

## IRON SHIP.

No. 3978 Survey held at Inverkeithing Date, First Survey 1st Oct 1876 Last Survey 4 Oct 1876On the Three Masted Schooner "Resolute" Master Wm Lawrence

TONNAGE under Tonnage Deck } 368.56  
Ditto of Third, Spar, or Awning Deck. }  
Ditto of Poop, or Raised Or. Dk. } 47.44  
Ditto of Houses on Deck } 16.26  
Ditto of Forecastle }  
Gross Tonnage } 432.26  
Less Crew Space } 12.44  
Less Engine Room }  
Register Tonnage as cut on Beam } 419.79

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
SPAR, OR AWNING-DECKED VESSEL.  
HALF BREADTH (moulded)... 14.5 Feet.  
DEPTH from upper part of Keel to top of Upper Deck Beams 14.2  
GIRTH of Half Midship Frame (as per Rule) 25.4  
1st NUMBER 541  
1st NUMBER, if THREE DECKED VESSEL  
LENGTH 138.2 [deduct 7 feet]  
2nd NUMBER 7476.62  
PROPORTIONS—Breadths to Length 4.8  
Depths to Length—Upper Deck to Keel 9.7  
Main Deck ditto

Built at Inverkeithing  
When built 1876 Launched 22nd April  
By whom built John Scott & Co.  
Owners John Grant & Co.  
Port belonging to Leith  
Destined Voyage Cape of Good Hope  
If Surveyed while Building, Afloat, or in Dry Dock. whilst Building & afloat.

LENGTH on deck as per Rule	Feet.	Inches.	BREADTH—Moulded...	Feet.	Inches.	DEPTH top of Floors to Upper Deck Beams	Feet.	Inches.	Power of Engines	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
138	2		29	0		12	11				One	One
Dimensions of Ship per Register, length, <u>146</u> breadth, <u>29.3</u> depth, <u>12.4</u>												
KEEL, depth and thickness	Inches in Ship.			Inches per Rule.								
STEM, moulding and thickness...	7 1/4 x 1 7/8			7 1/4 x 1 7/8								
STERN-POST for Rudder do. do. for Propeller	7 1/4 x 1 7/8			6 1/2 x 1 7/8								
Distance of Frames from moulding edge to moulding edge, all fore and aft	21 ins			(Class 180A)								
FRAMES, Angle Iron, for 1/2 length amidships Do. for 1/4 at each end	3 1/2 3 6			3 1/2 3 6								
REVERSED FRAMES, Angle Iron	3 1/2 3 5			3 1/2 3 5								
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 1/2 the half-bdth. as per Rule height extended at the Bilges...	15 1/2 6 5 8 31			15 1/2 6 5 7 31								
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	7 7 7 7			7 7 7 7								
Single or double Angle Iron on Upper edge Average space...	3 3 6 3 3 6 42			3 3 6 3 3 6 42								
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	7 7 7 7			7 7 7 7								
Single or double Angle Iron on Upper Edge Average space...	3 3 6 3 3 6 42			3 3 6 3 3 6 42								
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	7 7 7 7			7 7 7 7								
Single or double Angle Iron on Upper Edge Average space...	3 3 6 3 3 6 42			3 3 6 3 3 6 42								
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	11 9 11 9			11 9 11 9								
" Rider Plate	8 9 7 9			8 9 7 9								
" Bulb Plate to Intercostal Keelson	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" Angle Irons	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" Double Angle Iron Side Keelson	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" Side Intercostal Plate for 1/2 length	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" do. Angle Irons	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" Attached to outside plating with angle iron	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
BILGE Angle Irons	2 1/4 3 1/2 3 6 3 1/2 3 6			2 1/4 3 1/2 3 6 3 1/2 3 6								
" do. Bulb Iron	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
" do. Intercostal plates riveted to plating for length	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
BILGE STRINGER Angle Irons	2 1/4 3 1/2 3 6 3 1/2 3 6			2 1/4 3 1/2 3 6 3 1/2 3 6								
Intercoastal plates riveted to plating for length	3 1/2 3 6 3 1/2 3 6			3 1/2 3 6 3 1/2 3 6								
SIDE STRINGER Angle Irons	2 1/4 3 1/2 3 6 3 1/2 3 6			2 1/4 3 1/2 3 6 3 1/2 3 6								
Bulb plate 3/4 length	7 7 7 7			7 7 7 7								
Transoms, material. Knight-heads. Hawse Timbers.	7 7 7 7			7 7 7 7								
Windlass	Common			Pall Bitt								
	Leak											

The FRAMES extend in one length from Middle line to upper deck Riveted through plates with 3/4 in. Rivets, about 5 apart.The REVERSED ANGLE IRONS on floors and frames extend from middle line to Side Stringer and to Deck Stringer alternatelyKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? YesPLATING. Garboard, double riveted to Keel, with rivets 7/8 in. diameter, averaging 3 3/4 ins. from centre to centre.Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.Butts of One Strakes at Bilge for 1/2 length, double riveted with Butt Straps 1/16 thicker than the plates they connect.Edges from bilge to upper Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.Butts from Bilge to upper Sheerstrake, worked carvel, double riveted; with rivets 3/4 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 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 whole length.Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting No angle rivetingButt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double

Waterway, how secured to Beams (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? By knees welded to beams No. of Breasthooks, Three Crutches, TwoWhat description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? BestManufacturer's name or trade mark, Stockton Iron Co.

