

IRON SHIP. 1874

No. 4254 Survey held at Port Glasgow Date, First Survey 26 October 1876 Last Survey 20 June 1877
 On the Ship "Jeanie Landels" Master James Colvin

TONNAGE under Tonnage Deck 1288.59 **ONE, OR TWO DECKED, THREE DECKED VESSEL.**
 Ditto of Third, Spar, or Awning Deck. 42.75 **SPAR, OR AWNING DECKED VESSEL.**
 Ditto of Poop, or Raised Or. De. 20.64
 Ditto of Houses on Deck 20.64
 Ditto of Forecastle 43.27
 Gross Tonnage 1425.25
 Less Crew Space 68.42
 Less Engine Room 1356.53
 Register Tonnage 1356.53 **at Beam**

HALF BREADTH (moulded) 10.583
DEPTH from upper part of Keel to top of Upper Deck Beams 23.875
GIRTH of Half Midship Frame (as per Rule) 37.333
1st NUMBER 49.49
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
LENGTH 232.75
2nd NUMBER 185.11
PROPORTIONS—Breadths to Length 6.25
 Depths to Length—Upper Deck to Keel 10.15
 Main Deck ditto 9.75

Built at Port Glasgow
 When built 1874. Launched 2nd June 1874
 By whom built Wth Murray & Co
 Owners David Law
 Port belonging to Glasgow
 Destined Voyage Rio de Janeiro
 Surveyed while Building, Afloat, or in Dry Dock.

PLANS CASE

Feet. Inches.	Feet. Inches.	Feet. Inches.	Feet. Inches.	Horse.	No. of Decks with flat laid
as <u>232.75</u>	<u>37.16</u>	<u>21.875</u>	<u>21.875</u>	<input checked="" type="checkbox"/>	<u>One</u>
BREADTH—Moulded... <u>37.16</u>		DEPTH top of Floors to Upper Deck Beams... <u>21.875</u>		Engines ...	No. of Tiers of Beams <u>Two</u>
Do. do. Main Deck Beams... <u>37.16</u>		Do. do. Main Deck Beams... <u>21.875</u>			

	Inches in Ship.			Inches per Rule.		
	In Ship.	In Ship.	16ths per Rule	Inches per Rule	Inches per Rule	16ths per Rule
KEEL , depth and thickness	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>9</u>	<u>2 1/2</u>	<u>9</u>
STEM , moulding and thickness	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>
STERN-POST for Rudder do. do.	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>
for Propeller	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>	<u>8 1/2</u>	<u>2 1/2</u>	<u>8 1/2</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>
FRAMES , Angle Iron, for 3/4 length amidships	<u>5</u>	<u>3</u>	<u>5</u>	<u>5</u>	<u>3</u>	<u>5</u>
Do. for 1/2 at each end	<u>5</u>	<u>3</u>	<u>5</u>	<u>5</u>	<u>3</u>	<u>5</u>
REVERSED FRAMES , Angle Iron	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	<u>24</u>	<u>10</u>	<u>24</u>	<u>24</u>	<u>10</u>	<u>24</u>
thickness at the ends of vessel	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>
depth at 3/4 the half-bdth. as per Rule	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>
height extended at the Bilges	<u>56</u>	<u>48</u>	<u>56</u>	<u>56</u>	<u>48</u>	<u>56</u>
BEAMS , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>8 1/2</u>	<u>8</u>	<u>8 1/2</u>	<u>8 1/2</u>	<u>8</u>	<u>8 1/2</u>
Single or double Angle Iron on Upper edge	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Average space	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>
BEAMS , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>8 1/2</u>	<u>8</u>	<u>8 1/2</u>	<u>8 1/2</u>	<u>8</u>	<u>8 1/2</u>
Single or double Angle Iron on Upper Edge	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>
Average space	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>
BEAMS , Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>
Single or double Angle Iron on Upper Edge	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>
Average space	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>
KEELSONS Centre line, single or double plate, box or intercostal Plates	<u>17</u>	<u>12</u>	<u>17</u>	<u>17</u>	<u>12</u>	<u>17</u>
" Rider Plate	<u>10 1/2</u>	<u>12</u>	<u>10 1/2</u>	<u>10 1/2</u>	<u>12</u>	<u>10 1/2</u>
" Bulb Plate to Intercostal Keelson	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
" Angle Irons	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
" Double Angle Iron Side Keelson	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
" Side Intercostal Plate	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
do. Angle Irons	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
Attached to outside plating with angle iron	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>
KE Angle Irons	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
do. Bulb Iron	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
do. Intercostal plates riveted to plating for length	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
BILGE STRINGER Angle Irons	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
Intercostal plates riveted to plating for length	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>
SIDE STRINGER Angle Irons	<u>5</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>4</u>	<u>5</u>

