

IRON SHIP.

17579
Per 8/1/77

No. 2367 Survey held at Glasgow Date, First Survey 28th Jan 1876 Last Survey 5th Jan 1877

On the S. S. Loudoun Castle

Master A. Marshall

TONNAGE under Tonnage Deck	2307.84	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third Spar or Awning Deck		SPAR, OR AWNING DECKED VESSEL.
Ditto of Poop, or Raised Or. Dk.	87.57	HALF BREADTH (moulded) Feet. 18.3
Ditto of Houses on Deck	37.53	DEPTH from upper part of Keel to top of Upper Deck Beams 27.8
Ditto of Forecastle	39.28	GIRTH of Half Midship Frame (as per Rule) .. . 86.7
Gross Tonnage	2472.22	1st NUMBER 86.7
Less Crew Space	65.25	1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] 79.7
Less Engine Room	791.11	LENGTH 340
Register Tonnage as cut on Beam	1615.86	2nd NUMBER 270980
		PROPORTIONS—Breadths to Length 9.3
		Depths to Length—Upper Deck to Keel 12.2
		Main Deck ditto 16.9

Built at Glasgow
 When built 1876 Launched 18th Oct 1876
 By whom built J & G Thomson
 Owners Tho. Skinner & Co. of 81, Gordon St Glasgow
 Port belonging to Glasgow
 Destined Voyage China via London
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule	Feet. 340	Inches. 0	BREADTH Moulded	Feet. 36	Inches. 8	DEPTH top of Floors to Upper Deck Beams	Feet. 25	Inches. 9	Power of Engines	Horse. 400	N ^o . of Decks with flat laid Two	N ^o . of Tiers of Beams Three
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Dimensions of Ship per Register, length, 350.7 breadth, 36.8 depth, 25.75

	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	11	23/4		11	23/4	
STEM, moulding and thickness	11	23/4		11	23/4	
STERN-POST for Rudder do. do.	11	5 1/2		11	5 1/2	
for Propeller	11	5 1/2		11	5 1/2	
Distance of Frames from moulding edge to moulding edge, all fore and aft	24					
FRAMES, Angle Iron, for 3/4 length amidships	5	3	8	5	3	8
Do. for 1/2 at each end	5	3	7	5	3	7
REVERSED FRAMES, Angle Iron	3 1/2	3	8	3 1/2	3	8
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24	x	10	24	x	10
thickness at the ends of vessel			9-8			9-8
depth at 3/4 the half-bdth. as per Rule	12			12		
height extended at the Bilges	Twice					
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	7 1/2	x	7	7 1/2	x	7
Single or double Angle Iron on Upper edge	3	3	6	3	3	6
Average space	48					
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	9	x	9	9	x	9
Single or double Angle Iron, on Upper Edge	3 1/2	3	7	3 1/2	3	7
Average space	48					
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	10 1/2	x	10	10 1/2	x	10
Single or double Angle Iron on Upper Edge	4 1/2	4	9	4 1/2	4	9
Average space	as sketch, about every 10 th frame					
KEELSONS Centre line, single or double plate, box, or Intercostal Plates	26	x	14	26	x	14
Rider Plate	14	x	14	14	x	14
Bulb Plate to Intercostal Keelson						
Angle Irons	6 1/2	4	9	6 1/2	4	9
Double Angle Iron Side Keelson	6 1/2	4	9	6 1/2	4	9
Side Intercostal Plate						
do. Angle Irons	3 1/2	3 1/2	8	3 1/2	3 1/2	8
Attached to outside plating with angle iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8
BILGE Angle Irons	6 1/2	4	9	6 1/2	4	9
do. Bulb Iron	9	x	9	9	x	9
do. Intercostal plates riveted to plating for 1/2 length			9			9
BILGE STRINGER Angle Irons	6 1/2	4	9	6 1/2	4	9
Intercostal plates riveted to plating for 3/5 length			9			9
SIDE STRINGER Angle Irons						

