

IRON SHIP.

No. 4494 Survey held at Stockton Date, First Survey 15th Decr 1874 Last Survey 6th July 1875

On the Iron Ship "Albion" Master Shawley Evans

TONNAGE under Tonnage Deck 1061.85
 Ditto of Third, Spar, or Awning Deck 0
 Ditto of Poop, or raised Or. Dk. 0
 Ditto of Houses on Deck 34.99
 Ditto of Forecastle 24.66
 Gross Tonnage 1121.50
 Less Crew 33.85
 Less Engine Room 0
 Register Tonnage as cut on Beam 1087.65

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 17.6
 DEPTH from upper part of Keel to top of Upper Deck Beams 23.9
 GIRTH of Half Midship Frame (as per Rule) 36.6
 1st NUMBER 77.9
 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] —
 LENGTH 198.45
 2nd NUMBER 15452
 PROPORTIONS—Breadths to Length Under 6
 Depths to Length—Upper Deck to Keel Under 9
 Main Deck ditto —

Built at Stockton
 When built 1874-75 Laid down 5th June
 By whom built Richardson & Co.
 Owners Copper & Alexander & Co.
 Port belonging to Cardiff
 Destined Voyage Hutchins
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 198.9 BREADTH Moulded 35.1 DEPTH top of Floors to Upper Deck Beams 21.9 Power of Engines — Horse. — No. of Decks with flat laid Two No. of Tiers of Beams Five

Dimensions of Ship per Register, length 206.5 breadth 35.1 depth 21.8

	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	8 x 2 3/8	8 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8
STEM, moulding and thickness	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8
STERN-POST for Rudder do. do. for Propeller	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8	7 1/2 x 2 3/8
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	23	23	23	23	23	23	23
FRAMES, Angle Iron, for 1/2 length amidships	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3
Do. for 1/2 at each end	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3
REVERSED FRAMES, Angle Iron	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16
thickness at the ends of vessel	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16	24 x 7/16
depth at 1/2 the half-bath, as per Rule	12	12	12	12	12	12	12	12
height extended at the Bilges	48	48	48	48	48	48	48	48
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16	8 x 8/16
Single or double Angle Iron on Upper edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16
Single, or double Angle Iron, on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16	8 1/2 x 8/16
Single or double Angle Iron on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
KEELSONS Centre line, single or double plate, box, or intercostal, plates	15 x 11/16	15 x 11/16	15 x 11/16	15 x 11/16	15 x 11/16	15 x 11/16	15 x 11/16	15 x 11/16
Rider Plate	11 x 11/16	11 x 11/16	11 x 11/16	11 x 11/16	11 x 11/16	11 x 11/16	11 x 11/16	11 x 11/16
Bulb Plate to Intercostal Keelson	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Double Angle Iron Side Keelson	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Side Intercostal Plate	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
do. Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Attached to outside plating with angle iron	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3
BILGE Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
do. Bulb Iron	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
do. Intercostal plates riveted to plating for length	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
BILGE STRINGER Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Intercostal plates riveted to plating for length	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
SIDE STRINGER Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
Flat Keel Plates, breadth and thickness	34	11/16	30	11/16
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	9 1/6	19/16	9 1/6	19/16
fin up. part of Bilge to Ir. edge of Sh'rstrake	9 1/6	19/16	9 1/6	19/16
Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	36	11/16	36	11/16
Up. or Spar Dk Sh'rstrake, breadth & thickness	14 1/4	9 3/4 x 9/16	14 1/4	9 3/4 x 9/16
Butt Straps to outside plating, breadth & thickness	115	115	115	115
Lengths of Plating	46	46	46	46
Shifts of Plating, and Stringers	30	9/16	28	9/16
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16	5 x 3 1/2 x 8/16
Angle Iron on ditto	12	9/16	9	9/16
Tie Plates fore and aft, outside Hatchways	12	9/16	9	9/16
Diagonal Tie Plates on Beams No. of Pairs	12	9/16	9	9/16
Planksheer material and scantling	9	9	9	9
Waterways do. do.	3 1/2	9/16	3 1/2	9/16
Flat of Upper Deck do. do.	1/2	9/16	1/2	9/16
How fastened to Beams	30	8/16	26	9/16
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	30	8/16	26	9/16
Is the Stringer Plate attached to the outside plating?	yes	yes	yes	yes
Angle Irons on ditto, No. 2	3 1/2 x 3 1/2 x 9/16	3 1/2 x 3 1/2 x 9/16	3 1/2 x 3 1/2 x 9/16	3 1/2 x 3 1/2 x 9/16
Stringer or Tie Plates, outside Hatchways	12	9/16	9	9/16
Flat of Lower Deck do.	2 1/2	9/16	2 1/2	9/16
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2	9/16	2 1/2	9/16
Main piece of Rudder, diameter at head do. at heel	3	3	3	3
Can the Rudder be unshipped afloat?	yes	yes	yes	yes
Bulkheads No. One Thickness of	6 1/4	6 1/4	6 1/4	6 1/4
Height up	Main Deck	Main Deck	Main Deck	Main Deck

Transoms, material. Knight-heads. Hawse Timbers. Plates & Angles
 Windlass Iron. Patent. Pall Bitt Iron

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

The REVERSED ANGLE IRONS on floors and frames extend Across middle line to Gunwale and to — 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 1/8 in. diameter, averaging 5 1/8 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 2 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 3/8 ins. from centre to centre.

