

IRON SHIP. 20912

No. *3143* Survey held at *Aburdeen* Date, First Survey *Nov 1 1897* Last Survey *May 31 1898*
 On the *Benamain* Iron screw schooner Master *A. J. J. J.*

TONNAGE under Tonnage Deck *308.29* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of *4.11* SPAR, OR SWING-DECKED VESSEL.
 Ditto of *25.07* HALF BREADTH (moulded) *11.5*
 Ditto of *36.58* DEPTH from upper part of Keel to top of Upper Deck Beams *14.08*
 Ditto of *4.05* GIRTH of Half Midship Frame (as per Rule) *22.58*
 Gross Tonnage *381.10* 1st NUMBER *48.10*
 Less Crew Space *12.58* 1st NUMBER *THREE DECKED VESSEL*
 Less Engine Room *121.95* [deduct 7 feet]
 Register Tonnage *246.57* LENGTH *148.45*
 as cut on Beam *246.57* 2nd NUMBER *4103*
 PROPORTIONS—Breadths to Length *5.4*
 Depths to Length—Upper Deck to Keel *10.5*
 Main Deck ditto *10.5*

Built at *Aburdeen*
 When built *1898* Launched *May 15 1898*
 By whom built *James Hall & Co.*
 Owners *James J. A. Davidson*
 Port belonging to *Aburdeen*
 Destined Voyage *Coasting*
 If Surveyed while Building, Afloat, or in Dry Dock.
Under special Survey

LENGTH on deck as per Rule *148.45* BREADTH—Moulded *23.2* DEPTH top of Floors to Upper Deck Beams *13.15* Power of Engines *45* Horse. *45* N°. of Decks with flat laid *One* N°. of Tiers of Beams *One*

Dimensions of Ship per Register, length, *150.2* breadth, *23.2* depth, *13.0*

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>6 1/2 x 1 3/4</i>	<i>4 x 1 5/8</i>
STEM, moulding and thickness	<i>6 1/2 x 1 3/4</i>	<i>5 1/4 x 1 5/8</i>
STERN-POST for Rudder do. do.	<i>6 1/4 x 3 1/8</i>	<i>5 1/4 x 3 1/8</i>
for Propeller	<i>6 1/4 x 3 1/8</i>	<i>5 1/4 x 3 1/8</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>21</i>	(Class <i>100-A</i>)
FRAMES, Angle Iron, for 2/3 length amidships	<i>3 3 9/16</i>	<i>3 3 9/16</i>
Do. for 1/3 at each end	<i>3 3 9/16</i>	<i>3 3 9/16</i>
REVERSED FRAMES, Angle Iron	<i>2 1/2 2 1/2 5/16</i>	<i>2 1/2 2 1/2 5/16</i>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>13 1/2 9/16 5/16</i>	<i>13 1/2 9/16 5/16</i>
thickness at the ends of vessel	<i>13 1/2 9/16 5/16</i>	<i>13 1/2 9/16 5/16</i>
depth at 3/4 the half-bdth. as per Rule	<i>13 1/2 9/16 5/16</i>	<i>13 1/2 9/16 5/16</i>
height extended at the Bilges	<i>28 inches</i>	<i>28 inches</i>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>4 3 9/16</i>	<i>4 2 1/2 9/16</i>
Single or double Angle Iron on Upper edge	<i>5 1/2 3 9/16</i>	<i>5 1/2 3 9/16</i>
Average space	<i>2 1/2 2 1/4 5/16</i>	<i>2 1/4 2 1/4 5/16</i>
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>5 1/2 3 9/16</i>	<i>5 1/2 3 9/16</i>
Single, or double Angle Iron, on Upper Edge	<i>5 1/2 3 9/16</i>	<i>5 1/2 3 9/16</i>
Average space	<i>2 1/2 2 1/4 5/16</i>	<i>2 1/4 2 1/4 5/16</i>
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>5 1/2 3 9/16</i>	<i>5 1/2 3 9/16</i>
Single or double Angle Iron on Upper Edge	<i>5 1/2 3 9/16</i>	<i>5 1/2 3 9/16</i>
Average space	<i>2 1/2 2 1/4 5/16</i>	<i>2 1/4 2 1/4 5/16</i>
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	<i>10 1/4 9/16</i>	<i>10 9/16</i>
Rider Plate	<i>4 9/16</i>	<i>4 9/16</i>
Bulb Plate to Intercostal Keelson	<i>4 9/16</i>	<i>4 9/16</i>
Angle Irons	<i>3 3 9/16</i>	<i>3 3 9/16</i>
Double Angle Iron Side Keelson	<i>3 3 9/16</i>	<i>3 3 9/16</i>
Side Intercostal Plate	<i>3 3 9/16</i>	<i>3 3 9/16</i>
do. Angle Irons	<i>3 3 9/16</i>	<i>3 3 9/16</i>
Attached to outside plating with angle iron	<i>3 3 9/16</i>	<i>3 3 9/16</i>
BILGE Angle Irons	<i>3 3 9/16</i>	<i>3 3 9/16</i>
do. Bulb Iron	<i>3 3 9/16</i>	<i>3 3 9/16</i>
do. Intercostal plates riveted to plating for length	<i>3 3 9/16</i>	<i>3 3 9/16</i>
BILGE STRINGER Angle Irons	<i>3 3 9/16</i>	<i>3 3 9/16</i>
Intercostal plates riveted to plating for length	<i>3 3 9/16</i>	<i>3 3 9/16</i>
SIDE STRINGER Angle Irons	<i>3 3 9/16</i>	<i>3 3 9/16</i>