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	<u>36</u>	<u>11</u>	<u>36</u>	<u>11</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	<u>36</u>	<u>11</u>	<u>36</u>	<u>11</u>
fm up. part of Bilge to Ir. edge of Sh'rstrake	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	<u>40</u>	<u>12</u>	<u>40</u>	<u>12</u>
Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>40</u>	<u>12</u>	<u>40</u>	<u>12</u>
Butt Straps to outside plating, breadth & thickness	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>
Lengths of Plating	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Shifts of Plating, and Stringers	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>46</u>	<u>10</u>	<u>46</u>	<u>10</u>
Angle Iron on ditto	<u>46</u>	<u>10</u>	<u>46</u>	<u>10</u>
Tie Plates fore and aft, outside Hatchways	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Diagonal Tie Plates on Beams No. of Pairs	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Planksheer material and scantling	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Waterways do. do.	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Flat of Upper Deck do. do.	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
How fastened to Beams	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<u>46</u>	<u>10</u>	<u>46</u>	<u>10</u>
Is the Stringer Plate attached to the outside plating?	<u>Yes</u>			
Angle Irons on ditto, No. <u>One</u>	<u>5</u>	<u>4</u>	<u>5</u>	<u>4</u>
Tie Plates, outside Hatchways	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Diagonal Tie Plates on Beams, No. of pairs	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Waterways materials and scantlings	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Flat of <u>Middle</u> Deck do. do. <u>Y</u> fine.	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
How fastened to Beams	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>33</u>	<u>9</u>	<u>33</u>	<u>9</u>
Is the Stringer Plate attached to the outside plating?	<u>Yes</u>			
Angle Irons on ditto, No. <u>2</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Stringer or Tie Plates, outside Hatchways	<u>13</u>	<u>10</u>	<u>13</u>	<u>10</u>
Flat of Lower Deck do. do. <u>Y</u> fine.	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Ceiling betwixt Decks, thickness and material in hold do. do. <u>Y</u> fine.	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
Main piece of Rudder, diameter at head do. at heel	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Can the Rudder be unshipped afloat? <u>Yes</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Bulkheads No. <u>One</u> Thickness of <u>1/16</u> <u>1/16</u>				
Height up <u>to Main Deck</u>				
How secured to sides of ship <u>Double frames</u>				
Size of Vertical Angle Irons <u>3 1/2</u> x <u>3</u> x <u>3/16</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>				

ransoms, material. Knight-heads. Hawse Timbers. Iron
 indlass Iron Patent Pall Bitt Iron

he **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 1/8 in. Rivets, about 4" apart.
 he **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Main Deck on every frame alternate

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 1/8 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 1/8 in. diameter, averaging 3 3/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 3/4 ins. from centre to centre.
 Butts of Three Strakes at Bilge for half 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 1/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/8 in. diameter, averaging 3 3/4 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted ✓ length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for ✓ length.
 Breadth of laps of plating in double riveting 5/16 Breadth of laps of plating in single riveting ✓

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double or single Riveted? ✓
 Waterway, how secured to Beams Iron Gutter (Explain by Sketch, if necessary)
 Beams of the various Decks, how secured to the sides? Welded knee plates No. of Breasthooks, 6 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best
 Manufacturer's name or trade mark, Angle Iron Messena, Plates Consell

