

# IRON SHIP.

No. 2938 Survey held at Aberdeen Date, First Survey Nov. 26. 1875 Last Survey March 16. 1876  
On the "Smyrna" Ship Master Jamieson

TONNAGE under } 1185.22  
Tonnage Deck }  
Ditto of Third, Spar, }  
or Awning Deck. }  
Ditto of Poop, or } 107.92  
Raised Or. Dk. }  
Ditto of Houses } 22.37  
on Deck }  
Ditto of Forecastle } 56.63  
Gross Tonnage } 1372.14  
Less Crew Space } 67.54  
Less Engine Room }  
Register Tonnage } 1304.60  
as out on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
SPAR, OR AWNING DECKED VESSEL.  
HALF BREADTH (moulded)... 18.9  
DEPTH from upper part of Keel to top of Upper Deck Beams 24.4  
GIRTH of Half Midship Frame (as per Rule) ... 36.5  
1st NUMBER ... 19.8  
1st NUMBER, if a THREE DECKED VESSEL [deduct 7 feet]  
LENGTH ... 222  
2nd NUMBER ... 17.715  
PROPORTIONS—Breadths to Length ... 5.9  
Depths to Length—Upper Deck to Keel ... 9.0  
Main Deck ditto ...

Built at Aberdeen  
When built 1876 Launched Oct. 18. 1876  
By whom built Messrs W. Hood & Co.  
Owners Messrs G. Thompson & Co.  
Port belonging to Aberdeen  
Destined Voyage Sydney  
If Surveyed while Building, Afloat, or in Dry Dock.  
Under Special Survey

LENGTH on deck as per Rule ... 222.0 Feet. Inches. BREADTH—Moulded... 37.9 Feet. Inches. DEPTH top of Floors to Upper Deck Beams ... 22 Feet. Inches. 4 Power of Engines ... Horse. No. of Decks with flat laid Two No. of Tiers of Beams Two

Dimensions of Ship per Register, length, 222.3 breadth, 38.05 depth, 22.25

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness ...	$9 \times 2\frac{1}{2}$	$9 \times 2\frac{1}{2}$
STEM, moulding and thickness... ..	$8\frac{1}{2} \times 2\frac{1}{2}$	$8\frac{1}{2} \times 2\frac{1}{2}$
STERN-POST for Rudder do. do. ...	$9 \times 2\frac{1}{2}$	$8\frac{1}{2} \times 2\frac{1}{2}$
for Propeller ... ..		
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	<u>24 ins</u>	<u>24 ins</u>
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships ...	<u>5</u> <u>3</u> <u>8/16</u>	<u>5</u> <u>3</u> <u>8/16</u>
Do. for $\frac{1}{2}$ at each end ... ..	<u>5</u> <u>3</u> <u>7/16</u>	<u>5</u> <u>3</u> <u>7/16</u>
REVERSED FRAMES, Angle Iron ... ..	<u>3</u> <u>3/2</u> <u>8/16</u>	<u>3</u> <u>3</u> <u>8/16</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ...	<u>24 1/2</u> <u>10/16</u>	<u>24</u> <u>10/16</u>
thickness at the ends of vessel ... ..	<u>9/16</u> <u>9/16</u>	<u>8/16</u> <u>9/16</u>
depth at $\frac{3}{4}$ the half-bdth. as per Rule ...	<u>12 1/2</u>	<u>12</u>
height extended at the Bilges... ..	<u>6" 2"</u>	<u>4" 0"</u>
BEAMS, Upper, Spar, or Awning Deck } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge ...	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>
Average space... ..		
BEAMS, Main, or Middle Deck } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron, on Upper Edge ...	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>
Average space... ..		
BEAMS, Lower Deck, Hold, or Orlop } Single or double Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge ...	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>	<u>9</u> <u>9/16</u> <u>3 1/2</u> <u>3</u> <u>7/16</u> <u>4 feet</u>
Average space... ..		
KEELSONS Centre line, single or double plate, box, or intercostal, Plates ...	<u>17</u> <u>12/16</u>	<u>17</u> <u>12/16</u>
" Rider Plate ... ..	<u>11 1/2</u> <u>12/16</u>	<u>10 3/4</u> <u>12/16</u>
" Bulb Plate to intercostal keelson ...	<u>14</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
" Angle Irons ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
" Double Angle Iron Side Keelson ...		<u>8/16</u>
" Side intercostal Plate ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
" do. Angle Irons ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
" Attached to outside plating with angle iron for a length of <u>9</u> <u>7/16</u> feet amidships.	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
BILGE Angle Irons ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
" do. Bulb Iron... ..		
" do. Intercostal plates riveted to plating for length		
BILGE STRINGER Angle Irons ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>
Intercostal plates riveted to plating for length		
SIDE STRINGER Angle Irons ... ..	<u>5</u> <u>4</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>9/16</u>

