

IRON SHIP.

(Received at London Office, Rec'd 1st M. 7. 1884)

No. 6504 Survey held at Dumbarton Date, First Survey Aug 7. 1883 Last Survey 26th April 1884

On the Iron S.S. "Arabian" (Twin Screw) Master John Mitchell

TONNAGE under Tonnage Deck } 191.58
 Ditto of Third, Spar, or Awning Deck } 1.96
 Ditto of Deck or Raised Qr. Dk. } 13.87
 Ditto of Houses on Deck } 3.50
 Ditto of Forecastle } 7.30
 Gross Tonnage } 217.91
 Less Crew Space } 18.86
 Less Engine Room } 199.05
 Register Tonnage as cut on Beam } 89.73
129.32

ONE, OR TWO DECKED, THREE DECKED VESSEL,
~~SPAR, OR AWNING DECKED VESSEL.~~
 Half Breadth (moulded) Feet. 11-0
 Depth from upper part of Keel to top of Upper Deck Beams 10-6.5
 Girth of Half Midship Frame (as per Rule) 19.2
 1st Number 40-88
~~1st Number, if 2 Deeked Vessel deduct 1 foot~~
 Length 125
 2nd Number 5106
 Proportions— Breadths to Length. 5.6
 Depths to Length—Upper Deck to Keel. 11.74
 Main Deck ditto

Built at Murray Bros. Dumbarton
 When built 1883-84 Launched 28th Mar 84
 By whom built Murray Bros.
 Owners Morton & Williamson
 Residence Gretnock
 Port belonging to Gretnock
 Destined Voyage Coasting
 If Surveyed while Building, Afloat, or in Dry Dock. While Building & afloat

LENGTH on deck as per Rule 125 Feet. Inches. **BREADTH** Moulded. 22 Feet. Inches. **DEPTH** top of Floors to Upper Deck Beams 9 8 Feet. Inches. **Power of Engines** 50 Horse. **No. of Decks with flat laid** one **No. of Tiers of Beams** one

Dimensions of Ship per Register, length, 126 breadth, 22.15 depth, 9.55 moulded depth 10ft.

KEEL, depth and thickness 6 x 1 1/4 Inches in Ship. 6 x 1 1/4 Inches per Rule.
STEM, moulding and thickness. 6 x 2 1/2 Inches in Ship. 6 x 2 1/2 Inches per Rule.
STERN-POST for Rudder do. do. 20 Inches in Ship. 20 Inches per Rule.
 " " for Propeller
 Distance of Frames from moulding edge to moulding edge, all fore and aft

FRAMES, Angle Iron, for 1/2 length amidships 3 2 1/2 5 Inches in Ship. 3 2 1/2 5 Inches per Rule. 16ths 5
 Do. for 1/4 at each end
REVERSED FRAMES, Angle Iron 2 1/2 2 1/2 4 Inches in Ship. 2 1/2 2 1/2 4 Inches per Rule. 16ths 4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 12 Inches in Ship. 12 Inches per Rule. 16ths 5 6
 " thickness at the ends of vessel 6 Inches in Ship. 6 Inches per Rule. 16ths 5
 " depth at 3/4 the half-bdth. as per Rule 6 Inches in Ship. 6 Inches per Rule. 16ths 5
 " height extended at the Bilges. 24 Inches in Ship. 24 Inches per Rule. 16ths 5

BEAMS, Upper Spar or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 5 1/2 3 7 Inches in Ship. 5 1/2 3 7 Inches per Rule. 16ths 5
 Single or double Angle Iron on Upper edge
 Average space. 40 ins Inches in Ship. 40 ins Inches per Rule. 16ths 5
BEAMS, Main, Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron 4 2 1/2 6 Inches in Ship. 4 2 1/2 6 Inches per Rule. 16ths 6
 Single or double Angle Iron on Upper Edge
 Average space. 20 ins Inches in Ship. 20 ins Inches per Rule. 16ths 6

BEAMS, Lower Deck Single or double Angle Iron, Plate or Tee Bulb Iron
 Single or double Angle Iron on Upper Edge
 Average space.
BEAMS, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron
 Single or double Angle Iron on Upper Edge
 Average space.

