

# IRON SHIP.

11425 Survey held at Sunderland Date, First Survey January 11<sup>th</sup> Last Survey May 24<sup>th</sup> 1876  
 the Barque "Scottish Hero" Master M. C. Lacharn  
 Tonnage under Deck 795.24 ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 Ditto of Third, Spar, or Awaiting Deck 76.35 SPAR, OR AWAITING DECKED VESSEL.  
 Ditto of Poop, or Raised Quarter Deck 11.93 HALF BREADTH (moulded) 16.37  
 Ditto of Houses on Deck 27.06 DEPTH from upper part of Keel to top of Upper Deck Beams 20.95  
 Gross Tonnage 910.58 GIRTH of Half Midship Frame (as per Rule) 32.5  
 Less Crew Space 41.15 1st NUMBER 69.82  
 Less Engine Room 869.43 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] 12086  
 Register Tonnage as cut on Beam 869.43 LENGTH 186.0  
2nd NUMBER 12086  
PROPORTIONS—Breadths to Length 5  
Depths to Length—Upper Deck to Keel 8  
Main Deck ditto

LENGTH on deck as per Rule 186 Breadth Moulded 32.9 DEPTH top of Floors to Upper Deck Beams 19 Power of Engines 2 Horse. 2 No. of Decks with flat laid two No. of Tiers of Beams two

Dimensions of Ship per Register, length 196.6 breadth 33.8 depth 19.1

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 x 2 3/8	8 x 2 3/8	FRAMES, Angle Iron, for 1/2 length amidships	4 1/2 x 3	4 1/2 x 3
STEM, moulding and thickness	7 x 2 3/8	7 x 2 3/8	Do. for 1/4 at each end	4 1/2 x 3	4 1/2 x 3
STERN-POST for Rudder do. do.	7 x 2 3/8	7 x 2 3/8	REVERSED FRAMES, Angle Iron	3 x 3	3 x 3
for Propeller					
Distance of Frames from moulding edge to moulding edge, all fore and aft	22 ins	22 ins	FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	21	21
			thickness at the ends of vessel	7	7
			depth at 1/2 the half-bdth. as per Rule	11	10 1/2
			height extended at the Bilges	a fair taper	
BEAMS, Upper, Spar, or Awaiting Deck	7 1/2 x 7	7 1/2 x 7	BEAMS, Main, or Middle Deck	8 x 8	8 x 8
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Single or d'ble Ang. Iron, Plate or Tee Bulb Iron		
Single or double Angle Iron on Upper edge	3 x 3	3 x 3	Single or double Angle Iron on Upper edge	3 x 3	3 x 3
Average space	alternate frames		Average space	alternate frames	
BEAMS, Lower Deck, Hold, or Orlop	8 x 8	8 x 8	BEAMS, Lower Deck, Hold, or Orlop		
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Single or d'ble Ang. Iron, Plate or Tee Bulb Iron		
Single or double Angle Iron on Upper edge	3 x 3	3 x 3	Single or double Angle Iron on Upper edge	3 x 3	3 x 3
Average space	alternate frames		Average space	alternate frames	
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	13 x 10	13 x 10	KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates		
" Rider Plate	10 x 10	10 x 10	" Rider Plate		
" Bulb Plate to Intercoastal Keelson			" Bulb Plate to Intercoastal Keelson		
" Angle Irons	4 1/2 x 3 1/2	4 1/2 x 3 1/2	" Angle Irons		
" Double Angle Iron Side Keelson			" Double Angle Iron Side Keelson		
" Side Intercoastal Plate	6	6	" Side Intercoastal Plate		
" do. Angle Irons			" do. Angle Irons		
" Attached to outside plating with angle iron			" Attached to outside plating with angle iron		
BILGE Angle Irons	4 1/2 x 3 1/2	4 1/2 x 3 1/2	BILGE Angle Irons		
" do. Bulb Iron			" do. Bulb Iron		
" do. Intercoastal plates riveted to plating for length			" do. Intercoastal plates riveted to plating for length		
BILGE STRINGER Angle Irons	4 1/2 x 3 1/2	4 1/2 x 3 1/2	BILGE STRINGER Angle Irons		
Intercoastal plates riveted to plating for length			Intercoastal plates riveted to plating for length		
SIDE STRINGER Angle Irons			SIDE STRINGER Angle Irons		

