

# IRON SHIPS.

Rev 31/8/71

No. 2564 Survey held at Abdeen Date, First Survey March 1871 Last Survey 30 August 1871

In the Iron S.S. "Richmond" Master Booster

Tonnage under Tonnage Deck <u>141.33</u>	ONE, OR TWO DECKED, THREE DECKED VESSELS.	Built at <u>Abdeen</u>
Ditto of Third Spar, or Awaiting Deck.	SPAR, OR AWNING-DECKED VESSELS.	When built <u>1842</u> Launched <u>July 1871</u>
Ditto of Deep, or Raised Gr. Dk. <u>20.20</u>	Half moulded breadth <u>10.0</u>	By whom built <u>Thos. Hall &amp; Co</u>
Ditto Houses <u>191.38</u>	Depth from upper part of Keel to top of Upper Deck Beams <u>11.0</u>	Owners <u>Messrs Adam &amp; Co</u>
Ditto Forecastle <u>8.50</u>	Girth of Half Midship Frame (as per Rule) <u>19.0</u>	Port belonging to <u>Abdeen</u>
Gross Tonnage <u>191.38</u>	1st Number <u>40.0</u> Length <u>120</u>	Destined Voyage <u>Coasting</u>
Crew Space, as per Rule <u>8.50</u>	2nd Number <u>4800.0</u>	Is Surveyed while Building, Afloat, or in Dry Dock. <u>Under Special Survey</u>
Registered Tonnage, as per Rule <u>67.24</u>	Depths to Length <u>12</u>	
Net Tonnage, as per Rule <u>121.34</u>	Breadths to Length <u>6</u>	

Length on deck as per Rule 120 Feet. Inches. Moulded Breadth 20 Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 9.11 Feet. Inches. Power of Engines, 40 Horse. No. of Decks with flat laid One No. of Tiers of Beams One

Dimensions of Ship per Register, length 121 breadth 20.15 depth 9.25

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	5 1/2 x 1 1/8	5 1/4 x 1 1/4	Flat Keel Plates, breadth and thickness		
Do. if centre through plate, depth and thickness	6 x 1 1/8	6 x 1 1/4	Plates in Garboard Strakes, breadth and thickness	4 1/2	3 1/2
Stem, if bar iron, moulding and thickness	6 x 2 1/2	6 x 2 1/2	Do. from Garboard to upper part of Bilges	4 1/2	3 1/2
Stern-post for Rudder do. do.	6 x 2 1/2	6 x 2 1/2	Do. of doubling at Bilge, or increased thickness, and length applied		
Stern-post for Propeller	6 x 2 1/2	6 x 2 1/2	Do. from up. part of Bilge to l. edge of Sh'rstrake	4 1/2	3 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	(Class 20.4)	Do. Main Sheerstrake, breadth and thickness	4 1/2	3 1/2
Frames, size of Angle Iron, for 1/2 length amidships	3 1/2 x 3/8	3 1/2 x 3/8	Do. of doubling at Sh'rstrake, & length applied		
Do. for 1/2 at each end	3 1/2 x 3/8	3 1/2 x 3/8	Do. from Mn. to Upr. or Spar Dk. Sh'rstrake		
Reversed Frames, size of Angle Iron	2 1/4 x 3/8	2 1/4 x 3/8	Do. Up. or Spar Dk. Sh'rstrake, breadth & thickness		
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	2 1/4 x 3/8	2 1/4 x 3/8	Butt Straps to outside plating, breadth & thickness	2 1/2 x 3/8	2 1/2 x 3/8
Do. at the ends	1 1/2 x 3/8	1 1/2 x 3/8	Lengths of Plating	2 1/2	2 1/2
Do. do. do. at Bilge Keelson	1 1/2 x 3/8	1 1/2 x 3/8	Shifts of Plating, and Stringers	2 frames	2 frames
Do. height extended at the Bilges	20 1/2 inches	20 inches	Gunwale Plate on ends of Awaiting, Spar, or Upper Deck Beams, breadth and thickness	2 1/2 x 3/8	2 1/2 x 3/8
Beams, Upper, Spar, or Awaiting Deck (No. ) single or double Angle Iron, Plate or Tee Bulb Iron	5 x 3 1/8	5 x 3 1/8	Angle Iron on ditto	3 x 3 1/8	3 x 3 1/8
Single or double Angle Iron on Upper edge	3 x 3/8	3 x 3/8	Tie Plates (fore and aft), outside Hatchways	9 x 3/8	9 x 3/8
Average space	3.6	3.8	Diagonal Tie Plates on Beams (No. of Pairs, )		
Beams, Main or Middle Deck (No. ) single, or double Angle Iron, Plate or Tee Bulb Iron			Planksheer material and scantling	Iron Bulwarks	
Single, or double Angle Iron, on Upper Edge			Waterways do. do.	Galva Waterway	
Average space			Flat of Upper Deck do. do.	3 x 5	3 1/8
Beams, Lower Deck, Hold or Orlop (No. ) single or double Angle Iron, Plate or Tee Bulb Iron			How fastened to Beams	3/8 Dia	3/8
Single or double Angle Iron on Upper Edge			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness		
Average space			(Is the Stringer Plate attached to the outside plating?)		
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	8 1/2 x 3/8	8 1/2 x 3/8	Angle Irons on ditto (No. )		
Do. Bulb Plate to Intercoastal Keelson			Tie Plates, outside Hatchways		
Do. Size of Angle Irons	3 x 3/8	3 x 3/8	Diagonal Tie Plates on Beams (No. of pairs, )		
Do. Side Intercoastal Keelson, size of Plates			Waterways materials and scantlings		
Do. Angle Irons on tops of Floors	3 x 3/8	3 x 3/8	Flat of Middle Deck do. do.		
Do. Bilge Keelson, Bulb Iron	6 x 3/8	6 x 3/8	How fastened to Beams		
Do. do. Intercoastal plates riveted to plating for length			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams		
Do. do. Angle Irons			(Is the Stringer Plate attached to the outside plating?)		
Side Stringers (No. ) size of Angle Irons	3 x 3/8	3 x 3/8	Angle Irons on ditto (No. )		
Do. Intercoastal plates riveted to plating for length			Stringer or Tie Plates, outside Hatchways		