KEELSONS Centre line, single or double plate, 7 Inches in Ship. 6 7 6 Inches per Rule. 16ths 6
 " Intercoastal, Plates 6 1/2 Inches in Ship. 6 1/2 6 5 Inches per Rule. 16ths 6
 " Rider Plate 3 3 6 3 3 6 Inches in Ship. 3 3 6 3 3 6 Inches per Rule. 16ths 6
 " Bulb Plate to Intercoastal Keelson
 " Angle Irons
 " Double Angle Iron Side Keelson
 " Side Intercoastal Plate work 4 Inches in Ship. 4 Inches per Rule. 16ths 4
 " do. Angle Irons
 " Attached to outside plating with angle iron

BILGE Angle Irons 3 3 6 3 3 6 Inches in Ship. 3 3 6 3 3 6 Inches per Rule. 16ths 6
 " do. Bulb Iron. 5 1/2 Inches in Ship. 5 1/2 5 Inches per Rule. 16ths 5
 " do. Intercoastal plates riveted to plating for 1/2 length
BILGE STRINGER Angle Irons 3 3 6 3 3 6 Inches in Ship. 3 3 6 3 3 6 Inches per Rule. 16ths 6
 Intercoastal plates riveted to plating for 1/2 length
SIDE STRINGER Angle Irons

The **FRAMES** extend in one length from middle line to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Bilge & to 12" below and to up. Sk on every 3rd frame
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 3/4 in. diameter, averaging 3 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 3 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 x 2 1/2 ins. from centre to centre.
 " Butts of one Strakes at Bilge for 1/2 length, double riveted with Butt Straps 1/8 thicker than the plates they connect.
 " Edges from Bilge to Main Sheerstrake, worked clencher, double & single riveted; with rivets 3/4 in. diameter, averaging 3 x 2 1/2 ins. from cr. to cr.
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 x 2 1/2 ins. from cr. to cr.
 " Edges of Main Sheerstrake, double single riveted. Upper Sheerstrake, double or single riveted.
 " Butts of Main Sheerstrake, treble riveted for whole length amidships. Butts of Upper or Spar Sheerstrake, treble riveted whole length amidships.
 " Butts of Main Stringer Plate, treble riveted for whole length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for whole length amidships.
 " Breadth of laps of plating in double riveting 4 1/2 ins Breadth of laps of plating in single riveting 2 1/2 x 2 1/2 ins

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble No. of Breasthooks, 3 Crutches, deep floors
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Blackton W. I. C. & Co. & Rosend
 Manufacturer's name or trade mark, "K.A.M.B." & "Salsiel"
 The above is a correct description.
 Builder's Signature, Murray Bros. Surveyor's Signature, J. J. Todd
 Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel. * If Iron Deck, state if whole or part, and if wood deck is laid thereon.

Form No. 1 for Iron Ships—4000—16/10/83

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* *6504 gls*
 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*
 Are the fillings between the ribs and plates solid single pieces? *Yes*
 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.*

Masts, Bowsprit, Yards, &c. *18 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 *One mast forward of P. Pine.*