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	<i>31</i>	<i>9/16</i>	<i>30</i>	<i>9/16</i>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	<i>31</i>	<i>9/16</i>	<i>30</i>	<i>9/16</i>
fm up. part of Bilge to Ir. edge of Sh'rstrake	<i>31</i>	<i>9/16</i>	<i>30</i>	<i>9/16</i>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	<i>31</i>	<i>9/16</i>	<i>30</i>	<i>9/16</i>
Up. or Spar Dk. Sh'rstrake, brdth & thickness	<i>10 1/4 12 1/4 15 1/4</i>	<i>9/16 9/16 9/16</i>	<i>9 1/4 14 1/4</i>	<i>9/16 9/16</i>
Butt Straps to outside plating, breadth & thickness	<i>10 1/4 12 1/4 15 1/4</i>	<i>9/16 9/16 9/16</i>	<i>9 1/4 14 1/4</i>	<i>9/16 9/16</i>
Lengths of Plating	<i>10 1/4 12 1/4 15 1/4</i>	<i>9/16 9/16 9/16</i>	<i>9 1/4 14 1/4</i>	<i>9/16 9/16</i>
Shifts of Plating, and Stringers	<i>10 1/4 12 1/4 15 1/4</i>	<i>9/16 9/16 9/16</i>	<i>9 1/4 14 1/4</i>	<i>9/16 9/16</i>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<i>32</i>	<i>9/16</i>	<i>32</i>	<i>9/16</i>
Angle Iron on ditto	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Tie Plates fore and aft, outside Hatchways	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Diagonal Tie Plates on Beams No. of Pairs	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Planksheer material and scantling	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Waterways do. do.	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Flat of Upper Deck do. do.	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
How fastened to Beams	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Is the Stringer Plate attached to the outside plating?	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Angle Irons on ditto, No.	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Tie Plates, outside Hatchways	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Diagonal Tie Plates on Beams, No. of pairs	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Waterways materials and scantlings	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Flat of Middle Deck do. do.	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
How fastened to Beams	<i>3.3</i>	<i>9/16</i>	<i>3.3</i>	<i>9/16</i>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<i>12</i>	<i>9/16</i>	<i>12</i>	<i>9/16</i>
Is the Stringer Plate attached to the outside plating?	<i>12</i>	<i>9/16</i>	<i>12</i>	<i>9/16</i>
Angle Irons on ditto, No.	<i>12</i>	<i>9/16</i>	<i>12</i>	<i>9/16</i>
Stringer or Tie Plates, outside Hatchways	<i>12</i>	<i>9/16</i>	<i>12</i>	<i>9/16</i>
Flat of Lower Deck	<i>12</i>	<i>9/16</i>	<i>12</i>	<i>9/16</i>
Ceiling betwixt Decks, thickness and material	<i>1 1/2 x 1/4</i>	<i>2.2 1/2</i>	<i>2.2 1/2</i>	<i>2.2 1/2</i>
in hold do. do.	<i>2.2 1/2</i>	<i>2.2 1/2</i>	<i>2.2 1/2</i>	<i>2.2 1/2</i>
Main piece of Rudder, diameter at head	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>
do. at heel	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>
Can the Rudder be unshipped afloat?	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>
Bulkheads No. 5 Thickness of	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>
Height up	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>
How secured to sides of ship	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>
Size of Vertical Angle Irons	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>
Are the outside Plates doubled two spaces of Frames in length?	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>	<i>3 1/4</i>

Transoms, material. Knight-heads. Hawse Timbers. *Makes frames*
 Windlass *Patent of Iron* Pall Bitt *Patent of Iron*

