

# IRON SHIP.

DEC 1883

No. 3488 Survey held at Aberdeen Date, First Survey Sept 22 1883 Last Survey Nov 24 1883  
On the Harsh Star Iron S.S. Trawler

**TONNAGE** under Tonnage Deck 115.24 **ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.** Master R Bond  
 Ditto of Third, Spar, or Awning Deck. **Half Breadth** (moulded) 9.5 Feet. Built at Aberdeen  
 Ditto of Poop, or Raised Or. Dk. **Depth** from upper part of Keel to top of Upper Deck Beams 11.25 When built 1883 Launched 18 Aug 1883  
 Ditto of Houses on Deck. **Girth** of Half Midship Frame (as per Rule) 15.9 By whom built James & Ritchie Iron Co  
 Ditto of Forecastle **1st Number** 3405 Owners W. Fisher & Co  
 Gross Tonnage 115.50 **1st Number, if a 3-Decked Vessel** deduct 7 feet Residence Aberdeen  
 Crew Space 4.89 **Length** 100 Port belonging to Aberdeen  
 Engine Room 48.02 **2nd Number** 3405 Destined Voyage Coasting  
 Tonnage put on Beam 29.49 **Proportions**— Breadths to Length 5.26 If Surveyed while Building, Afloat, or in Dry Dock, Under special survey  
 Depths to Length—Upper Deck to Keel 9  
 Main Deck ditto .. .. .

PLANS

Length of Deck as per Rule	Feet. Inches. <u>100</u>	BREADTH—Moulded	Feet. Inches. <u>19</u>	DEPTH top of Floors to Upper Deck Beams	Feet. Inches. <u>10.4</u>	Power of Engines	Horse. <u>52</u>	N <sup>o</sup> . of Decks with flat laid	<u>One</u>
				Do. do. Main Deck Beams				N <sup>o</sup> . of Tiers of Beams	<u>One</u>