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

Knight-heads Plates Haywe Timbers and frames

Windlass English Oak Pall Bitt English Oak

The Frames extend in one length from Keel to Gunwale Riveted through plates with (3/8 in.) Rivets, about 5 apart.

The Reverse Angle Irons on the floors and frames extend from the middle line to the middle line and to the middle line 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 (3/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (3/8 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 (3/8 in.) thick, double or single Riveted; with Rivets (3/8 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 (3/8 in.) thick, or clencher, double or single riveted; with rivets (3/8 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 (3/8 in.) thick, double or single Riveted; with Rivets (3/8 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 (3/8 in.) Breadth of laps of plating in single Riveting (3/8 in.)

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

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? Rivets No. of Breasthooks, Three Crutches, Three

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

Manufacturer's name or trade mark, Lat. Nuba & Ball Angle Bar

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

Builder's Signature A. H. Hall Surveyor's Signature J. B. Little

120449-0227



**Workmanship.** Are the butts of plating planed or otherwise fitted? All planedDo the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? YesDo the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? YesDo 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? YesAre there any rivets which either break into or have been put through the seams or butts of the plating? A few in Corner of ButtsHer 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 43.3. Bowsprit 44.5. Dia 10.2Tested by John Hartness  
North of the Sundeland  
10 July 1871Tested by John Hartness  
North of the Sundeland  
July 10<sup>th</sup> 1871

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.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain .....	150	1 1/16	11 1/20	13/16	11 9/10	Bowers ....	2	5.1.24	10.1.0	5.0.0	4 1/10
	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 Cable	60	9/16				Stream ....	1	1.3.0		1.3.0	
	Main Sails,	Hawser .....	90	4		6		Kedges ....	1	1.0.0		1.0.0	
	Main Top Sails,	Towlines ....	90	4 1/2		4							
		Warp .....	90	3 1/2									
		All of <u>quality</u> .											

Her Standing and Running Riggings Good sufficient in size and good in quality. She has one Long Boat and one other boatThe present state of the Windlass is Good Capstan Good and Rudder Good Pumps new & efficientEngine Room Skylights.—How constructed? Wood frame with thick glass How secured in ordinary weather? Patent CrampingWhat arrangements are there for deadlights in such for bad weather? Two guards and tarpaulinsCoal Bunker Openings.—How constructed? Iron frame with thick plate How are lids secured? With pins and washers How high above deck? Four feetScuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Two scuppers and two discharge ports on each sideCargo Hatchways.—How formed? Iron Cramping rivetted beams State size See Hatch 9.0 x 4.0If of extraordinary size, state how framed and secured? Medium sizeWhat arrangement for shifting beams? Iron Buckhead extended to upper edge of CrampingHatches, themselves, whether strong and efficient? Yes Main Hatchways.—State size 21.4 x 7.0Order for Special Survey No. 308 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built in 1870Date 26 July 1871 Surveys held 2nd. On the plating during the progress of riveting Special survey fromOrder for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid the 7th March 1871 untilDate as per 4th. When the ship was complete, and before the plating was finally coated or cemented the 30 AugustNo. 267 in builder's yard. Section 18. 5th. After the ship was launched and equipped 1871**General Remarks,**

The sheer trake is increased 1/10 ft 3/4, the stringer plate 1/10 ft 3/5, and a Buck Bar is fitted and rivetted to the keel. The vessels length amidships, as compensation for the proportions of the vessel; and an additional stringer of double angle bars 3 x 3 x 9/16 ft 1/2 the vessels length amidships is fitted between the keel and the keelson. Has a Water ballast tank for a length of 24.5 fitted as per sketch. The length of raised Quarter Deck is 4.3.0

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 Patent PaintI am of opinion this Vessel should be Classed GO A 1

The amount of the Entry Fee .....£ 2 : 0 : 0 is received by me,

Special .....£ 9 : 2 : 0  
Certificate .... John

(Travelling Expenses)

(if any) £ noneCommittee's Minute 1<sup>st</sup> September 1871Character assigned GO A 1 Rules of 1870

Concur in the opinion that this vessel should be Classed GO A 1.  
1/9/71