

## IRON SHIP.

No. 2439 Survey held at Aberdeen Date, First Survey Nov 24 1873 Last Survey Nov 9 1874On the Waratah Iron S.S. Yard Number 297 Master John Stewart

TONNAGE under Tonnage Deck <u>345.42</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Aberdeen</u>
Ditto of Third, Spar, or Awning Deck <u>42.33</u>	SPAR, OR AWNING-DECKED VESSEL.	When built <u>1874</u> Launched <u>April 18 1874</u>
Ditto of Poop, or Raised Or. Dk. <u>32.72</u>	HALF BREADTH (moulded) <u>12.0</u>	By whom built <u>James Hall Russell &amp; Co</u>
Ditto of Houses on Deck <u>5.12</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>14.5</u>	Owners <u>Charles Smith</u>
Ditto of Forecastle	GIRTH of Half Ship Frame (as per Rule) <u>23.88</u>	Port belonging to <u>Sydney</u>
Gross Tonnage <u>424.99</u>	1st NUMBER <u>50.38</u>	Destined Voyage <u>Sydney</u>
Crew Space <u>27.49</u>	1st NUMBER, if a THREE DECKED VESSEL <u>8007.8</u>	Is Surveyed while Building, Afloat, or in Dry Dock. <u>Under Special Survey.</u>
Engine Room <u>135.99</u>	deduct 7 feet <u>75.88</u>	
Register Tonnage <u>264.57</u>	LENGTH <u>158.83</u>	
as cut on Beam	2nd NUMBER <u>8007.8</u>	
	PROPORTIONS—Breadths to Length <u>0.02</u>	
	Depths to Length—Upper Deck to Keel <u>11.05</u>	
	Main Deck ditto <u>11.05</u>	

LENGTH on deck as per Rule 158.83 Breadth—Moulded 24 DEPTH top of Floors to Upper Deck Beams 12.35 Power of Engines 50 Horse. 50 N° of Decks with flat laid One N° of Tiers of Beams One

Dimensions of Ship per Register, length, 160 breadth, 24 depth, 13.12

KEEL, depth and thickness 6 1/2 x 2 1/4 Inches in Ship. 1 1/4 x 1 1/8 Inches per Rule.

STEM, moulding and thickness 6 1/2 x 2 1/4 Inches in Ship. 5 1/2 x 1 1/8 Inches per Rule.

STERN-POST for Rudder do. do. 4 1/8 x 3 3/8 Inches in Ship. 5 1/2 x 3 3/8 Inches per Rule.

for Propeller 4 1/8 x 3 3/8 Inches in Ship. 5 1/2 x 3 3/8 Inches per Rule.

Distance of Frames from moulding edge to moulding edge, all fore and aft 22 inches (Class 90 ft)

FRAMES, Angle Iron, for 2/3 length amidships 3 Inches in Ship. 3 Inches in Ship. 16ths required 3 Inches in Ship. 16ths required 3 Inches in Ship. 16ths required

Do. for 1/2 at each end 3 Inches in Ship. 3 Inches in Ship. 16ths required 3 Inches in Ship. 16ths required

REVERSED FRAMES, Angle Iron 2 1/4 Inches in Ship. 2 1/4 Inches in Ship. 16ths required 2 1/4 Inches in Ship. 16ths required

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 14 Inches in Ship. 14 Inches in Ship. 16ths required 14 Inches in Ship. 16ths required

thickness at the ends of vessel 14 Inches in Ship. 14 Inches in Ship. 16ths required 14 Inches in Ship. 16ths required

depth at 2/3 the half-bdth. as per Rule 14 Inches in Ship. 14 Inches in Ship. 16ths required 14 Inches in Ship. 16ths required

height extended at the Bilges 28 inches 28 inches

BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 6 Inches in Ship. 6 Inches in Ship. 16ths required 6 Inches in Ship. 16ths required

Single or double Angle Iron on Upper edge 3 1/4 Inches in Ship. 3 1/4 Inches in Ship. 16ths required 3 1/4 Inches in Ship. 16ths required

Average space 3.8 3.8

BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron 6 Inches in Ship. 6 Inches in Ship. 16ths required 6 Inches in Ship. 16ths required

Single or double Angle Iron on Upper Edge 3 1/4 Inches in Ship. 3 1/4 Inches in Ship. 16ths required 3 1/4 Inches in Ship. 16ths required

Average space 3.8 3.8

BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron 6 Inches in Ship. 6 Inches in Ship. 16ths required 6 Inches in Ship. 16ths required

Single or double Angle Iron on Upper Edge 3 1/4 Inches in Ship. 3 1/4 Inches in Ship. 16ths required 3 1/4 Inches in Ship. 16ths required

Average space 3.8 3.8

KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates 10 1/4 Inches in Ship. 10 1/4 Inches in Ship. 16ths required 10 1/4 Inches in Ship. 16ths required

Rider Plate 7 Inches in Ship. 7 Inches in Ship. 16ths required 7 Inches in Ship. 16ths required