Flat Keel Plates, breadth and thickness ... 37 1/2 11/16 36 11/16  
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 1/2 length fm up. part of Bilge to Ir. edge of Sh'rstrake  
Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness 42 12/16 40 12/16  
Butt Straps to outside plating, breadth & thickness 11 1/2 14 1/4 13 1/4  
Lengths of Plating ... .. 10 feet  
Shifts of Plating, and Stringers. not less than 2 frame shifts  
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... 44 10/16 44 10/16  
Angle Iron on ditto ... .. 5 4 9/16 5 4 9/16  
Tie Plates fore and aft, outside Hatchways ... 13 10/16 13 10/16  
Diagonal Tie Plates on Beams No. of Pairs.  
Planksheer material and scantling from Bulwarks  
Waterways do. do. Scantling Waterway  
Flat of Upper Deck do. do. Yellow pine 4"  
How fastened to Beams ... .. 8/16 Bolts 8/16 Bolts  
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... ..  
Is the Stringer Plate attached to the outside plating?  
Angle Irons on ditto, No. Two ... .. 4 4 9/16 4 4 9/16  
Tie Plates, outside Hatchways ... .. 13 10/16 13 10/16  
Diagonal Tie Plates on Beams, No. of pairs  
Waterways materials and scantlings ... ..  
Flat of Middle Deck do. do. ... ..  
How fastened to Beams ... ..  
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... .. 32 9/16 32 9/16  
Is the Stringer Plate attached to the outside plating?  
Angle Irons on ditto, No. Two ... .. 4 4 9/16 4 4 9/16  
Stringer or Tie Plates, outside Hatchways ... .. 13 10/16 13 10/16  
Flat of Lower Deck 3 pairs  
Ceiling betwixt Decks, thickness and material ... 3 1/4 7  
in hold do. do. ... 2 1/2  
Main piece of Rudder, diameter at head ... 6  
do. at heel ... 3 1/4  
Can the Rudder be unshipped afloat? Yes  
Bulkheads No. One Thickness of 7/16  
Height up to Main Deck  
How secured to sides of ship between two frames  
Size of Vertical Angle Irons 3 1/2 3 8/16 and distance apart 30 ins.  
Are the outside Plates doubled two spaces of Frames in length? Yes

Transoms, material. Knight-heads. Hawse Timbers. Plates & Frames  
Windlass Harfield's Patent Pall Bitt

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 5" apart.  
The REVERSED ANGLE IRONS on floors and frames extend across middle line to Keel to Gunwale and to fore & aft alternately  
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 1/8 in. diameter, averaging 5 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/8 in. diameter, averaging 3 1/2 ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 1/2 ins. from centre to centre.  
Butts of 3 Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.  
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/8 in. diameter, averaging 3 1/2 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.  
Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 3 1/2 (upper edge of Sheerstrake)

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Treble riveted  
Waterway, how secured to Beams Butt Waterway (Explain by Sketch, if necessary)  
Beams of the various Decks, how secured to the sides? Welded arms riveted to frames No. of Breasthooks, 5 Crutches, 5  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Frames & Beams Coats  
Manufacturer's name or trade mark, Best: Plating-Jones Bros. & Co. Middlesbrough

The above is a correct description.  
Builder's Signature, Walter Hood & Co. Surveyor's Signature, J. W. Little  
Surveyor to Lloyd's Register of British and Foreign Shipping.

Official Number 70452

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*  
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* 17385 Iron  
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 in corners of Butts.*

Masts, Bowsprit, Yards, &c., are *Iron & 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 *Fore & Main Masts are formed of 4 plates 7/16 5/16 thick, lands double clencher - butts treble carvel riveted, buttstraps 1/16 thicker than plates*  
*Length - Fore mast 86'4"; Main 88'3"; - Dia. - at Cap 19"; at Deck 30"; at Keel 27".* (Cont'd below.)

Sealed at Rotherham near Dudley by D.G. Lewis, 21 14 25 October 1876					Sealed at Rotherham near Dudley by D.G. Lewis, 21 14 25 October 1876				
NUMBER for EQUIPMENT 18896					ANCHORS.				
N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	N <sup>o</sup> .	Weight.
A	Fore Sails,	Chain	270	1 7/8	63 1/4 and 88 1/2 Lons	270 g 1 1/3 1/6	59 1/8 and 82 3/4 Lons	3	34.2.13
	Fore Top Sails,								32.1.3.0
	Fore Topmast Stay Sails	Chain	40	1" (chain)	1" chain				30.19.1.0
	Main Sails,	Hawser ...	90	10"	10"				32.0.0.0
	Main Top Sails,	Towlines ...	90	6"	9 1/2"				30.2.0.0
and		Warp ...	90	4 1/2"	6"				26.10.20 Lons
		quality <i>good</i>							
					Bowers				
					Stream				
					Kedges				

Standing and Running Rigging *Gale Wire & Hemp* sufficient in size and *good* in quality. She has *one* 26 1/2 ft Long Boat and three other boats.

