

IRON SHIPS.

Rev 23/10/19

No. 2097 Survey held at Aberdeen Date, First Survey March 5/19 Last Survey October 23/18

On the "Dee" Iron screw Steamer Master M. Bain

Tonnage under Tonnage Deck <u>207 1/2</u>	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>Aberdeen</u>
Ditto of Third Spar, or Awning Deck. <u>5.00</u>	Half moulded breadth <u>20.5</u>	Half Moulded Breadth....	When built <u>1843</u> Launched <u>Sept 13/1843</u>
Ditto of Poop, or Raised Qr. Dk. <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	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	Owners <u>James Adam & Co</u>
Ditto of Forecastle	1st Number <u>435</u> Length <u>144</u>	3rd Number	Port belonging to <u>Aberdeen</u>
Gross Tonnage <u>298.85</u>	2nd Number <u>6364</u>	4th Number	Destined Voyage <u>Coasting</u>
Crew Space as per Rule <u>11.12</u>	Depths to Length <u>11.5</u>	Breadths to Length <u>0.9</u>	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage, out on Beam <u>292.70</u>			<u>Under special Survey</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

Dimensions of Ship per Register, length 145 breadth 21.1 depth 11.4

	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>7 1/8</u>	Flat Keel Plates, breadth and thickness		
Do. if centre through plate, depth and thickness	<u>6 1/4 x 1 1/8</u>	<u>6 1/4 x 1 1/8</u>	Plates in Garboard Strakes, breadth and thickness ..	<u>3 1/2</u>	<u>3 1/2</u>
Stem, if bar iron, moulding and thickness	<u>4 x 3</u>	<u>6 1/4 x 3 1/4</u>	Do. from Garboard to upper part of Bilges ..	<u>4 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 thick- ness, 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>20</u>	(Class <u>20</u>)	Do. Main Sheerstrake, breadth and thickness ..	<u>3 1/2</u>	<u>3 1/2</u>
Frames, size of Angle Iron, for 1/2 length amidships	<u>3 1/2</u>	<u>3 1/2</u>	Do. of d'bling at Sh'rstrake, & length applied		
Do. for 1/2 at each end	<u>3 1/2</u>	<u>3 1/2</u>	Do. from Mn. to Up. or Spar Dk. Sh'rstrake.		
Reversed Frames, size of Angle Iron	<u>2 1/4</u>	<u>2 1/4</u>	Do. Up. or Spar Dk. Sh'rstrake, breadth & thickness	<u>3 1/2</u>	<u>3 1/2</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>13 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 1/2</u>	<u>3 1/2</u>	Lengths of Plating	<u>3 1/2</u>	<u>3 1/2</u>
Do. do. do. at Bilge Keelson	<u>3 1/2</u>	<u>3 1/2</u>	Shifts of Plating, and Stringers	<u>3 1/2</u>	<u>3 1/2</u>
Do. height extended at the Bilges	<u>3 1/2</u>	<u>3 1/2</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.)	<u>3 1/2</u>	<u>3 1/2</u>	Angle Iron on ditto	<u>5 1/2</u>	<u>5 1/2</u>
single or double Angle Iron, Plate or Tee	<u>3 1/2</u>	<u>3 1/2</u>	Tie Plates (fore and aft), outside Hatchways ..		
Bulb Iron	<u>3 1/2</u>	<u>3 1/2</u>	Diagonal Tie Plates on Beams (No. of Pairs,)		
Single or double Angle Iron on Upper edge ..	<u>3 1/2</u>	<u>3 1/2</u>	Planksheer material and scantling	<u>3 1/2</u>	<u>3 1/2</u>
Average space	<u>3 1/2</u>	<u>3 1/2</u>	Waterways do. do.	<u>3 1/2</u>	<u>3 1/2</u>
Beams, Main or Middle Deck (No.) single, }	<u>3 1/2</u>	<u>3 1/2</u>	Flat of Upper Deck do. do.	<u>3 1/2</u>	<u>3 1/2</u>
or double Angle Iron, Plate or Tee Bulb Iron }	<u>3 1/2</u>	<u>3 1/2</u>	How fastened to Beams	<u>3 1/2</u>	<u>3 1/2</u>
Single, or double Angle Iron, on Upper Edge ..	<u>3 1/2</u>	<u>3 1/2</u>	Stringer Plate on ends of Main or Middle Deck }		
Average space	<u>3 1/2</u>	<u>3 1/2</u>	Beams, breadth and thickness		
Beams, Lower Deck, Hold or Orlop (No.)	<u>3 1/2</u>	<u>3 1/2</u>	(Is the Stringer Plate attached to the outside plating?)		
single or double Ang. Iron, Plate or Tee Bulb Iron }	<u>3 1/2</u>	<u>3 1/2</u>	Angle Irons on ditto (No.)		
Single or double Angle Iron on Upper Edge	<u>3 1/2</u>	<u>3 1/2</u>	Tie Plates, outside Hatchways		
Average space	<u>3 1/2</u>	<u>3 1/2</u>	Diagonal Tie Plates on Beams (No. of pairs,)		
Keelson Centre line, single or double plate, }	<u>10</u>	<u>9 1/4</u>	Waterways materials and scantlings		
box, or Intercoastal, size of Plates	<u>10</u>	<u>9 1/4</u>	Flat of Middle Deck do. do.		
Do. Bulb Plate to Intercoastal Keelson	<u>3</u>	<u>3</u>	How fastened to Beams		
Do. Size of Angle Irons	<u>3</u>	<u>3</u>	Stringer Plates on ends of Lower Deck, Hold or }		
Do. Side Intercoastal Keelson, size of Plates ..	<u>3</u>	<u>3</u>	Orlop Beams		
Do. Angle Irons on tops of Floors	<u>3</u>	<u>3</u>	(Is the Stringer Plate attached to the outside plating?)		
Do. Bilge Keelson, Bulb Iron	<u>3</u>	<u>3</u>	Angle Irons on ditto (No.)		
Do. do. Intercoastal plates riveted	<u>3</u>	<u>3</u>	Stringer or Tie Plates, outside Hatchways		
to plating for length	<u>3</u>	<u>3</u>	Flat of Lower Deck		
Do. do. Angle Irons	<u>3</u>	<u>3</u>	Ceiling betwixt Decks, thickness and material ..		
Side Stringers (No. <u>two</u>) size of Angle Irons	<u>3</u>	<u>3</u>	Do. in hold do. do.	<u>2 1/2</u>	<u>2</u>
Do. Intercoastal plates riveted to plating for	<u>3</u>	<u>3</u>	Main piece of Rudder, diameter at head	<u>3 1/4</u>	<u>3 1/4</u>
length	<u>3</u>	<u>3</u>	Do. do. at heel	<u>2 1/4</u>	<u>2 1/4</u>