NUMBER for EQUIPMENT *5616*

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested & Suprntd.
	Fore Sails,	Chain	<i>165</i>	<i>1 5/8</i>	<i>23.7</i>	<i>165</i>	<i>Glasgow</i>	Bower Anchors	<i>057</i>	<i>6-3-5</i>	<i>9-1-10</i>	<i>5 3/4</i>	<i>Glasgow</i>
	Fore Top Sails,	Iron Stream Chain	<i>42</i>	<i>5/8</i>	<i>15.8</i>	<i>14/16</i>	<i>by</i>		<i>058</i>	<i>6-2-24</i>	<i>8-18-30</i>	<i>5 3/4</i>	<i>by</i>
	Fore Topmast Stay Sails,	or Steel Wire ..	<i>46</i>	<i>10/16</i>	<i>10.5</i>	<i>45</i>	<i>Wm</i>		<i>059</i>	<i>2-0-12</i>	<i>4-12-20</i>	<i>1 1/2</i>	<i>Wm Fraser</i>
	Main Sails,	or Hempen Strm Cable	<i>42</i>	<i>5/8</i>	<i>7</i>	<i>10/16</i>	<i>Fraser</i>			<i>2-3</i>			
	Main Top Sails,	Towline, Hemp.	<i>75</i>	<i>7</i>		<i>75-6 1/2</i>		Stream Anchor		<i>1-1-0</i>		<i>3/4</i>	
	and	or Steel Wire ..	<i>90</i>	<i>5</i>		<i>90-4</i>		Kedge		<i>with stock</i>			
		Hawser						2nd Kedge					
		Warp											
		quality <i>g^d</i>											

Standing and Running Rigging *five hemp* sufficient in size and *g^d* in quality. She has *one* Long Boat and *one other*
 The Windlass is *M^r Onie's patent* Capstan and Rudder *good* Pumps *good*
 Engine Room Skylights.—How constructed? *Teak on top of iron casing* How secured in ordinary weather? *Bolted*
 What arrangements for deadlights in bad weather? *Bulldozers in solid deadlights*
 Coal Bunker Openings.—How constructed? *Cast Iron* How are lids secured? *Turn-buckles* Height above deck? *flush*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *3 scuppers, 3 water ports, 2 moving pipes and one cargo port*
 Cargo Hatchways.—How formed? *as usual*
 State size Main Hatch *19'10" x 10'8"* Forehatch *6'6" x 5'10"* Quarterhatch
 If of extraordinary size, state how framed and secured? *One web in main Hatchway*
 What arrangement for shifting beams? *and one fore & after.*
 Hatches, If strong and efficient? *3" Pine. Solid.*

Order for Special Survey No. *1864* Date *1st June 1883*
 Order for Ordinary Survey No. *44* Date *4th July*
 No. *3* in builder's yard.
 State dates of letters respecting this case *19th May & 31st Dec. 1883*

1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Specially Surveyed:—1883:—Aug 7, Sept. 14, Oct 2, 12, 16, 25; Nov. 6, 14, 20, 28;</i>
2nd. On the plating during the process of riveting	<i>Dec. 4, 12, 18, 21; 1884, Jan. 8, 15, 23, 29;</i>
3rd. When the beams were in and fastened, and before the decks were laid....	<i>Feb. 6, 13, 21, 27; March 5, 12, 18, 21,</i>
4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>25, 26, 27, 28; April 8, 14, 18 & 26.</i>
5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *The workmanship is good, and the vessel has been built in accordance with the tracing attached herewith, and with the instructions contained in the Secretary's letters of the 19th & 30th May and 31st Dec 1883, and otherwise in accordance with the requirements of the Rules.*
She has a fore peak tank containing 32 tons of water. This tank was tested as required by the rules and found satisfactory.
The hold, aft side of engine space, which forms the tunnel was filled with water and the bulkheads found satisfactory.
Forecastle which is sunk 3ft. 9ins is 18ft. long.
Raised Quarter deck 19ft long. Casing over E.P.B. space 26ft. x 11 1/2.

How are the surfaces preserved from oxidation? Inside *Cement & paint* Outside *paint*
 I am of opinion this Vessel should be Classed *100A.1.*
 The amount of the Entry Fee£ *1 : 0 : 0* is received by me, *J. J. Dodd*
 Special£ *10 : 0 : 0* 28th Apr 1884
 (to be sent as per margin). Certificate ...
 (Travelling Expenses, if any. £ *1/4/0*.)
 Committee's Minute *FRIDAY 2 MAY 1884 18*
 Character assigned *100A.1*
 1st class Iron & R.G.D. wood

The Surveyors are requested not to write on or below the space for Committee's Minute.

