON SHIP.

No. 3095 Survey held at Whitehaven Date, First Survey 29 Dec^r 1875 Last Survey 28 September 1876

On the 13th "Ladstock" Master P. Graham

TONNAGE under } 808.14
 Tonnage Deck }
 Ditto of Third, Spar, }
 or Awning Decks }
 Ditto of Poop, or } 32.98
 Raised Qr. Dk. }
 Ditto of Houses } 13.48
 on Deck }
 Ditto of Fore and Aft } 2.22
 Gross Tonnage } 857.18
 Less Crew Space } 41.14
 Less Engine Room }
 Register Tonnage } 816.04
 as cut on Beam }

ONE, OR TWO DECKED, ~~THREE DECKED~~ VESSEL.
~~SPAR, OR AWNING DECKED VESSEL.~~
 HALF BREADTH (moulded) 16.0 Feet.
 DEPTH from upper part of Keel to top of Upper Deck Beams 21.5
 GIRTH of Half Midship Frame (as per Rule) 32.5
 1st NUMBER 40.0
 1st NUMBER of a ~~THREE DECKED~~ VESSEL.
 [deduct 7 feet]
 LENGTH 192.6
 2nd NUMBER 13482
 PROPORTIONS—Breathths to Length 6.02
 Depths to Length—Upper Deck to Keel 8.72
 Main Deck ditto

Built at Whitehaven
 When built 1876 Launched 6 Sept^r 1876
 By whom built Whitehaven Shipbuilding Co^{rs}
 Owners William Connelly & others, of Whitehaven
 Port belonging to Liverpool
 Destined Voyage Adrossan thence San Francisco
 If Surveyed while Building, Afloat, or in Dry Dock.
While Building. S. S. N. 246.

LENGTH on deck as per Rule . . . 192 Feet. 8 Inches. BREADTH Moulded . . . 32 Feet. 2 Inches. DEPTH top of Floors to Upper Deck Beams . . . 19 Feet. 8 1/2 Inches. Power of Engines No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 201 breadth, 32.2 depth, 19.5

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 x 2 3/8	8 x 2 3/8
STEM, moulding and thickness	8 x 2 3/8	7 1/4 x 2 1/8
STERN-POST for Rudder do. do.	8 x 2 3/8	7 1/4 x 2 3/8
Distance of Frames from moulding edge to moulding edge, all fore and aft	22 inches	23 inches (Class 100A)
FRAMES, Angle Iron, for 2/3 length amidships	4 1/2 x 3	4 1/2 x 3
Do. for 1/3 at each end	4 1/2 x 3	4 1/2 x 3
REVERSED FRAMES, Angle Iron	3 x 3	3 x 3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	2 1/2	2 1/2
thickness at the ends of vessel	8 1/2	8 1/2
depth at 2/3 the half-bath. as per Rule	10 3/4	10 3/4
height extended at the Bilges	4 1/2	4 3/8
BEAMS, Upper, Spar, or Awning Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8
Angle or double Angle Iron on Upper edge	3 x 3	3 x 3
Average space	44	46
BEAMS, Main, or Middle Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8
Angle or double Angle Iron on Upper Edge	3 x 3	3 x 3
Average space	44	46
BEAMS, Lower Deck, Hold, or Orlop Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	8	8
Angle or double Angle Iron on Upper Edge	3 x 3	3 x 3
Average space	44	46
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	14	14
" Rider Plate	10 3/4	11
" Bulb Plate to Intercoastal Keelson	5	5
" Angle Irons	5 3/2	5 3/2
" Double Angle Iron Side Keelson	5 3/2	5 3/2
" Side Intercoastal Plate	5 3/2	5 3/2
do. Angle Irons	5 3/2	5 3/2
Attached to outside plating with angle iron	5 3/2	5 3/2
Angle Irons	5 3/2	5 3/2
Bulb Iron	5 3/2	5 3/2
Intercoastal plates riveted to plating for length	5 3/2	5 3/2
Angle Irons	5 3/2	5 3/2
Attached to plating for length	5 3/2	5 3/2
Angle Irons	5 3/2	5 3/2

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	46	10	34	10
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	9		9	
10 Strake of doubling at Bilge, or increased thickness, and length applied	10			
fm up. part of Bilge to h. edge of Sh'rstrake	9 10		9	
Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake	4 1/2	12	36	11
Up. or Spar Dk Sh'rstrake, brdth & thickness	25 10	9 6	13 16 4 9 7 9 to 12	
Butt Straps to outside plating, breadth & thickness				
Lengths of Plating <u>See sketch of frames</u>				
Shifts of Plating, and Stringers <u>two spaces of frames</u>				
Gunwale Plate on ends of <u>Awning Spar</u> or Upper Deck Beams, breadth and thickness	36	9	36	9
Angle Iron on ditto	5 x 3 1/2	7	5 x 3 1/2	7
Tie Plates fore and aft, outside Hatchways	10	9	10	9
Diagonal Tie Plates on Beams No. of Pairs, 3	10	9		
Plankboer material and scantling				
Waterways do. do. <u>Iron gutter Cemented</u>				
Flat of Upper Deck do. do. <u>Yellow Pine</u>	4		3 1/2	
How fastened to Beams <u>Galvanized iron nuts & bolts</u>	8		8	
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Is 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 <u>Diagonals in way of Mast</u>	28	8	28	8
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. <u>2 at side</u>	13 x 3 1/2	8	5 x 3 1/2	8
Stringer or Tie Plates, outside Hatchways	10	9	10	9
Flat of Lower Deck	3			
Ceiling betwixt Decks, thickness and material	2 1/2	Pine battens		
in hold do. do. <u>2 1/2 Pine ceiling to upper part of bilge</u>				
Main piece of Rudder, diameter at head	5		5	
do. at heel	4 1/2		3	
Can the Rudder be unshipped afloat? <u>Yes</u>				
Bulkheads No. <u>1</u> Thickness of <u>1 1/2</u>				6
Height up to <u>Main deck</u>				
How secured to sides of ship <u>double framed</u>				
Size of Vertical Angle Irons <u>3 x 3 x 1/16</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				

