

# IRON SHIPS.

Recd 22/5/71

No. 3333 Survey held at Dumbarton Date, First Survey 3<sup>rd</sup> October 1870 Last Survey 13<sup>th</sup> May 1871

The Paddle Steamer The Lady Carmichael Master Hughes

under Deck } 364.66	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	Half Moulded Breadth... 12.5	Built at <u>Dumbarton</u>
over Deck } 4.15	THREE DECKED VESSELS.	Total Depth if three or more Decks... 5-	When built <u>1871</u> Launched <u>7<sup>th</sup> March</u>
gross Tonnage <u>368.81</u>	Half Moulded Breadth... 12.5	Total Girth of Half Mid-ship Frame... 23.83	By whom built <u>C. McMillan &amp; Son</u>
Crew Space, <u>as permitted</u>	1st Number... <u>49.03</u>	3rd Number... ..	Owners <u>Submarine Telegraph Comp<sup>y</sup></u>
Register Tonnage, <u>as permitted</u>	Length... <u>160.75</u>	Length... ..	Port belonging to <u>London</u>
Engine Room <u>175.10</u>	2nd Number... <u>D. 010</u>	4th Number... ..	Destined Voyage <u>Dumb. Coaster</u>
Register Tonnage, <u>as a Steamer, on Beam</u>	Depths to Length, <u>under 14</u>	Breadths to Length, <u>under 7</u>	If Surveyed while Building, Afloat, or in Dry-Dock.