Butts of Three Strakes at Bilge for Half length, treble riveted with Butt Straps 1 1/16 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 3/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 3/8 ins. from cr. to cr.

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

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

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

Breadth of laps of plating in double riveting 5 in Breadth of laps of plating in single riveting —

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

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

Beams of the various Decks, how secured to the sides? Knees turned & welded No. of Breasthooks, Four Crutches, Three

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

Manufacturer's name or trade mark, Hopkins & Co. Bowfield & Co.

The above is a correct description.

Builder's Signature, Richardson & Co. Surveyor's Signature, —

Surveyor to Lloyd's Register of British and Foreign Shipping.

See Vessel's Log Nov 6th 1874 Nov 17th Dec 1874

Workmanship. Are the butts of plating planed or otherwise fitted? Planed
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good? Yes
Are the fillings between the ribs and plates solid single pieces? Solid Single Pieces.
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 butts.

Masts, Bowsprit, Yards, &c., are Good Wood in Good condition, and sufficient in size and length
Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are
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 Main Mast length 80ft 3 1/2 diam 3 1/2
Angles 4 x 3 x 7/16 Foremast length 44ft 7 inches diam 2 1/2 Plating 5/16
Mizzen Mast 72ft 4 in long diam 2 1/2 plating 5/16 & 7/16 Angles 3 1/2
4 1/2 long diam 2 1/2 plating 5/16 & 7/16 Ang. 3 1/2 x 3 x 7/16 Seams single butts double & riveted

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate	Length & Size req'd per Rule	ANCHORS.	No.	Weight Ex. Stock	Test per Certificate
16482		270	1 1/2	55	2 1/2 x 1 1/2	Bowers	3	30.5	29.6
Chain		90	1 1/2	...	90 x 1 1/2			30.2	29.0
SAILS.								26.2	26.1
Fore Sails,									
Fore Top Sails,									
Fore Topmast Stay Sails									
Main Sails,									
Main Top Sails,									
CABLES, &c.									
Hawser ...		90	9	...	90 x 9 1/2				
Towlines ...		90	10	...	90 x 5 1/2				
Warp quality <u>Good</u>		90	5 1/2				

Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has 2 Life Long Boats and 2 Cutters & 1 Dingy.
The Windlass is Iron Emerson's Patent. Capstan Iron and Rudder Efficient Pumps Two 6 inch & Two 4 inch

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

What arrangements for deadlights in bad 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? Four Ports and four Scuppers on each side.

Cargo Hatchways.—How formed? Comings Plates 2 1/2 x 7/16 Angles 3 1/2 x 3 x 7/16
State size Main Hatch 15 feet x 8 feet Forehatch 6 feet x 6 feet Quarterhatch 7 feet x 6 feet 6 inches

If of extraordinary size, state how framed and secured? What arrangement for shifting beams? Two Fore and Afters to Main Hatch.

Hatches, If strong and efficient? Strong and efficient.

Order for Special Survey No. <u>523</u>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<u>Special Surveys taken 15th 17th 18th 20th 22nd 24th 26th 28th 30th 1874</u>
Date <u>16 Sept 1874</u>		2nd. On the plating during the process of riveting	<u>January 7th 13. 19. 22. 24. 29th 1875. Feb 1st</u>
Order for Ordinary Survey No. <u>-</u>		3rd. When the beams were in and fastened, and before the decks were laid	<u>10th 11. 17. 22. March. 8. 11. 15. 26. April. 4. 15</u>
Date <u>-</u>		4th. When the ship was complete, and before the plating was finally coated or cemented	<u>26. 27. 29th May 3. 6. 27. 29th June 2. 4. 7</u>
No. <u>209</u> in builder's yard.		5th. After the ship was launched and equipped	<u>11. 14. 16. 18. 22. 25. 29th July 1st 8th 1875</u>

General Remarks (State quality of workmanship, &c.) This Vessel is built with a forecabin 30 feet long frames extending to the top. Beams built Iron 6 1/2 x 7/16 with angles 2 1/2 x 2 1/2 x 7/16 Stringers plated on to 2 1/2 x 7/16 Tie plates 9 x 7/16 Deck 3 inch Yellow Pine, Outside plating 5/16. She has a Deck House aft and one forward 31 feet long frames Angles 3 x 2 1/2 x 7/16 with diagonal stay plates at ends; She has two panting stays or Beams in fore peak and one on the second frame abaft the collision bulkhead fitted and rivetted to Angle Iron Stringers.

The whole of the material used in the construction of this Vessel appears to be of the best quality, and the Workmanship very good.

Richardson Dicks & Co
State of two, or three, decked vessel, or if open, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside Coated with Oxide & Paint Outside Paint and Tallow
In my opinion this Vessel should be Classed 100 A.S.

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, 1874
Special ... £ 52 : 3 : 6 14 July 1875
Certificate ...
(Travelling Expenses, if any, £ -).

Committee's Minute 20th July 1875
Character assigned 100A

TRW
This vessel appears eligible to be classed as recommended by Lloyd's Register
Lloyd's Register
Two D.D.s.
1875