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths. per Rule
Flat Keel Plates, breadth and thickness				
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	40	12	36	12
of doubling at Bilge, or increased thickness, and length applied		12-11		12-11
fm up. part of Bilge to lr. edge of Sh'rstrake				
Main Sheerstrake, breadth and thickness	40	15	40	15
of doubling at Sh'rstrake, & length applied				
from Mn to Upr. or Spar Dk. Sh'rstrake				
Upr. or Spar Dk. Sh'rstrake, breadth & thickness				
Butt Straps to outside plating, breadth & thickness	19-16	4	19-14	4
Lengths of Plating	11 1/4	16	10 5/8	16
Shifts of Plating, and Stringers	12-0		10 5/8	
Gunwale Plate, on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	83	9	72	9
Angle Iron on ditto	6 1/2 x 4 x 9		6 1/2 x 4 x 9	
Tie Plates fore and aft, outside Hatchways	16	9	16	9
Diagonal Tie Plates on Beams No. of Pairs	None		None	
Planksheer material and scantling				
Waterways do. do. Seat	14 x 6		12 x 6	
Flat of Upper Deck do. do. Seat	3 1/2		3 3/8	
How fastened to Beams	Nuts and Screws			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	49	10	49	10
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No. 2	4 x 4 x 9		4 x 4 x 9	
Tie Plates, outside Hatchways	Centerlines		Centerlines	
Diagonal Tie Plates on Beams, No. of pairs	Deck 7/16		Deck 7/16	
Waterways materials and scantlings	6 1/2 for a few		6/16	
Flat of Middle Deck do. do.	Flat at ends		Riveted	
How fastened to Beams	Riveted			
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	42	9	42	9
Is the Stringer Plate attached to the outside plating?	Yes		Yes	
Angle Irons on ditto, No. 3	4 x 4 x 9		4 x 4 x 9	
Stringer or Tie Plates, outside Hatchways	6 1/2 x 4 x 9		6 1/2 x 4 x 9	
Flat of Lower Deck	Strong Beams			
Ceiling betwixt Decks, thickness and material	Cape Iron Spacing			
in hold do. Rock Glass	2 1/2		2 1/2	
Main piece of Rudder, diameter at head	8		8	
do. at heel	4		4	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 6 Thickness of	7-6		7-6	
Height up	Forward one and three eighths to upper deck			
How secured to sides of ship	By double frames			
Size of Vertical Angle Irons	3 1/2 x 3 1/2		30 ins.	
Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight-heads. Hawse Timbers. Iron
 Windlass Compo's Patent Pall Bitt

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 from middle line to middle deck and to upper deck 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 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.
 Butts of 3 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 riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Edges of Main Sheerstrake, double 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 1/2 length.
 Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble Riveted?
 Waterway, how secured to Beams Nuts & Screws (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? By Keels turned down also No. of Breasthooks, Six Crutches, Five and a half deep floors

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best
 Manufacturer's name or trade mark, Angles and Bulbs "Mossend" Plates "Mossend" Bolts

The above is a correct description.
 Builder's Signature, Jno. James & Co. Thoms
 Surveyor's Signature, Saml. Laphorn
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 469-0475

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 17579 Iron
 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*

Masts, Bowsprit, Yards, &c., are *all* 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 *Three Masts - Fore and Aft Schooner Rig*

Bowsprit of Pitch Pine 47.6" x 26" at Bed
Iron of Mast Plate Fore Mast *extreme 128* } *Pitch Pine Pole 41.5"* } *Lower part of Mast of Iron 1 1/2" in*
 Main Mast " *130* } *do* } *Fore d Main 6.25 in. Mast*
 Mizzen Mast " *108* } *do* } *4 plates in Curbs double riveted, edges*
quality from } *triple riveted Batts Fore d Main 28 at*
Massend } *hairs, Mizzen 24 at hatches.*