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *2 in g bon 7 dia* Mallac's patent.

Engine Room Skylights. How constructed? How secured in ordinary weather?

What arrangements for deadlights in bad weather?

Coal Bunker Openings. How constructed? How are lids secured? Height above deck?

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *7 Discharge Ports and 4 Scuppers on each side.*

Cargo Hatchways.—How formed? *Iron beamings riveted to Beams & Tie plates*

State size Main Hatch *15.6 x 10.0* Forehatch *3.10 x 5.6* Quarterhatch *5.0 x 4.0*

If of extraordinary size, state how framed and secured? *Medium size: One deep web plate fitted in main Hatch.*

What arrangement for shifting beams?

Hatches, If strong and efficient?

Order for Special Survey No. *44* Date *21 Dec 1875*  
Order for Ordinary Survey No. *69* in builder's yard.  
DATES of Surveys held while building as per Section 18:  
1st. On the several parts of the frame, when in place, and before the plating was wrought *Built under Special Survey and Surveyed as follows: Nov 26, 30; Dec 3, 6, 11, 14, 17, 22, 24, 27, 30 - 1875;*  
2nd. On the plating during the process of riveting *Jan 7, 14, 18, 19, 21, 24, 26; Feb. 1, 10, 16, 18, 21, 22, 25, 29; Mar 1, 3, 7, 8,*  
3rd. When the beams were in and fastened, and before the decks were laid ... *10, 14, 15, 17, 20, 23, 24, 27, 29, 31; April 4, 5, 8, 11, 15, 18, 22, 28; May 9, 12, 18,*  
4th. When the ship was complete, and before the plating was finally coated or cemented ... *19, 22, 23, 26, 31; June 2, 5, 8, 10, 13, 16, 22, 26, 29; July 4, 8, 11, 13, 20, 24, 26, 31; Aug 2, 9, 11, 14, 31; Sept. 1, 5, 7, 11, 12, 15, 18, 21, 23, 26, 28; Oct. 5, 12, 17, 20, 25,*  
5th. After the ship was launched and equipped *27. Nov 8. 14. 1876*

General Remarks (State quality of workmanship, &c.)

*Mizen Mast formed of 4 plates 5/16 7/16 thick, lands double clencher, buttstraps treble riveted and 1/16 thicker than the plates. Length 78'3". Dia at Head 16 1/2". Deck 24 1/4". Keel 21". The Bowsprit is formed of 4 plates 7/16 thick. Lands double clencher, buttstraps treble riveted, & 1/16 thicker than plates. Length 42'4". Dia. at Cap 20". Bed 25 1/2". Keel 23 1/2". Has a vertical diaphragm plate 10 feet long x 9 1/2" thick. & 2 angle Bars 3 1/2 x 3 1/2 x 8 1/6. The Fore & Main Lower Yards formed of 2 plates 4 1/6 5 1/6 7/16 7/16 thick, lands single, buttstraps treble riveted. Doubling plate in way of Slings 10'3" x 7/16. Length 84 ft. - Dia at Slings 20 1/2" end 10 1/4". The Topsail Yards are formed of 2 plates 4 1/6 7/16 6 1/6 thick. Lands single, buttstraps treble & double riveted: Length 70 ft. Dia. at Slings 17 3/4". Ends 8 3/4".*

*The iron used in the construction of this vessel, as well as the Masts & Yards has been carefully tested and found to be of good quality.*

*The workmanship throughout is very good.*

*Length of Poop. 48 ft: Forecastle 42 ft*

State if *one, two, or three*, decked vessel, or if *open*, or *awning decked*; and the lengths of poop, forecastle, or *raised* quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Red Lead & Portland Cement in flat* Outside *Patent Paint*

I am of opinion this Vessel should be Classed *\* 100 A 1*

The amount of the Entry Fee ... £ *5:0:0* is received by me, *J. H. Pettit*

Special ... £ *54:12:0* Nov 15 1876

Certificate ... *Gratis*

(Travelling Expenses, if any, £ *none*).

Committee's Minute *14th November 1876*

Character assigned *100 A 1*

Lloyd's Register Foundation