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

Knight-heads Plates Hawse Timbers and frames

Windlass London Pattern Pall Bitt

The Frames extend in one length from Keel to Gunwale Riveted through plates with (10/16 in.) Rivets, about 5" apart.

The Reverse Angle Irons on the floors and frames extend across the middle line from upper turn of bilge and to ditto alternately

Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (1 1/4 in.) diameter, averaging (49 3 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (10/16 in.) diameter, averaging (2 1/2 ins.) from centre to centre.

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 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No

Do. of Strakes at Bilge for length, treble riveted with Butt Straps thicker than their plates.

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 1/2 ins.) from centre to centre.

Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge single At lower edge double

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 1/2 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? Double Riveted

Planksheer, how secured to the plating of the sides? from bilge to gunwale 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? Welded down rivets to the frames No. of Breasthooks, four Crutches, four

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

Manufacturer's name or trade mark, Plateny Consett

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. Keene

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 54 feet 11 1/2 in. Dia. of Mast 5 1/2 feet 11 1/2 in.

12001 Iron

Tested by M. D. Reader at
Buckerton May 28th June 20th 1873

Tested by M. D. Reader at
Buckerton July 5th 1873

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
SAILS.												
CABLES, &c.												
N ^o .	Fore Sails,	Chain	765	7	18 1/2 in	7	Bowers	2	1.1.21	2.13.20	7.1.0	2 1/20
One complete suit and	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).					(State Machine where Tested, and name of Superintendent).					
	Fore Topmast Stay Sails	Hempen Stream										
	Main Sails,	Cable	60	7 1/2			Stream	7	2.3.18		2.3.0	
	Main Top Sails,	Hawser	100	5	✓	4 1/2						
		Towlines	100	5		5 1/2						
		Warp	100	5 1/2			Kedges	7	7.7.24		7.7.0	
		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 Caming

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 How are lids secured? With chain How high above deck? Four

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 beam State size Five 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 1st. On the several parts of the frame, when in place, and before the plating was wrought First under keelson

Date Jan 15 1873 Surveys held 2nd. On the plating during the progress of riveting Second from the 12th to 19th under keelson

Order for Ordinary Survey No. ✓ while building 3rd. When the beams were in and fastened, and before the decks were laid Third under keelson

Date ✓ as per 4th. When the ship was complete, and before the plating was finally coated or cemented Fourth under keelson

No. 280 in builder's yard. Section 18. 5th. After the ship was launched and equipped Fifth under keelson

General Remarks, Has an Iron Deck 5/16 thick, Laid single clincher, built double carvel riveted.

Length of Raised Quarter Deck 5'5". Length of Inceastle 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.

Red lead on

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