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.		N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
								Bowers	Stream					
	Fore Sails,	Chain	300	1 1/2	67 2/3	300-1 1/2	67 5/16	1	36.2.12	33.10.1	36 1/2	33 2/20		
	Fore Top Sails,	3 strands out of each 15 fathoms to a breaking show of			94 10/20		94 5/16	1	7.0.18	33.2.3	35	32 5/10		
	Fore Topmast Stay Sails	Hmpn Strm Cbl	90	1 1/2 Iron				1	36.0.2	33.2.3	35	32 5/10		
	Main Sails,	Hawser ...	90	1 1/2				1	7.0.10	30.17.2	32 1/2	30 2/20		
	Main Top Sails,	Towlines ...	90	1 1/2				1	33.0.0	30.17.2	32 1/2	30 2/20		
	and 4 Spare	Warp ...	180	2 1/2				1	6.0.4					
		quality <i>new</i>	360					Total	105.2.14	Total = 104				
								Stream	14.0.12		14			
								Kedges	7.0.4		7			
									3.2.23		3 1/2			

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Six* Boats *and 2 fitters with buoyancy*

The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good and efficient*

Engine Room Skylights.—How constructed? *Leak proof fitted on top of an Iron House* How secured in ordinary weather? *Iron bars*

What arrangements for deadlights in bad weather? *Strong Leak covering with Bulls eyes*

Coal Bunker Openings.—How constructed? *Circular casting* How are lids secured? *Screwed* Height above deck? *about 4 ins*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *3 Cargo Ports, 6 Scuppers, 6 water ports, 2 mooring pipes each side*

Cargo Hatchways.—How formed? *Plate and angle iron*

State size Main Hatch *20 x 12* Forehatch *8 x 7* Quarterhatch *14 x 10"*

If of extraordinary size, state how framed and secured? *Increased width of Pies and stringers and strong portable beams*

What arrangement for shifting beams? *Increased width of Pies and stringers and strong portable beams*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *1187* 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 } *1876 - Jan. 28, Feb. 4, 9, 17, 23, March 1, 3, 9*
 Date *Jan. 21/76* 2nd. On the plating during the process of riveting } *March 15, 17, 23 April 3, 5, 7, 13, 18, 21, 28*
 Order for Ordinary Survey No. *1* 3rd. When the beams were in and fastened, and before the decks were laid... } *May 3, 8, 12, 17, 23, 26, June 2, 7, 15*
 Date *✓* 4th. When the ship was complete, and before the plating was finally coated or cemented... } *June 16, 20, 28, 30, July 3, 7, 11, 28 Aug 4*
 No. *146* in builder's yard. 5th. After the ship was launched and equipped } *Aug 8, 19, 30 Sept. 9, 13, 15, 21, 25, 28*
Oct. 4, 12, 16, 19, 27 Nov 4, 16, 29
Dec 7, 8, 18, 27; 1877 Jan 5

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

*The Workmanship is of good quality—
 Built in accordance with the Sketches of Midship and Longitudinal Sections and of those marked A & B herewith approved per Committee's Letters of 20th Decr 1875, 31st Jan. and 12th April 1876 and in general conformity with the Rules with a view to the grade contemplated.*

Fitted with Poop 40 feet long and Forecastle 47 ft long. Iron house over Engine Hatch 20 x 12 having skylight on top, Galley and Funnel casing of Iron 34 x 12. Cabins under Bridge amidships for Officers & Engineers 24 x 12, Wings under Bridge at sides 24 x 7, Wheel Covering on Bridge 18 x 10

State if one, two, or three, decked vessel, or if open, or opening decked, and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement and Paint* Outside *Paint*

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

The amount of the Entry Fee ... £ 5 : : : is received by me, *Jan 6th 1877*
 Special ... £ 85 : 3 : 6 *Jan. 1877*
 Certificate ... *British*
(Travelling Expenses, if any, £ 8. 8. 0.)

Committee's Minute *9th January 1877*

Character assigned *Lloyd's Register*
Lloyd's Register Foundation