

IRON SHIPS.

Rev 23/10/19

No. 2097 Survey held at Aberdeen Date, First Survey March 5 1893 Last Survey October 23 1893

On the "Dee" Iron Screw Steamer Master W. Bain

Tonnage under Tonnage Deck <u>201.43</u>	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>Aberdeen</u>
Ditto of <u>25.06</u>	Half moulded breadth <u>20.5</u>	Half Moulded Breadth <u>20.5</u>	When built <u>1843</u> Launched <u>Sept 13 1843</u>
Ditto of <u>25.97</u>	Depth from upper part of Keel to top of Upper Deck Beams <u>12.5</u>	Total Depth of three or more Decks <u>12.5</u>	By whom built <u>James & Hall & Co</u>
Ditto of Houses on Deck <u>3.25</u>	Girth of Half Midship Frame (as per Rule) <u>20.5</u>	Total Girth of Half Midship Frame <u>20.5</u>	Owners <u>James Adams & Co</u>
Ditto of Forecastle	1st Number <u>435</u>	3rd Number <u>435</u>	Port belonging to <u>Aberdeen</u>
Gross Tonnage <u>298.85</u>	Length <u>144</u>	Length <u>144</u>	Destined Voyage <u>Coasting</u>
Crew Space as per Rule <u>11.12</u>	2nd Number <u>6354</u>	4th Number <u>6354</u>	If Surveyed while Building, Afloat, or in Dry Dock. <u>Under special Survey</u>
Register Tonnage out on Beam <u>292.70</u>	Depths to Length <u>11.5</u>	Breadths to Length <u>6.9</u>	

Length on deck as per Rule 144 Moulded Breadth 21 Depths from top of Floors to Upper and Main Deck Beams, as per Rule 11.4 Power of Engines 44 No. of Decks with flat laid One No. of Tiers of Beams One