The FRAMES extend in one length from *Keel* to *gunwale* Riveted through plates with *5/16* in. Rivets, about *4* apart.
 The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *upper part of Bilge* and to *gunwale* 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* in. diameter, averaging *4 1/2* ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *5/16* in. diameter, averaging *2 1/2* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *5/16* in. diameter averaging *3 1/4* ins. from centre to centre.
 Butts of *One* Strakes at Bilge for *half* length, double riveted with Butt Straps *5/16* thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *5/16* in. diameter, averaging *2 1/2* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *5/16* in. diameter, averaging *3 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 1/2* Breadth of laps of plating in single riveting *3*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double riveted*
 Waterway, how secured to Beams *girth on raised transverse beam* (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *Welded and riveted to the frames* No. of Breasthooks, *3* Crutches, *3*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Best quality iron*
 Manufacturer's name or trade mark, *Patent of Iron*

The above is a correct description.
 Builder's Signature, *James Russell & Co.* Surveyor's Signature, *J. J. J.*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 678-0018

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 *Black & Red Pine* *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

Length of foremast from deck 40 feet Dia 15 1/4 inches
dillo dille of Main Mast 38 feet Dia 15 inches

Surveyed by J. H. M. at Sunderland Dec 20 1844.

Surveyed by J. H. M. at Sunderland Jan 22 1848

NUMBER for EQUIPMENT

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W't req'd per Rule.	Test req'd per Rule.
1	Fore Sails,	Chain	105	1 1/8	20 3/40	15 1/2	20 3/40	Bowers	3	1.3.0	10.12.2.0	8.1.0	10 1/20
2	Fore Top Sails,				30 3/40	1 1/8	30 3/40						
3	Fore Topmast Stay Sails	Hmpn Strm Cbl	50	1 1/8	2.12.2.0	50 3/40	30 3/40						
4	Main Sails,	Hawser ...	45	1		45 1/2		Stream	1	2.1.14	4.14.2.0	3.0.0	
5	Main Top Sails,	Towlines ...	90	5		45. 1/2		Kedges	1	1.2.12		1.2.0	
6	and	Warp ...	50	4 1/2		45. 5							
7		quality good	50	3 1/2									

Standing and Running Rigging *the ship's Hemp* sufficient in size and *good* in quality. She has *One 1/2* Long Boat and *One 10 foot* Gig

The Windlass is *Good of Iron* Capstan and Rudder *Good* Pumps *2 of Iron & 1 of Gun*

Engine Room Skylights.—How constructed? *Strong teak frame* How secured in ordinary weather? *Blocked & Camings*

What arrangements for deadlights in bad weather? *Glass Bulbeyes*

Coal Bunker Openings.—How constructed? *Part of Iron & part of Wood* How are lids secured? *with a bar* Height above deck? *5"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *5 scuppers and 5 discharge ports on each side*

Cargo Hatchways.—How formed? *Iron Camings riveted to beams and tie plates*

State size Main Hatch *15.10 x 11.10* Forehatch *13.10 x 11.10* Quarterhatch *15.10 x 11.10*

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

What arrangement for shifting beams? *None*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>49</i>	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	<i>Built under special survey and surveyed as follows Nov 1. 5. 9. 10. 12. 14. 15. 17. 20. 21. 25. 27. 30. Dec 3. 4. 12. 18. 21. 1844. Jan 6. 9. 11. 17. 22. 25. 26. 28. 30. Feb 14. 5. 8. 11. 13. 14. 15. 19. 25. 28. March 1. 5. 8. 11. 1845. 15. 20. 22. 27. 29. April 5. 11. May 14. 15. 17. 18. 21. 25. 28. 31. 1845.</i>
✓ Date <i>Oct 29 1844</i>		2nd.	On the plating during the process of riveting	
Order for Ordinary Survey No. <i>210</i>		3rd.	When the beams were in and fastened, and before the decks were laid ...	
Date <i>—</i>		4th.	When the ship was complete, and before the plating was finally coated or cemented..	
No. <i>210</i> in builder's yard.		5th.	After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *Workmanship of good quality*
The Iron used in the construction of this vessel has been tested and found to be of good quality.
Length of Raised Quarter Deck 45 feet, dille of fore-castle 10 feet, dille of Water ballast tank 32 feet.
And is built in accordance with approved drawings as per Secretary's Letter dated 19th October 1844.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, fore-castle, 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 on Flat of bottom* Outside *Patent Paint*

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

The amount of the Entry Fee ... £ *4* : 0 : 0 is received by me, *J. H. M.*
Special ... £ *18* : 8 : 0 *May 17 1845*
Certificate ... *Grates* :
(Travelling Expenses, if any, £ *none*).

Committee's Minute *4th, June 1878.*

Character assigned *100A*

By committee Lloyd's Register 32 feet
the 3rd Bower anchor is 29m 7 lbs light. In other respects the vessel is eligible for the figure 1

It is submitted that this vessel appears eligible to be classed 100A

Double Bottom 32 ft.

Lloyd's Register