

# IRON SHIP.

No. 2885 Survey held at Aberdeen Date, First Survey June 7 1875 Last Survey March 1876  
 On the Ballater Iron S.S. Yard Number 199 Master C. Davidson  
 Tonnage under Deck 599.15 ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 Ditto of Third, Spar, or Awning Deck. 44.90 SPAR, OR AWNING-DECKED VESSEL.  
 Ditto of Prop, or Raised, Or. Dk. 14.40 HALF BREADTH (moulded) 15.5  
 Ditto of Houses on Deck 22.44 DEPTH from upper part of Keel to top of Upper Deck Beams 14.13  
 Ditto of Forecastle 22.44 GIRTH of Half Midship Frame (as per Rule) 24.42  
 Gross Tonnage 441.22 1st NUMBER 58.05  
 Less Crew Space 33.38 1st NUMBER THREE DECKED VESSEL  
 Less Engine Room 2.34.19 LENGTH 198.83  
 Register Tonnage 440.60 2nd NUMBER 11542  
 as cut on Beam! PROPORTIONS—Breadths to Length 4.3  
 Depths to Length—Upper Deck to Keel 11.6  
 Main Deck ditto 11.6  
 Built at Aberdeen  
 When built 1876 Launched 22 Feb 1876  
 By whom built James Hall, Dundee  
 Owners James & A. Davidson  
 Port belonging to Aberdeen  
 Destined Voyage Coasting  
 If Surveyed while Building, Afloat, or in Dry Dock.  
Under special survey

LENGTH on deck as per Rule 198.83 BREADTH—Moulded 24 DEPTH top of Floors to Upper Deck Beams 14.13 Power of Engines 90 Horse. 90 No. of Decks with flat laid One No. of Tiers of Beams One

Dimensions of Ship per Register, length 200.7 breadth 24.2 depth 15.5

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	$4\frac{1}{2} \times 2\frac{3}{8}$	$4\frac{1}{2} \times 2\frac{3}{8}$						
STEM, moulding and thickness	$4\frac{1}{2} \times 2\frac{3}{8}$	$4\frac{1}{2} \times 2\frac{3}{8}$						
STERN-POST for Rudder do. do.	$4\frac{1}{2} \times 4\frac{1}{2}$	$4\frac{1}{2} \times 4\frac{1}{2}$						
for Propeller	$4\frac{1}{2} \times 4\frac{1}{2}$	$4\frac{1}{2} \times 4\frac{1}{2}$						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22</u>	(Class <u>100-A</u> )						
FRAMES, Angle Iron, for $\frac{3}{4}$ length amidships	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$
Do. for $\frac{1}{4}$ at each end	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$
REVERSED FRAMES, Angle Iron	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$	$1\frac{1}{4} \times \frac{1}{8}$
thickness at the ends of vessel	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$
depth at $\frac{3}{4}$ the half-bdth. as per Rule	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$
height extended at the Bilges	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$	$3\frac{1}{4} \times \frac{1}{8}$
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$	$6\frac{1}{2} \times \frac{1}{8}$
Single or double Angle Iron on Upper edge	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$
Average space	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$
Single or double Angle Iron, on Upper Edge	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$
Average space	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$	$4\frac{1}{2} \times \frac{1}{8}$
Single or double Angle Iron on Upper Edge	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$	$3 \times 3$
Average space	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$	$3 \times 8$
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$	$12\frac{1}{4} \times \frac{1}{8}$
" Rider Plate	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$	$9\frac{1}{4} \times \frac{1}{8}$
" Bulb Plate to Intercoastal Keelson	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" Angle Irons	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" Double Angle Iron Side Keelson	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" Side Intercoastal Plate	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" do. Angle Irons	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" Attached to outside plating with angle iron	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
BILGE Angle Irons	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
" do. Bulb Iron	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$	$5\frac{1}{2} \times \frac{1}{8}$
" do. Intercoastal plates riveted to plating for length	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$
BILGE STRINGER Angle Irons	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
Intercoastal plates riveted to plating for length	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$	$\frac{1}{2} \times \frac{1}{8}$
SIDE STRINGER Angle Irons	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$	$4\frac{1}{2} \times 3$
Transoms, material. Knight-heads. Hawse Timbers.	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$	$10 \times \frac{1}{8}$
Windlass <u>Barfords Patent</u> Pall Bitt								