Length on deck as per Rule <u>160.9</u>	Moulded Breadth <u>25</u>	Depths from top of Floors to Upper and Main Deck Beams, as per Rule <u>19 2/2</u>	Power of Engines, <u>165</u>	N <sup>o</sup> . of Decks, <u>1</u>	N <sup>o</sup> . of Tiers of Beams, <u>1</u>
Dimensions of Ship per Register, length, <u>162</u> breadth, <u>25</u> depth, <u>19 1</u>					
Keel, if bar iron, depth and thickness <u>7/4 x 1 3/8</u>	Inches in Ship <u>7/4 x 1 3/8</u>	Inches required per Rule <u>7/4 x 1 3/8</u>	Flat Keel Plates, breadth and thickness <u>30 1/2</u>	Inches in ship <u>30 1/2</u>	16ths in ship <u>0</u>
Do. if centre through plate, depth and thickness			Plates in Garboard Strakes, breadth and thickness <u>30 1/2</u>		
Stem, if bar iron, moulding and thickness <u>6 1/2 x 1 3/8</u>	<u>6 1/2 x 1 3/8</u>	<u>6 1/2 x 1 3/8</u>	Do. from Garboard to upper part of Bilges <u>7.6</u>		
Stern-post for Rudder do. do. <u>6 1/2 x 1 3/8</u>	<u>6 1/2 x 1 3/8</u>	<u>6 1/2 x 1 3/8</u>	Do. of doubling at Bilge, or increased thickness, and length applied <u>1/2 length 2 1/2</u>		<u>2 1/2</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>22</u>	<u>22</u>	<u>22</u>	Do. one strake doubled, and length applied <u>1/2 length 2 1/2</u>		<u>2 1/2</u>
Frames, size of Angle Iron, for 1/2 length amidships <u>3 2 1/2</u>	<u>3 2 1/2</u>	<u>3 2 1/2</u>	Do. from up. part of Bilge to l.r. edge of Sh'rstrake <u>6.5</u>		<u>6.5</u>
Do. for 1/4 at each end <u>3 2 1/2</u>	<u>3 2 1/2</u>	<u>3 2 1/2</u>	Do. Main Sheerstrake, breadth and thickness <u>30 1/2</u>		<u>30 1/2</u>
Reversed Frames, size of Angle Iron <u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	Do. of doubling at Sh'rstrake, & length applied <u>1/2 length 2 1/2</u>		<u>2 1/2</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships <u>1 1/2</u>	<u>1 1/2</u>	<u>1 1/2</u>	Do. from Ma. to Upr. or Spar Dk. Sh'rstrake <u>11 1/2</u>		<u>11 1/2</u>
Do. at the ends <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Do. Up. or Spar Dk. Sh'rstrake, brdth & thickness <u>11 1/2</u>		<u>11 1/2</u>
Do. do. do. at Bilge Keelson <u>14</u>	<u>14</u>	<u>14</u>	Butt Straps to outside plating, breadth & thickness <u>1 1/2</u>		<u>1 1/2</u>
Do. height extended at the Bilges <u>31</u>	<u>31</u>	<u>31</u>	Lengths of Plating <u>6 frames</u>		
Beams, Upper, Spar, or Awning Deck (No. ) <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Shifts of Plating, and Stringers <u>2 frames</u>		
Single or double Angle Iron, Plate or Tee Bulb Iron <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness <u>32</u>		<u>32</u>
Single or double Angle Iron on Upper edge <u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	Angle Iron on ditto <u>3 1/2</u>		<u>3 1/2</u>
Average space <u>44</u>	<u>44</u>	<u>44</u>	Tie Plates (fore and aft), outside Hatchways <u>10 1/2</u>		<u>10 1/2</u>
Beams, Main or Middle Deck (No. ) <u>3</u>	<u>3</u>	<u>3</u>	Diagonal Tie Plates on Beams (No. of Pairs) <u>7</u>		<u>7</u>
Single or double Angle Iron, Plate or Tee Bulb Iron <u>3</u>	<u>3</u>	<u>3</u>	Planksheer material and scantling <u>3/4</u>		<u>3/4</u>
Single or double Angle Iron on Upper Edge <u>3</u>	<u>3</u>	<u>3</u>	Waterways } do. do. <u>3 1/2</u>		<u>3 1/2</u>
Average space <u>6</u>	<u>6</u>	<u>6</u>	Flat of Deck do. do. <u>3 1/2</u>		<u>3 1/2</u>
Keelson Centre line, single or double plate, box, or Intercostal, size of Plates <u>1 1/2</u>	<u>1 1/2</u>	<u>1 1/2</u>	How fastened to Beams <u>Secured</u>		
Do. Bulb Plate to Intercostal Keelson <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness <u>3 1/2</u>		<u>3 1/2</u>
Do. Size of Angle Irons <u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	(To the Stringer Plate attached to the outside plating)		
Do. Side Intercostal Keelson, size of Plates <u>1 1/2</u>	<u>1 1/2</u>	<u>1 1/2</u>	Angle Irons on ditto (No. ) <u>3 1/2</u>		<u>3 1/2</u>
Do. Angle Irons on tops of Floors <u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	Tie Plates, outside Hatchways <u>3 1/2</u>		<u>3 1/2</u>
Do. Bilge Keelson, Bulb Iron <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Diagonal Tie Plates on Beams (No. of pairs) <u>7</u>		<u>7</u>
Do. do. Intercostal plates riveted to plating for length <u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	Waterways materials and scantlings <u>3/4</u>		<u>3/4</u>
Do. do. Angle Irons <u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	Flat of Deck do. do. <u>3 1/2</u>		<u>3 1/2</u>
Side Stringers (No. ) size of Angle Irons <u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	How fastened to Beams <u>Secured</u>		
Do. Intercostal plates riveted to plating for length <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams <u>3 1/2</u>		<u>3 1/2</u>
Transoms, material <u>Iron</u> or, if none, in what manner compensated for <u>Chock's Rock Iron</u>			(To the Stringer Plate attached to the outside plating)		
Knight-heads <u>Iron</u> Hawse Timbers <u>Chock's Rock Iron</u>			Angle Irons on ditto (No. ) <u>3 1/2</u>		<u>3 1/2</u>
Windlass <u>English oak</u> Pall Bitt <u>English oak</u>			Stringer or Tie Plates, outside Hatchways <u>3 1/2</u>		<u>3 1/2</u>
The Frames extend in one length from <u>Keel</u> to <u>Deck Plating</u>			Flat of Deck <u>3 1/2</u>		<u>3 1/2</u>
The Reverse Angle Irons on the floors and frames extend from the middle line <u>in every frame</u> to <u>about 1/2 length</u>			Ceiling betwixt Decks, thickness and material <u>2 1/2</u>		<u>2 1/2</u>
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u>			Do. in hold do. do. <u>2 1/2</u>		<u>2 1/2</u>
Plates, Garboard, double or <u>Riveted to Keel, double or</u> at upper edge, with Rivets ( <u>1 3/4</u> in.) diameter, averaging <u>3 1/2</u> ins. from centre to centre.			Main piece of Rudder, diameter at head <u>7 1/2</u>		<u>7 1/2</u>
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets ( <u>3/4</u> in.) diameter, averaging ( <u>3</u> ins.) from centre to centre.			Do. do. at heel <u>2 1/2</u>		<u>2 1/2</u>
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes ( <u>1/2</u> in.) thick, double or single Riveted; with Rivets ( <u>3/4</u> in.) diameter averaging ( <u>3</u> ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>Yes</u>			(Can the Rudder be unshipped afloat? <u>Yes</u> )		
Do. of <u>no</u> Strakes at Bilge for <u>half</u> length, <u>double</u> riveted with Butt Straps <u>1/2</u> thicker than their plates.			Bulkheads No. <u>3</u> Thickness of <u>1/2</u>		
Do. Edges from bilge to Main Sheerstrake, worked <u>carvel</u> with a lining piece ( <u>1/2</u> in.) thick, or clencher, <u>double</u> or single riveted; with rivets ( <u>5/8</u> in.) diameter, averaging ( <u>2 1/2</u> ins.) from centre to centre.			Do. Height up <u>Main Deck</u>		
Do. Edges of Sheerstrake, <u>Main</u> , double or single Riveted. Upper, <u>double</u> or single Riveted. At upper edge <u>Single</u> At lower edge <u>Double</u>			Do. How secured to the sides of the ship <u>Double frames</u>		
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps ( <u>1/2</u> in.) thick, double or single Riveted; with Rivets ( <u>3/4</u> in.) diameter, averaging ( <u>3 1/2</u> ins.) from centre to centre.			Do. Size of Vertical Angle Irons <u>2 1/2</u> and their distance apart, <u>30</u> ins.		
Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted <u>half</u> length amidships. Breadth of laps of plating in double Riveting ( <u>1/2</u> ) Breadth of laps of plating in single Riveting ( <u>2 1/2</u> )			Do. Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>		
Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>Yes</u>			The Frames extend in one length from <u>Keel</u> to <u>Deck Plating</u> Riveted through plates with ( <u>1 1/2</u> in.) Rivets, about <u>5</u> apart.		
Secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.) <u>Secured</u>			extended to Deck, at every frame, in engine & boiler spaces, and alternately for about 1/2 length		
Upper Decks, how secured to the sides? <u>Becket knees forged</u>			No. of Breasthooks, <u>3</u> Crutches, <u>3</u>		
Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Yes</u>					
For trade mark, <u>Mosend Brites &amp; others</u>					
This is a correct description of the several particulars therein given.					
Surveyor's Signature, <u>A. McMillan</u>					