The above is a correct description.
 Builder's Signature, Henry Murray & Co Surveyor's Signature, Edwin Rouchman
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 472-0481

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*
 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? *very few* 18770 Iron

Masts, Bowsprit, Yards, &c., are *Iron 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, *Fore Mast 85'3" x 30" Main Mast 88'3" x 31" Mizzen 81'6" x 29" Bowsprit 24'0" x 30"*
Fore & Main Masts 16 } In 2 plates edges double riveted, Butt straps outside 1/4" thicker
Mizzen Mast 4 1/2 } than plates & treble riveted Mast plates doubled for 10' extending
Bowsprit 2 1/2 } from below wedging at Hold Beams, to above Main Deck
 16 10.600

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.		Wight req'd per Rule.		Test req'd per Rule.					
N ^o .	SAILS.	CABLES, &c.	135.1	1 1/2	6 3/4	2 1/2	6 3/4	2 1/2	6 3/4	2 1/2	6 3/4	Bowers	3659	34.1.22	32.0.0.0	34.0.0.0	31.1.20	3660	34.1.9	31.18.0.0	28.3.17	27.1.20	3658	28.0.24	24.6.3.0	28.3.17	27.1.20
Double	Fore Sails,	Ketherton Proving House																									
	Fore Top Sails,	D. G. Lewis Superintendent																									
	Fore Topmast Stay Sails	Hmpn Strm Cbl	90	1																							
	Main Sails,	Hawser ...	90	1																							
	Main Top Sails,	Towlines ...	20	10 1/4																							
	and	Warp ...	90	5																							
		quality	90	4																							

Standing and Running Rigging *lured Demsen* sufficient in size and *good* in quality. She has *One* Long Boat and *3* others
 The Windlass is *Emmerson & Walker's Patent* Capstans *DW* and Rudder *efficient* Pumps *2 x 2 Bilges*

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? *Ports & Scuppers*

Cargo Hatchways.—How formed? *Iron Cornings*
 State size Main Hatch *15'10" x 10'0"* Forehatch *8'0" x 6'0"* Quarterhatch *8'6"*

If of extraordinary size, state how framed and secured?
 What arrangement for shifting beams? *Shifting Beams in Main Hatch*
 Hatches, If strong and efficient? *yes*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.				
829	4 th Oct 1876			84		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	Built under S.S. and surveyed 10% Oct 1876	30, November 2, 10, 17, 20, 24, 28 December 2, 12, 14, 19, 20	1074 January 26, 31, February 7, 19, 24, March 5	16, 20, 28, 31, April 11, 17, 24 May 2, 11, 29 June 6, 9, 14, 20

General Remarks (State quality of workmanship, &c.) *This vessel has been built in conformity with the Rules and Workship Section and Longitudinal plan herewith appended which were submitted and approved by the Committee in letter dated 5th October 1876. The Bowsprit of this vessel is fitted with a sole plate outside the Knight heads, similar to the Iron Ship's "Benares" by the same Builders. Report No. 4222.*
The workmanship and materials are of good quality

Fore and Main Lower Yards 49'0" x 19" dia plates 6 3/4 } In two plates edges single rivet
Topmast 64'6" x 16" 5 3/4 } Butts overlapped and treble rivet
 doubling plates in way of Slings
 all other spars of Pitch & Red Pine

State if one, two, or three, decked vessel, or if spar, or carring decked; and the lengths of poop, *36 1/2* fore-castle, *35 1/2* raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Portland cement to above Bilges & Red Lead* outside *Red Lead & Patent Paint on bottom*

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

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *Edmund Bonchmann*
 Special ... £ 58 : 18 : 0 24 June 1877
 Certificate ... £ 0 : 0 : 0

(Travelling Expenses, if any, £-10%). *£ 63 : 18 : 0*
 Committee's Minute 29th June, 1877.

Character assigned *100 A 1*
Red Lead & Patent Paint
Edmund Bonchmann
 Lloyd's Register Foundation