

IRON SHIP

No. *4146* Survey held at *Port Glasgow* Date, First Survey *29th Aug 1876* Last Survey *4th April 1877*

On the Ship *"Ashmore"* Master *D. Simpson*

TONNAGE under Tonnage Deck *1021.92*
 Ditto of Third Spar, or Awning Deck *84.69*
 Ditto of Poop, or Raised Quarter Deck *15.93*
 Ditto of Houses on Deck *56.31*
 Ditto of Forecastle *1140.85*
 Gross Tonnage *1099.32*
 Less Crew Space *49.53*
 Less Engine Room *1099.32*
 Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING DECKED VESSEL.
 HALF BREADTH (moulded) *17.5*
 DEPTH from upper part of Keel to top of Upper Deck Beam *22.75*
 GIRTH of Half Midship Frame (as per Rule) *34.9*
 1st NUMBER *75.15*
 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
 LENGTH *212*
 2nd NUMBER *15.931*
 PROPORTIONS—Breadths to Length *6.05*
 Depths to Length—Upper Deck to Keel
 Main Deck ditto *9.3*

Built at *Port Glasgow*
 When built *1876:77* Launched *1st March 1877*
 By whom built *John Reid & Co*
 Owners *John Stewart & Co*
 Port belonging to *London*
 Destined Voyage *East Indies*
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *212* Breadth Moulded *35* DEPTH top of Floors to Upper Deck Beams *20.0* Power of Engines *2* Horse. N^o. of Decks with flat laid *Two* N^o. of Tiers of Beams *Two*

Dimensions of Ship per Register, length *214.35* breadth *35.3* depth *20.6*

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>8 1/2 x 2 1/2</i>	<i>8 1/2 x 2 1/2</i>
STEM, moulding and thickness	<i>8 x 2 1/2</i>	<i>8 x 2 1/2</i>
STERN-POST for Rudder do. do.	<i>8 x 2 1/2</i>	<i>8 x 2 1/2</i>
for Propeller	<i>8 x 2 1/2</i>	<i>8 x 2 1/2</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>23</i>	<i>23</i>
FRAMES, Angle Iron, for 3/4 length amidships	<i>5 3/4</i>	<i>5 3/4</i>
Do. for 1/2 at each end	<i>5 3/4</i>	<i>5 3/4</i>
REVERSED FRAMES, Angle Iron	<i>3 3/4</i>	<i>3 3/4</i>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>23 1/2</i>	<i>23 1/2</i>
thickness at the ends of vessel	<i>8 1/2</i>	<i>8 1/2</i>
depth at 3/4 the half-bdth. as per Rule	<i>12</i>	<i>12</i>
height extended at the Bilges	<i>5 1/2</i>	<i>5 1/2</i>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>8 1/2</i>	<i>8 1/2</i>
Single or double Angle Iron on Upper edge	<i>3 3/4</i>	<i>3 3/4</i>
Average space	<i>46</i>	<i>46</i>
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>8 1/2</i>	<i>8 1/2</i>
Single or double Angle Iron on Upper Edge	<i>3 3/4</i>	<i>3 3/4</i>
Average space	<i>46</i>	<i>46</i>
AMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>8 1/2</i>	<i>8 1/2</i>
Single or double Angle Iron on Upper Edge	<i>3 3/4</i>	<i>3 3/4</i>
Average space	<i>46</i>	<i>46</i>
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	<i>16</i>	<i>16</i>
Rider Plate	<i>11</i>	<i>11</i>
Bulb Plate to Intercostal Keelson	<i>10 1/2</i>	<i>10 1/2</i>
Angle Irons	<i>5 3/4</i>	<i>5 3/4</i>
Double Angle Iron Side Keelson	<i>5 3/4</i>	<i>5 3/4</i>
Side Intercostal Plate	<i>5 3/4</i>	<i>5 3/4</i>
do. Angle Irons	<i>5 3/4</i>	<i>5 3/4</i>
Attached to outside plating with angle iron	<i>5 3/4</i>	<i>5 3/4</i>
Angle Irons	<i>5 3/4</i>	<i>5 3/4</i>
do. Bulb Iron	<i>5 3/4</i>	<i>5 3/4</i>
do. Intercostal plates riveted to plating for length	<i>5 3/4</i>	<i>5 3/4</i>
STRINGER Angle Irons	<i>5 3/4</i>	<i>5 3/4</i>
Intercostal plates riveted to plating for length	<i>5 3/4</i>	<i>5 3/4</i>
STRINGER Angle Irons	<i>5 3/4</i>	<i>5 3/4</i>

Booms, material. Knight-heads. Hawse Timbers. *Iron*
 and class *Iron Patent* Pall Bitt

FRAMES extend in one length from *Keel* to *Gunwale* Riveted through plates with *7/8* in. Rivets, about *1*" apart.
 REVERSED ANGLE IRONS on floors and frames extend from middle line to *Main Deck* and to *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 *7/8* in. diameter, averaging *5 1/2* ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 3/4* ins. from centre to centre.
 Butts of *Three* Strakes at Bilge for *half* length, treble riveted with Butt Straps *7/8* thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *7/8* in. diameter, averaging *3 3/4* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* 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 *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* amidships.
 Breadth of laps of plating in double riveting *5 1/2* Breadth of laps of plating in single riveting *5 1/2*

Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 how secured to Beams *Iron Gutter* (Explain by Sketch, if necessary.)
 of the various Decks, how secured to the sides? *Beam ends turned down* No. of Breasthooks, *4* Crutches, *4*

description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Best*
 manufacturer's name or trade mark *Richd. Iron Works. Plates. Corsett*

The above is a correct description.
 Builder's Signature, *John Reid & Co* Surveyor's Signature, *H. H. Wood*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON SHIP

Workmanship. Are the butts of plating planed or otherwise fitted? *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*
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* 18006 *Ln*

Masts, Bowsprit, Yards, &c., are *Ln* 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 Mast 75 ft dia 30 Main 79 ft dia 30 Mizzen 72 ft dia 26 Bowsprit 20.8 dia 25 in 2 plates edges double riveted butts 1/16 thicker than plate & treble*
Fore & Main Mast & Bowsprit 1/16 riveted, plate doubled in way of wedging & 2 angle Ls in each
Mizzen Mast 15500 4 1/2 x 3 1/2 x 1/16 except in Mizzen which are 4 x 3 1/2 x 1/16. Diaphragm plate also in bow

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
SAILS.												
CABLES, &c.												
No.	SAILS.	CABLES, &c.	Chain									
Double	Fore Sails,	<i>135-50 1 3/4</i>	<i>5500 1/2</i>	<i>110 1/2</i>	<i>5500 1/2</i>	<i>110 1/2</i>	Bowser	<i>5500 1/2</i>	<i>30.1.4</i>	<i>20.17.0.0</i>	<i>30.0.0</i>	<i>20.12.20</i>
Fore Top Sails,		<i>135-50 1 3/4</i>	<i>5500 1/2</i>	<i>110 1/2</i>	<i>5500 1/2</i>	<i>110 1/2</i>		<i>5500 1/2</i>	<i>30.0.0</i>	<i>20.17.0.0</i>	<i>30.0.0</i>	<i>20.12.20</i>
Fore Topmast Stay Sails		<i>0.4 Lewis</i>	<i>60 1/8</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>60 1/8</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>
Main Sails,		<i>Hemp-Strm Cbl</i>	<i>60 1/8</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>60 1/8</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>
Main Top Sails,		<i>Hawser ...</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>90 1/2</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>
and		<i>Towlines ...</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>90 1/2</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>
		<i>Warp ...</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>90 1/2</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>
		<i>quality good</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>	<i>90 1/2</i>		<i>90 1/2</i>	<i>25.2.0.0</i>	<i>25.8.0.0</i>	<i>25.2.0</i>	<i>25.3.20</i>

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Two* Long Boats and *4* others
The Windlass is *Emerson's Walker Patent* Capstan and Rudder *Efficient* Pumps *2* *Ln*

Engine Room Skylights. How constructed _____ How secured in ordinary weather? _____
What arrangements for deadlights in bad weath _____

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? *Ports & Scuppers*

Cargo Hatchways. How formed? *Ln* *Comings*
State size Main Hatch *15.4 x 10.0* Forehatch *7.8 x 6.6* Quarterhatch *7.8 x 6.6*

If of extraordinary size, state how framed and secured? _____
What arrangement for shifting beams? *One Shifting Beam*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>222</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under S.S. and Surveyed 1871</i>
<i>222</i>	2nd. On the plating during the process of riveting	<i>Augt 23, Sept 13, 19, 25, 28, Oct 2, 13, 19, 20, 2</i>
Binary Survey No. <i>222</i>	3rd. When the beams were in and fastened, and before the decks were laid ...	<i>Nov 2, 1, 3, 7, 22, 21, 20, Dec 2, 6, 14, 19, 22, 1</i>
Date <i>5/11</i>	4th. When the ship was complete, and before the plating was finally coated or cemented...	<i>Jan 4, 15, 23, 30, Feb 7, 8, 17, 23, March 6, 13, 20, 24, April 4th</i>
No. <i>5/11</i> in builder's yard.	5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conformity with the Rules and Midship Section and longitudinal plan herewith appended which were submitted and approved by the Committee in letters dated 9th 15th September 1876*
The workmanship and materials are of good quality.

Fore & Main lower Yards 70 ft dia 19 plate 5/16 in 2 plates edges single riveted butts
Do Topsail 60 65 ft dia 16 1/2 in 5/16 in 2 plates edges single riveted butts
Cross Jack 60 59 ft dia 15 in 5/16 in 2 plates edges single riveted butts
all wrought 3/2 x 3/4 and 2 in topsail and crossjack for about 30 ft in the middle 3/2 x 3/4
30 ft 37 1/2 ft

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

How are the surfaces preserved from oxidation? Inside *Pattana cement to abraded red lead* Outside *Red lead & 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, *100 A 1*
Special ... £ *52: 9: 6* 5th April 1874
+ Certificate ... £ *0: 0: 0*
(Travelling Expenses, if any, £ ...) *£ 54: 9: 6*

Committee's Minute *10 April 1874*

Character assigned *100 A 1*

+ Certificate requested to be sent to the Owner