	Inches in Ship	Inches required per Rule		Inches in Ship	Inches required per Rule
Keel, if bar iron, depth and thickness	<u>4 1/8</u>	<u>4 1/8</u>	Flat Keel Plates, breadth and thickness		
Do. if centre through plate, depth and thickness			Plates in Garboard Strakes, breadth and thickness	<u>5 1/2</u>	<u>5 1/2</u>
Stem, if bar iron, moulding and thickness	<u>6 1/4 x 1 1/8</u>	<u>6 1/4 x 1 1/8</u>	Do. from Garboard to upper part of Bilges	<u>5 1/2</u>	<u>5 1/2</u>
Stern-post for Rudder do. do.	<u>4 x 3</u>	<u>6 1/4 x 3 1/4</u>	Do. of doubling at Bilge, or increased thickness, and length applied	<u>8 1/2</u>	<u>5 1/2</u>
Stern-post for Propeller	<u>4 x 3</u>	<u>6 1/4 x 3 1/4</u>	Do. fm up. part of Bilge to lr. edge of Sh'rstrake	<u>5 1/2</u>	<u>5 1/2</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>	Do. Main Sheerstrake, breadth and thickness	<u>5 1/2</u>	<u>5 1/2</u>
Frames, size of Angle Iron, for 1/2 length amidships	<u>3 2 1/2</u>	<u>3 2 1/2</u>	Do. of d'bling at Sh'rstrake, & length applied	<u>5 1/2</u>	<u>5 1/2</u>
Do. for 1/2 at each end	<u>3 2 1/2</u>	<u>3 2 1/2</u>	Do. from Mn. to Upr. or Spar Dk. Sh'rstrake	<u>5 1/2</u>	<u>5 1/2</u>
Reversed Frames, size of Angle Iron	<u>2 1/4</u>	<u>2 1/4</u>	Do. Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>5 1/2</u>	<u>5 1/2</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>12 1/2</u>	<u>12</u>	Butt Straps to outside plating, breadth & thickness	<u>5 1/2</u>	<u>5 1/2</u>
Do. at the ends	<u>3 5/8</u>	<u>3 5/8</u>	Lengths of Plating	<u>8 1/2</u>	<u>8 1/2</u>
Do. do. do. at Bilge Keelson	<u>3 5/8</u>	<u>3 5/8</u>	Shifts of Plating, and Stringers	<u>8 1/2</u>	<u>8 1/2</u>
Do. height extended at the Bilges	<u>25 inches</u>	<u>24 inches</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>4 1/2</u>	<u>4 1/2</u>
Beams, Upper, Spar, or Awning Deck (No.) single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 3</u>	<u>5 3</u>	Angle Iron on ditto	<u>5 1/2</u>	<u>5 1/2</u>
Single or double Angle Iron on Upper edge	<u>5 3</u>	<u>5 3</u>	Tie Plates (fore and aft), outside Hatchways	<u>5 1/2</u>	<u>5 1/2</u>
Average space	<u>5 6</u>	<u>5 6</u>	Diagonal Tie Plates on Beams (No. of Pairs)		
Beams, Main or Middle Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron	<u>5 3</u>	<u>5 3</u>	Planksheer material and scantling	<u>Iron Bulwark</u>	
Single, or double Angle Iron, on Upper Edge	<u>5 3</u>	<u>5 3</u>	Waterways do. do.	<u>Iron 5/8 thick</u>	
Average space	<u>5 6</u>	<u>5 6</u>	Flat of Upper Deck do. do.		
Beams, Lower Deck, Hold or Orlop (No.) single or double Ang. Iron, Plate or Tee Bulb Iron	<u>5 3</u>	<u>5 3</u>	How fastened to Beams		
Single or double Angle Iron on Upper Edge	<u>5 3</u>	<u>5 3</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness		
Average space	<u>5 6</u>	<u>5 6</u>	(Is the Stringer Plate attached to the outside plating?)		
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	<u>10</u>	<u>8 1/2</u>	Angle Irons on ditto (No.)		
Do. Bulb Plate to Intercoastal Keelson	<u>3 3</u>	<u>3 3</u>	Tie Plates, outside Hatchways		
Do. Size of Angle Irons	<u>3 3</u>	<u>3 3</u>	Diagonal Tie Plates on Beams (No. of pairs)		
Do. Side Intercoastal Keelson, size of Plates	<u>3 3</u>	<u>3 3</u>	Waterways materials and scantlings		
Do. Angle Irons on tops of Floors	<u>3 3</u>	<u>3 3</u>	Flat of Middle Deck do. do.		
Do. Bilge Keelson, Bulb Iron	<u>3 3</u>	<u>3 3</u>	How fastened to Beams		
Do. do. Intercoastal plates riveted to plating for length	<u>3 3</u>	<u>3 3</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams		
Do. do. Angle Irons	<u>3 3</u>	<u>3 3</u>	(Is the Stringer Plate attached to the outside plating?)		
Side Stringers (No. <u>two</u>) size of Angle Irons	<u>3 3</u>	<u>3 3</u>	Angle Irons on ditto (No.)		
Do. Intercoastal plates riveted to plating for length	<u>3 3</u>	<u>3 3</u>	Stringer or Tie Plates, outside Hatchways		
Transoms, material <u>simple</u> or, if none, in what manner compensated for.			Flat of Lower Deck		
Knight-heads <u>Plates</u> Hawse Timbers <u>and frames</u>			Ceiling betwixt Decks, thickness and material		
Windlass <u>Iron</u> Pall Bitt			Do. in hold do. do.	<u>2 1/2</u>	<u>2</u>
The Frames extend in one length from <u>Keel</u> to <u>Gunwale</u> Riveted through plates with (10/16 in.) Rivets, about 5" apart.			Main piece of Rudder, diameter at head	<u>3 1/4</u>	<u>3 1/4</u>
The Reverse Angle Irons on the floors and frames extend <u>across</u> the middle line <u>from upper beam of bilge</u> and to <u>ditto</u> alternately			Do. do. at heel	<u>2 1/4</u>	<u>2 1/4</u>
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>			(Can the Rudder be unshipped afloat?) <u>Yes</u>		
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (10/16 in.) diameter, averaging (4 3/8 ins.) from centre to centre.			Bulkheads No. <u>four</u> Thickness of <u>4 1/8</u>		
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (10/16 in.) diameter, averaging (2 1/8 ins.) from centre to centre.			Do. Height up <u>to main beam</u>		
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (7/16 in.) thick, double or single Riveted; with Rivets (10/16 in.) diameter averaging (2 1/8 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>No</u>			Do. How secured to the sides of the ship <u>2 1/2 double frames 2 1/4 double frames</u>		
Do. of Strakes at Bilge for length, treble riveted with Butt Straps thicker than their plates.			Do. Size of Vertical Angle Irons, <u>2 1/2</u> and their distance apart, <u>30</u>		
Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (10/16 in.) diameter, averaging (2 1/8 ins.) from centre to centre.			Do. Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>		
Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge <u>single</u> . At lower edge <u>double</u>					
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (7/16 in.) thick, double or single Riveted; with Rivets (10/16 in.) diameter, averaging (2 1/8 ins.) from centre to centre.					
Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for length amidships. Breadth of laps of plating in double Riveting (4 1/2) Breadth of laps of plating in single Riveting (2 1/4)					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>Double Riveted</u>					
Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)					
Beams of the various Decks, how secured to the sides? <u>Welded some riveted to the frames</u> No. of Breasthooks, <u>four</u> Crutches, <u>four</u>					
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. <u>Wrought Palmers pattern</u>					
Manufacturer's name or trade mark, <u>Plating Conssett</u>					