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with  $\frac{3}{4}$  in. Rivets, about 5 apart.  
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to from Mid Beam to Gunwale 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  $\frac{1}{8}$  in. diameter, averaging 5 ins. from centre to centre.  
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets  $\frac{3}{4}$  in. diameter, averaging 3 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets  $\frac{3}{4}$  in. diameter averaging 3 ins. from centre to centre.  
 Butts of Two Strakes at Bilge for 12 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  $\frac{3}{4}$  in. diameter, averaging 3 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets  $\frac{3}{4}$  in. diameter, averaging 3 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 12 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 12 length amidships.  
 Butts of Main Stringer Plate, treble riveted for 12 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 12 length.  
 Breadth of laps of plating in double riveting 5 to 6 inches Breadth of laps of plating in single riveting 3  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Treble Rivelled  
 Waterway, how secured to Beams Welded & secured (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Secured to frames  
 No. of Breasthooks, Five Crutches, Five  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best quality of Birm.  
 Manufacturer's name or trade mark, Cassell & Co. Iron Company  
 The above is a correct description.  
 Builder's Signature, Wm. Russell & Co. Surveyor's Signature, Wm. Russell

IRON 465-0152



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 Patent 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 Length of Main Mast from Deck to Heads 44.5. Sea 18 inches. Ditto of Main Mast 44 feet Dia 14 1/2 inches

Tested at South Docks  
Lundal & Partners 5th 1876

Tested at South Docks  
Lundal & Partners 14. 19. 22 Jan 1876

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Lngh. & Size req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
One	SAILS.											
	Fore Sails,											
	Fore Top Sails,											
	Fore Topmast Stay Sails											
	Main Sails,											
Two	Main Top Sails,											
	Warp											
	quality											
and	CABLES, &c.											
	Chain ...	210	7 1/2	37 and 45 10/20	219 7/8	37 and 45 1/2	Bowers ...	3	15.3.24 17.7.2.0	15.1.0	15 1/4 1/2	
Two	Chain ...											
	Ham Strm Cbl	65	10 1/2									
Two	Hawser ...	90	10									
	Towlines ...	90	8									
and	Warp ...	90	8									
	quality	90	5									

Standing and Running Rigging Good sufficient in size and good in quality. She has 22 Long Boat and 10 feet gig

The Windlass is Good Capstan Good and Rudder Good Pumps 3 8 inches

Engine Room Skylights. How constructed? On Brass Deck Windows How secured in ordinary weather? Tacked to Cammings

What arrangements for deadlights in bad weather? Covered with tarpaulins

Coal Bunker Openings. How constructed? Cast Iron Pans How are lids secured? With a bar Height above deck? 5 inches

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Scupper and two

discharge ports on each side

Cargo Hatchways. How formed? Iron Cammings rivetted to Beams & tie plates

State size Main Hatch 18.0 x 9.0 Forehatch 14.5 x 9.0 Quarterhatch 14.5 x 9.0

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

What arrangement for shifting beams? One shifting beam in each hatch

Hatches, If strong and efficient? Yes

Order for Special Survey No. 22 DATES of Surveys held while building as per Section 18.

Date May 28. 1875 1st. On the several parts of the frame, when in place, and before the plating was wrought

Order for Ordinary Survey No. 22 2nd. On the plating during the process of riveting

Date May 28. 1875 3rd. When the beams were in and fastened, and before the decks were laid...

4th. When the ship was complete, and before the plating was finally coated or cemented...

No. 299 in builder's yard. 5th. After the ship was launched and equipped

27. 22. 25. 29 March 7. 3. 8. 1876

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

The Sheustrake is doubled with an 8/10 Plate for 14 length Amidships; and is double rivetted throughout and is built in accordance with approved tracing of Midship section as per Secretaries Letter dated May 22. 1875 Length of Iron Deck Amidships 50 feet; ditto of Water Ballast Tank 54.2; ditto of Raised Quarter deck 59 feet; ditto of Bridge House 40 feet. Hot & cold tests have been made upon the Iron used in the construction of this vessel and proved to be of good quality. The Ballast Tank has been tested on the slip and afloat and proved to be quite tight.

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 Painted Outside Patent Paint

I am of opinion this Vessel should be Classed 1000

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, J. W. Kettle

Special ... £ 35 : 4 : 0 March 1876

Certificate ... Gratis

(Travelling Expenses) (if any) £ none

Committee's Minute 14th March 1876

Character assigned 1000

W. M. Kettle

14th March 1876

1000

1000

1000

1000

1000

1000