Dimensions of Ship per Register, length, 101.4 breadth, 19.05 depth, 10.2

	Inches in Ship.			Inches per Rule.		
	In Ship.	In Ship.	In Ship.	Inches per Rule.	Inches per Rule.	Inches per Rule.
KEEL, depth and thickness	<u>5 1/2</u>	<u>1 1/4</u>	<u>5 1/2</u>	<u>5 1/2</u>	<u>1 1/4</u>	<u>5 1/2</u>
KEEL, moulding and thickness	<u>5</u>	<u>1 1/4</u>	<u>5</u>	<u>5</u>	<u>1 1/4</u>	<u>5</u>
STERN-POST for Rudder do. do.	<u>5</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>	<u>2 1/2</u>	<u>5</u>
" " for Propeller	<u>5</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>	<u>2 1/2</u>	<u>5</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>20 inches</u>					
FRAMES, Angle Iron, for 2/3 length amidships	<u>3</u>	<u>2 1/2</u>	<u>5</u>	<u>3</u>	<u>2 1/2</u>	<u>5</u>
Do. for 1/2 at each end	<u>3</u>	<u>2 1/2</u>	<u>5</u>	<u>3</u>	<u>2 1/2</u>	<u>5</u>
REVERSED FRAMES, Angle Iron	<u>2 1/2</u>	<u>2 1/2</u>	<u>4</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>4</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<u>1 1/2</u>	<u>5</u>	<u>1 1/2</u>	<u>5</u>	<u>5</u>	<u>5</u>
thickness at the ends of vessel	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
depth at 3/4 the half-bdth. as per Rule	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
height extended at the Bilges	<u>24 inches</u>					
BEAMS, Upper, Spar, or Awning Deck	<u>4</u>	<u>2 1/2</u>	<u>6</u>	<u>4</u>	<u>2 1/2</u>	<u>6</u>
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>was frame every frame</u>					
Single or double Angle Iron on Upper edge	<u>was frame every frame</u>					
Average space	<u>was frame every frame</u>					
BEAMS, Main, or Middle Deck	<u>was frame every frame</u>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>was frame every frame</u>					
Single, or double Angle Iron, on Upper Edge	<u>was frame every frame</u>					
Average space	<u>was frame every frame</u>					
BEAMS, Lower Deck	<u>was frame every frame</u>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>was frame every frame</u>					
Single or double Angle Iron on Upper Edge	<u>was frame every frame</u>					
Average space	<u>was frame every frame</u>					
BEAMS, Hold, or Orlop	<u>was frame every frame</u>					
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>was frame every frame</u>					
Single or double Angle Iron on Upper Edge	<u>was frame every frame</u>					
Average space	<u>was frame every frame</u>					
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	<u>8 1/2</u>	<u>4</u>	<u>8 1/2</u>	<u>4</u>	<u>8 1/2</u>	<u>4</u>
" Rider Plate	<u>6 1/2</u>	<u>4</u>	<u>6 1/2</u>	<u>4</u>	<u>6 1/2</u>	<u>4</u>
" Bulb Plate to Intercostal Keelson	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
" Angle Irons	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
" Double Angle Iron Side Keelson	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
" Side Intercostal Plate	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
" do. Angle Irons	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
Attached to outside plating with angle iron	<u>yes</u>					
BILGE Angle Irons	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
do. Bulb Iron	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
do. Intercostal plates riveted to plating for length	<u>yes</u>					
DIAGONAL STRINGER Angle Irons	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
Intercostal plates riveted to plating for length	<u>yes</u>					
SIDE STRINGER Angle Irons	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>6</u>
The FRAMES extend in one length from <u>keel</u> to <u>gunwale</u>	<u>Riveted through plates with 5/8 in. Rivets, about 5 apart.</u>					
The REVERSED ANGLE IRONS on floors and frames extend <u>across</u> middle line to <u>above upper turn of keel</u> and to <u>gunwale</u> alternately	<u>yes</u>					
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? <u>yes</u> And butts properly shifted? <u>yes</u>	<u>yes</u>					
PLATING. Garboard, double riveted to Keel, with rivets <u>1</u> in. diameter, averaging <u>5</u> ins. from centre to centre.	<u>yes</u>					
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted, with rivets <u>5/8</u> in. diameter, averaging <u>2 1/2</u> ins. from centre to centre.	<u>yes</u>					
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets <u>5/8</u> in. diameter averaging <u>2 1/2</u> ins. from centre to centre.	<u>yes</u>					
Butts of <u>One</u> Strakes at Bilge for <u>1/2</u> length, double riveted with Butt Straps <u>1/16</u> thicker than the plates they connect.	<u>yes</u>					
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets <u>5/8</u> in. diameter, averaging <u>2 1/2</u> ins. from cr. to cr.	<u>yes</u>					
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets <u>5/8</u> in. diameter, averaging <u>2 1/2</u> ins. from cr. to cr.	<u>yes</u>					
Edges of Main Sheerstrake, double or single riveted.	<u>yes</u>					
Butts of Main Sheerstrake, treble riveted for length amidships.	<u>yes</u>					
Butts of Main Stringer Plate, treble riveted for length amidships.	<u>yes</u>					
Butts of Upper or Spar Stringer Plate, treble riveted for length.	<u>yes</u>					
Breadth of laps of plating in double riveting <u>5</u> Breadth of laps of plating in single riveting <u>3</u>	<u>yes</u>					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>yes</u> No. of Breasthooks, <u>3</u> Crutches, <u>3</u>	<u>yes</u>					
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Darlington Iron Co</u>	<u>yes</u>					
Manufacturer's name or trade mark, <u>Darlington Iron Co</u>	<u>yes</u>					
The above is a correct description? <u>yes</u>	<u>yes</u>					
Surveyor's Signature, <u>John Guthrie</u> Surveyor's Signature, <u>J. W. Kettle</u>	<u>yes</u>					

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

**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*  
 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 *fetch red 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 fore Mast deck to hounds 34 feet*  
*Dea at Deck 13 1/2 inches, sets of Main Mast 33 feet Mast Deck 14 1/4 inches*

*Tested by O. G. Lewis at Rotherham 22/25/7/1883. Tested by O. G. Lewis at Rotherham 25/Jan/1883*