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, A. Hall Geo Surveyor's Signature, J. W. Beech

120455-0310

Workmanship. Are the butts of plating planed or otherwise fitted? All planed
 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 riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes
 Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in Curves of Butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the 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 Length of the Mast 47 feet 1/2 Dia. of Main Mast 5 1/2 feet 11/8

12001 Iron

Tested by M. K. Read at
 Betherton May 20th June 20th 1873

Tested by M. K. Read at Betherton
 July 5th 1873

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Number for equipment		255	7	18 1/2	7	18 1/2						
One	Fore Sails,	Chain						Bowers	2	7.1.21	9.13.20	7.1.0	9.9/20
Complete	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).						(State Machine where Tested, and name of Superintendent).		7.3.12	1.1.1	7.1.0	9.9/20
	Fore Topmast Stay Sails	Hempen Stream Cable	50	9/16				Stream	7	2.3.18		2.3.0	
Suit	Main Sails,	Hawser	100	7		4 1/2		Kedges	7	7.7.20		7.7.0	
	Main Top Sails,	Towlines	100	5		5 1/2							
		Warp	100	4 1/2									
and		All of good quality.	100	5 1/2									

Her Standing and Running Rigging Good sufficient in size and good in quality. She has one Long Boat and one other boat
 The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Efficient

Engine Room Skylights.—How constructed? Wrought iron frame How secured in ordinary weather? Boards to her Ceiling
 What arrangements are there for deadlights in such for bad weather? Glass Bulbs over on top of the light

Coal Bunker Openings.—How constructed? Iron plates let in deck How are lids secured? with chain How high above deck? 18 inches

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Three discharge ports and two scuppers on each side

Cargo Hatchways.—How formed? Iron beams riveted to beams State size Main Hatch 10'5" x 5'0"
 If of extraordinary size, state how framed and secured? Medium size

What arrangement for shifting beams? See shifting beams on Main Hatch. Quarters Hatch 7'0" x 5'0"
 Hatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 7'5" x 10'

Order for Special Survey No. 500 DATES of
 Date Jan 15 1873 Surveys held
 Order for Ordinary Survey No. 1 while building
 Date Jan 15 1873 as per
 No. 280 in builder's yard. Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought Done under supervision
- 2nd. On the plating during the progress of riveting Done from the start to the end
- 3rd. When the beams were in and fastened, and before the decks were laid Done as follows 12.15.1872
- 4th. When the ship was complete, and before the plating was finally coated or cemented Done 14.9.11.72 12.25.28.30. May 10.15.18 20.32.24.28.10. June 1.5.9.11.13.17.19.23.24.25.27.30. July 2.4.7.10.15.18.22.25.29. Aug 1.5.9.12.14.15.20.23.25.27.29 Sept 1.5.4.8.10.12.13.15 Oct 2.9.13
- 5th. After the ship was launched and equipped

General Remarks, Has an Iron Deck 7/8" thick, Landed single Clewcher, Hulls double carvel riveted.

Length of Raised Quarter Deck 5'5.5. Length of Incastles 10 feet. Length of Water Ballast Tank 44 feet.
With this report I beg to forward tracing of midship section and sketch showing how the vessel is strengthened in wake of Raised Quarter Deck.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

In what manner are the surfaces preserved from oxidation? Inside Red lead Outside Paint

I am of opinion this Vessel should be Classed Q.A.1

The amount of the Entry Fee£ 3 : 0 : 0 is received by me,
 Special£ 14 : 4 : 0
 Certificate gratis

(Travelling Expenses)
 (if any) £ none

Committee's Minute 11th Nov^r 1873

Character assigned Q.A.1

[Large blue ink signature and stamp]
 This vessel appears to be eligible for the class Q.A.1
 1873
 10/11/73