Windlass Greenheart 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 from middle line to above hold beam stringer 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 1/8 in. diameter, averaging 5 1/2 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 1/2 ins. from centre

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

Butts of three Strakes at Bilge for half length, treble riveted with Butt Straps 7/16 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 1/2 ins. from

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 5 ins. from

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

Butts of Main Sheerstrake, treble riveted for entire length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for

Breadth of laps of plating in double riveting 4 1/2 x 5 1/4 Breadth of laps of plating in single riveting 3

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

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

Beams of the various Decks, how secured to the sides? Welded & nuts riveted to frames No. of Breasthooks, Stringers Crutches, at use

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angle iron & Beams from Stockton

Manufacturer's name or trade mark, Malleable iron Company, Keelson stringer & tie plates from West Cumberland Iron & Steel Works

The above is a correct description. Floors, Mast plates, Shell wall other plates from County.

Builder's Signature, Whitehaven Shipbuilding Co^{rs} Surveyor's Signature, J. W. Miles

James Orrison Surveyor to Lloyd's Register of British and Foreign Ships

IRON 168 0363

Workmanship. Are the butts of plating planed or otherwise fitted? *They are planed*
 Are the edges of the carvel ... 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? *yes*
 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 in the butts* 17139 Iron

Masts, Bowsprit, Yards, &c., are *all* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scanlings 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 *The Fore Mast, Main Mast, Mizzen Mast, Bowsprit, Fore & Main Yards, and the Fore & Main Lower Topmast Yards, are constructed of Iron, Sketch and dimensions herewith.*

NUMBER for EQUIPMENT	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.		No.	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Ru.
						Bowers	Stream					
14380	2705	1 1/16	57.5.0.0	2 1/2 of 1 1/16	47.10.0.0	3	27.3.4	25.16.3.0	25.2.0	25.3		
			41.15.0.0		66.10.0.0		27.2.24	25.18.3.0				
							23.3.5	23.12.3.0				
							99.7.5				12.3.0	
							11.0.2				10.2.0	
							5.2.2				5.1.0	
							2.3.1				2.3.0	

Standing and Running Rigging *Wire, Manilla, &c.* sufficient in size and *good* in quality. She has *4* Long Boats and
 The Windlass is *Good and Secure* Capstan *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights. How constructed? *How secured in ordinary weather?*

Coal Bunker Openings. How constructed? *How are lids secured?* *Height above deck?*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports in the bulwarks hung with hinges, and scuppers through sheerstrakes level with deck stringers.*

Cargo Hatchways. How formed? *Fore and aft Carlings & half beam, Iron Coverings & Wood Hatches.*
 State size Main Hatch *14'6" x 9'0"* Forehatch *7'0" x 6'0"* Quarterhatch *6'0" x 6'0"*

If of extraordinary size, state how framed and secured? *A web plate athwartships at middle of Main hatchway*

What arrangement for shifting beams? *They are*

Order for Special Survey No.	Date	Ordinary Survey No.	Date	No. in builder's yard.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.	
246	15 February 1876			30		On the several parts of the frame, when in place, and before the plating was wrought	1875, Dec 29, 1876, Jan 4, 12, 14, 19, 27, 31, Feb 2, 4, 8, 10, 12, 15, 17,	26, 29, March 2, 9, 11, 15, 20, 22, 27, 30, April 4, 7, 13, 15, 20, 22, 28, May	5, 6, 9, 15, 17, 19, 22, 27, 30, June 1, 5, 7, 10, 13, 15, 19, 21, 23, 24, 27,	July 5, 10, 11, 13, 14, 17, 21, 25, 28, August 1, 5, 8, 12, 15, 17, 19, 21, 24,	25, 29, 31, September 2, 4, 5, 16, 18, 21, 23, 25, 27, 28.

General Remarks (State quality of workmanship, &c.) *Built under Special Survey and see*

The edges of the outside strakes of plating and the whole of the butts are planed and the general quality of the workmanship good.

This vessel has a raised quarter deck extending 36'6" before the sternpost, and a fore-castle deck 26'6"; a deck house erected between the fore mast and the mid 5'6" x 12'0" constructed of Iron, and the beams plated away of the galley.
Efficient Porting beams and stringers are fitted forward.

Efficient Porting beams and stringers are fitted forward.

the surfaces preserved from oxidation? Inside *Portland Cement to ridges of Paint* Outside *Outside of Iron & other Paint*

in this Vessel should be Classed *100 A 1*

at of the Entry Fee ... £ 5: - : is received by me, *J. W. Niles*
 Special ... £ 42: 1: *14 October 1876*
 Certificate ... : : *J. W. Niles*

Committee's Minute *20th October 1876*

Character assigned *100 A 1*