Transoms, material. Knight heads. Narrow Timbers. Iron  
 Windlass Immerman & Walker Fall Bitt Iron

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.  
 The REVERSED ANGLE IRONS on floors and frames extend near middle line to Hold Beam Stringer 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 1/16 in. diameter, averaging 5 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 1/4 ins. from centre to centre.  
 Butts of 2 Strakes at Bilge for 1/2 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 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.  
 Butts from Bilge to Main 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 & single riveted. Upper Sheerstrake, double or single riveted.  
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.  
 Breadth of laps of plating in double riveting 4 3/4 Breadth of laps of plating in single riveting nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double and treble throughout  
 Waterway, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Turned down ends and riveted to frames and stringer plates No. of Breasthooks, 4 Crutches, 39 transom  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates by Stockton malleable  
 Manufacturer's name or trade mark Iron Co. & Bolton, Bagham & Co.; Angles, Stockton malleable Iron Co.  
 The above is a correct description.  
 Builder's Signature, William Deaford & Sons Surveyor's Signature, James Sibbald  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 466-0425



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 very well*  
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*

Masts, Bowsprit, Yards, &c., are *of Iron &* 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 *please see sketch attached*

*16444 Iron*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
13200		270	1 5/8	47 1/2	270-1 1/8	47 5/10	Bowers	1	25.3.0	25.8.0	25.2.0	25 3/20
N <sup>o</sup> .	SAILS.	CABLES, &c.		Chain		3 links of each length tested		1	25.2.14	25.5.3	21 1/2	
2	Fore Sails,	to breaking strain of 6 1/2 tons, signed		J. Hartness, marked R.W.C.P.T., dated		14, March 23 and March 30/76 respectively		1	22.1.0	22.1.1	21.3.0	22 3/2
2	Fore Top Sails,	Hmpn Strm Cbl		80		6		Stream	1	10.2.26	10.2.0	
2	Fore Topmast Stay Sails	Hawser Chain		60		1		Kedges	1	5.2.26	5.1.0	
2	Main Sails,	Towlines		90		10						
2	Main Top Sails,	Warp		80		6						
and others as usual		quality good		80		5						

Standing and Running Rigging *Wire & hemp* sufficient in size and *good* in quality. She has *one* *Long* Boat and *3 others*

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *Metal & good*

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? *4 Ports and 4 Scuppers on each side*

Cargo Hatchways.—How formed? *Iron plate Comings and Headledges*

State size Main Hatch *14' 8" x 10' 0"* Forehatch *7' 4" x 6' 0"* Quarterhatch *7' 4" 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>2614</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 plating and surveyed 1876 Jan 11/14/20/25/26</i>
Date <i>26 January 1876</i>		2nd. On the plating during the process of riveting	<i>34/15/17/22/23 March 16/9/13/15/20/22/24/28/31 April 26/1/11/13/19/24/26 May 1/1876</i>
Order for Ordinary Survey No. <i>—</i>		3rd. When the beams were in and fastened, and before the decks were laid....	<i>23/24</i>
Date <i>—</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	
No. <i>49</i> in builder's yard.		5th. After the ship was launched and equipped	

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

*This vessel has been constructed in accordance with the rules, and tracing of Midship Section submitted and approved by the Committee. She has a full Poop about 40' 6" in length, and Top-gallant Forecastle about 26 feet in length; A House on deck about 22 feet in length, and is fitted with Immerson & Walker's patent windlass. The quality of materials and workmanship being of a good description.*

*The Iron used in the Construction of the Lower Masts, Yards, and Bowsprit, has been subjected to both Hot and cold tests, and the quality further ascertained by breaking a piece across the fibre of the Iron, which proved very satisfactory.*

State if *one, two, or three*, decked vessel, or if *span, or awning* decked; and the lengths of poop, forecastle, or *rare* quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Portland Cement to upper* Outside *3 Coats of paint*

I am of opinion this Vessel should be Classed *100 A* *Plan of bilges & paint above*

The amount of the Entry Fee ... £ *5* : - : - is received by me, *HW*  
Special ... £ *43* : *9* : - *24th May 1876*  
Certificate ... - : - : -

(Travelling Expenses, if any, £ *—*).

Committee's Minute *26th May 1876*

Character assigned *100 A*

*JBW AREP*



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