Bulb Plate to Intercoastal Keelson 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Angle Irons 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Double Angle Iron Side Keelson 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Side Intercoastal Plate 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

do. Angle Irons 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Attached to outside plating with angle iron

BILGE Angle Irons 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

do. Bulb Iron for 1/2 length 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

do. Intercoastal plates riveted to plating for length

BILGE STRINGER Angle Irons 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Intercoastal plates riveted to plating for length

SIDE STRINGER Angle Irons 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Bulb Bar for 9 ft 3 1/2 Inches in Ship. 3 1/2 Inches in Ship. 16ths required 3 1/2 Inches in Ship. 16ths required

Transoms, material. Knight-heads. Hawse Timbers. Plates and frames

Windlass Emmerson & Mackay Pall Bitt Palat

The FRAMES extend in one length from Keel to Gunnwale

The REVERSED ANGLE IRONS on floors and frames extend across the middle line to gunwale

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

LATING. Garboard, double riveted to Keel, with rivets 7 in. diameter, averaging 4 1/4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7 in. diameter, averaging 4 1/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked clencher, double riveted; with rivets 7 in. diameter, averaging 4 1/4 ins. from centre to centre.

Butts of One Strakes at Bilge for half length, double riveted with Butt Straps 7 in. diameter, averaging 4 1/4 ins. from centre to centre.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7 in. diameter, averaging 4 1/4 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked clencher, double riveted; with rivets 7 in. diameter, averaging 4 1/4 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 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

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

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

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

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

Beams of the various Decks, how secured to the sides? Welded and riveted to frames. No. of Breasthooks, Four Crutches, Four

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

Manufacturer's name or trade mark. Hawke & Co. frames, rollers frames

The above is a correct description.

Builder's Signature, Hall Russell & Co. Surveyor's Signature, J. R. Little



Workmanship. Are the butts of plating planed or otherwise fitted?

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are Pitch Pine in good condition, and sufficient in size and length. If of Iron or Steel give 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.

NUMBER for EQUIPMENT

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight, Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
One	Fore Sails,	Chain	195	7 1/8	22 1/4	195 1/2	22 1/2	Bowers ...	3	10.1.4	12.5.2.4	10.0.0	12 1/2
Complete	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)						(State Machine where Tested, Date, and name of Superintendent.)					
	Fore Topmast Stay Sails	Chain	50	10 1/8						10.1.4	12.5.2.4	10.0.0	12 1/2
	Main Sails,	Hawser ...	90	8 1/2		8 1/2		Stream ...	1	5.0.0	5 1/2 lbs	4.3.0	
Sail and some spare sails	Main Top Sails,	Towlines ...	90	5		5 1/2		Kedges ...	2	2.1.6		2.1.0	
		Warp ...	50	4						2.0.6		1.0.0	
		quality good	50	3 1/2									

Standing and Running Rigging Good sufficient in size and good in quality. She has one Long Boat and two other boats.

The Windlass is Good Capstan Good and Rudder Good Pumps Good efficient.

Engine Room Skylights.—How constructed? Shengwood frame of cast iron How secured in ordinary weather? Bolts & clamping

What arrangements for deadlights in bad weather? Glass bell eyes in skylight

Coal Bunker Openings.—How constructed? Cast iron frames How are lids secured? With a bar Height above deck? Same height as deck

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Sea scuppers and three discharge ports on each side

Cargo Hatchways.—How formed? Iron beamings rivetted to beams and tie plates

State size Main Hatch 44.6 x 8.0 Forehatch 10.9 x 8.0 Quarterhatch 10.9 x 8.0

If of extraordinary size, state how framed and secured? Medium size

What arrangement for shifting beams? One shifting beam in Main Hatch

Hatches, If strong and efficient? Yes

Order for Special Survey No. 38 Date 25 Nov 1873

Order for Ordinary Survey No. 191 in builder's yard. Date 191

General Remarks, Has an Iron Deck 5 1/2 inch bands single anchor. little double carvel rivetted. As compensation for hold beams a Bulk Bar 6 x 5 1/2 is rivetted between double angle bars 3 1/2 x 3 1/2 all fore and aft. The suggestions made by the Committee in this case have been carried out, and is built in accordance with a company's approved Induship Section, as per Secretary's letter dated Dec 6. 1873. with this report, I beg to enclose sketch showing how the vessel is strengthened in wake of Raised Quarter Deck. Length of Raised Quarter Deck 30 feet. of Bulkhead 33 feet

Workmanship. Good.

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.

How are the surfaces preserved from oxidation? Inside Red lead and Portland Cement Outside Paint

I am of opinion this Vessel should be Classed GO-87

The amount of the Entry Fee ... £ 5.0 : 0 is received by me, May 1874

Special ... £ 20. : 3 : May 1874

Certificate ... Grater

(Travelling Expenses) (if any) £ none

Committee's Minute 12 May 1874

Character assigned GO-87

2 Dec 74

The C.

J. J. W.

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