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
								N°.	Weight.					
		Chain .....	120	1 3/16	10.2.2.0	12.0.7	1018 and 1518	Bower Anchors	2	4.0.18	6.12.2.0	4.1.0	5	12/20
One	Fore Sails,	Iron Stream Chain	45	9/16	3.15.0.0	4.5.9.9		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)		3.24				
	Fore Top Sails,	or Steel Wire ..			4.10.0.0			10 lbs light		4.0.23	6.12.2.0	4.1.0	5	12/20
Complete	Fore Topmast Stay Sails,	or Hempen Strm Cable .....	45	8		4.5.9.6		5 lbs light		3.22				
		Towline, Hemp.	90	5 1/2		9.1.4.4								
Suits	Main Sails,	or Steel Wire ..												
	Main Top Sails, and	Hawser .....												
		Warp .....												
		quality <i>good</i>												
	Standing and Running Rigging	<i>Gale Wire, Hemp</i>												
	The Windlass is	<i>Iron</i>												
	Engine Room Skylights.	How constructed? <i>Iron</i>												
	What arrangements for deadlights in bad weather?	<i>Glass bulls eyes 7/8 thick in top of skylight</i>												
	Coal Bunker Openings.	How constructed? <i>Cast Iron frame</i>												
	How are lids secured?	<i>solid hatch with a bar</i>												
	Height above deck?	<i>5 above deck</i>												
	Scuppers, &c.	What arrangements for clearing upper deck of water, in case of shipping a sea?												
		<i>Two scuppers and three discharge ports on each side</i>												
	Cargo Hatchways.	How formed? <i>Iron crammings riveted to beams and iron deck</i>												
	State size Main Hatch													
		Forehatch				4.5 x 4.5								
		Quarterhatch				3.0 x 3.0								
	If of extraordinary size, state how framed and secured?													
	What arrangement for shifting beams?	<i>None</i>												
	Hatches, If strong and efficient?	<i>yes solid</i>												

She has *one 12 ft* Long Boat and *one 12 ft* official Pumps *3 1/2 hp* 1 official  
 The Windlass is *Iron* Capstan *Iron* and Rudder *Good*  
 Engine Room Skylights. How constructed? *Iron* How secured in ordinary weather? *secured by crammings*  
 What arrangements for deadlights in bad weather? *Glass bulls eyes 7/8 thick in top of skylight*  
 Coal Bunker Openings. How constructed? *Cast Iron frame* How are lids secured? *solid hatch with a bar* Height above deck? *5 above deck*  
 Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Two scuppers and three discharge ports on each side*  
 Cargo Hatchways. How formed? *Iron crammings riveted to beams and iron deck*  
 State size Main Hatch Forehatch *4.5 x 4.5* Quarterhatch *3.0 x 3.0*  
 If of extraordinary size, state how framed and secured?  
 What arrangement for shifting beams? *None*  
 Hatches, If strong and efficient? *yes solid*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	in builder's yard.	1st.	2nd.	3rd.	4th.	5th.
154	Sept 12 1882			154		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped

**General Remarks** (State quality of workmanship, &c.)  
*Workmanship of good quality.*  
*The bower anchors of this vessel are slightly lighter than the rules require, that provided the Committee do not object I am of opinion that the figure 9 may be assigned.*  
*And is built in accordance with accompanying approved tracings as per Secretary's letter dated 5 Sept 1882. This report has been delayed the outfit being incomplete*

State if one, two, or three decked vessel, or if spar, or cummy decked, and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)  
 How are the surfaces preserved from oxidation? Inside *Red lead and Portland cement* Outside *Paint*  
 I am of opinion this Vessel should be Classed *100 ft 1 umi deck*  
 The amount of the Entry Fee ... £ 1 : 0 : 0 is received by me, *W. Kettle*  
 Special ... £ 5 : 4 : 0 *hw 28 1883*  
 Certificate (to be sent upper margin).  
 (Travelling Expenses, if any, £ *none*)  
 Committee's Minute *WEDNESDAY 4 DEC 1883 18*  
 Character assigned *W. Kettle*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.  
*The Bower anchors are a trifle light, but it is submitted the vessel appears to be worthy of favorable consideration. The Committee to be classed 100 ft 1 umi (Iron) 3/2/13 2011*

Reference should be made to any correspondence connected with the case.  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)