The above is a correct description.

Builder's Signature, John Scott & Co.Surveyor's Signature, John Davidson

Surveyor to Lloyd's Register of British and Foreign Shipping.



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 equal to thickness of adjacent plating*  
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 the butts only* 17020 Iron

Masts, Bowsprit, Yards, &c., are *Hand Wood* 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

Foremast Length *54 ft* Partners *20* *2 1/2* *15* *8 1/2* *5 1/2* *5 1/2* *14* *5 1/2* is composed of three planks the round doubled in way of wedging; edges double riveted all butts table with shapes 1/8 thick than the plates they connect. Main mast in accordance with appd sketch and Bowsprit. Mizen mast rather spar of Pile Pine & Swedish Fir. Iron used (Cont'd below)

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.							Bowers					
Fore Sails,	CABLES, &c.	210	1 1/2	28-2-2	20-1 1/2	28-2-2		1st	13-3-1/2	15-12-2-0	13-2-0	15-3-0-0
Fore Top Sails,	Chain							2nd	13-2-0	15-3-3-0	13-2-0	15-3-0-0
Fore Topmast Stay Sails								3rd	11-2-1/2	13-1-1-0	11-2-0	13-2-0-0
Main Sails,	<i>J. Hartnall. Sunderland. 3 Aug 16</i>											
Main Top Sails,	Hamper Strm Cbl	45	1 3/4		90-1/2							
	Hawser ...	90	8 1/2									
	Towlines ...	90	7 1/2		90-5 1/2							
	Warp quality <i>Good</i>	90	5 1/2									
							Stream	1	6-1-6		6-0-0	
								1	3-1-20		3-0-0	
							Kedges	2nd	1-3-19		1-2-0	

Standing and Running Rigging *Wire & Rope* sufficient in size and *Good* in quality. She has a *22 ft* Long Boat and one *18 ft* The Windlass is *Good* Capstans *2* *Good* and Rudder *Good* Pumps *one pair 5 1/2* Iron

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? *Four pairs of Scuppers & four pairs of wash ports*

Cargo Hatchways. How formed? *Iron plates and angle irons riveted to each other & to beams.*

State size Main Hatch *12-3 x 8-0* Forehatch *7-0 x 5-0* Quarterhatch *5-3 x 5-0*

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

What arrangement for shifting beams? *✓*

Hatches, if strong and efficient? *yes.*

Order for Special Survey No. <i>224</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 &amp; Surveys</i>
Date <i>4th Sept 1886</i>		2nd. On the plating during the process of riveting	<i>1885. Oct 1. Nov 5, 12. Dec 9. 1886. Jan 17, 25</i>
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>July 10, 22. Mar 23, 28. April 6, 11, 20. May 9</i>
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	<i>June 1, 26. July 18. At last Aug 1, 3, 5, 11, 16</i>
No. <i>55</i> in builder's yard.		5th. After the ship was launched and equipped	<i>Aug 18, 24, 26, 31. Sept 6, 9. Oct 11</i>

General Remarks (State quality of workmanship, &c.) *Iron used in masts - Stockton - tested by bending cold 6 1/2 plate to an angle of 45° with 15° across the grain 5 1/2 55° 20° without fracture.*

The upper deck is continued to Stern. Each frame & alternate reverse frames being continued to height of Mast Roop. This with the deck house being constructed in accordance with appd sketch the frames to the house are continued down & connected to main 8th beam. In way of Bulk a doubling plate 9 1/2 thick is worked and a double angle iron Hanger 5 x 4 x 9 1/2 14 ft long is worked immediately below main 8th beam. She is in all other respects in accordance with scantlings & arrangements set forth on the sketch of Mid. Station & Long Plan and with the Rules

State if one, two, or three, decked vessel, or if spar, or awning decked, and the lengths of poop, forecabin, or raised quarter deck, and the lengths of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement & Red Lead* Outside *Red Lead*

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

The amount of the Entry Fee *5 : 0 : 0* is received by me, *John Dawkins*

Special ... *21 : 12 : 0* 18th Aug 1886

Certificate ...

(Travelling Expenses, if any, 2/- = 0/-)

Committee's Minute *1st October 1886*

Character assigned *100A.1*

*200P*

*JDW*

*12*

*2618*

*Lloyd's Register Foundation*