IRON 448-0358

Lloyd's Register Foundation

**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? They do  
 Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Single pieces  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? They do and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? They are  
 Are there any rivets which either break into or have been put through the seams or butts of the plating? A few at the butts

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. If they are of Iron or Steel give the 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 9008 Lm

Small wood masts no bowsprit

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		Chain .....	90	1 1/2	15.4.0.0	100.1.	10		2422	12.1.3.	14.2.0.0		
	Fore Sails,	(State Machine where Tested, and name of Superintendent).	90	1 1/2	15.4.0.0			Bowers ....	2421	12.0.15	14.0.0.0	7 1/2	9 1/2
3	Fore Top Sails,	12 links of each chain tested & 22.15. Lloyd's Camb <sup>n</sup> Test. Nos 1337.2 Andrew Jack						(State Machine where Tested, and name of Superintendent).	2420	10.1.0	12.6.0.0		
	Fore Topmast Stay Sails	Hampson Stream Cable	90	3/4		7 1/2		Stream ....	1	2.3.0	-	2 1/2	
	Main Sails,	Hawser .....	70	7/8		5 1/2		Kedges ....	1	1.0.10		1 1/4	
	Main Top Sails,	Towlines ...	70	9/8									
		Warp .....	70	5-									
	and	All of <u>good</u> quality.											

Her Standing and Running Rigging is made sufficient in size and good in quality. She has two Life Boats and one other Boat. The present state of the Windlass is good and Wharfa by an Engineer and Rudder Good. Pumps good. Beaces fitted in the Stowport. Which is placed under the deck the puncheon Wheels being cast up. Engine Room Skylights.—How constructed? in iron Comings How secured in ordinary weather? With lots of screws.

What arrangements are there for deadlights in such for bad weather? Bulls eyes in top —

Coal Bunker Openings.—How constructed? on the deck How are lids secured? by studs How high above deck? flush

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? Gangways and ironing pipes —

Cargo Hatchways.—How formed? in comings State size 7.4 x 6.0

If of extraordinary size, state how framed and secured? Part of extraordinary size —

What arrangement for shifting beams? none

Hatches, themselves, whether strong and efficient? yes Main Hatchways.—State size 7.4 x 6.0.

Order for Special Survey No. 114 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Boat under Special Survey  
 Date 5th Sept 1871 Surveys held 2nd. On the plating during the progress of riveting  
 Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid between 3rd October 70  
 Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented and  
 No. 163 in builder's yard. Section 18. 5th. After the ship was launched and equipped 15th May 1871  
 Number of Ports 10.

**General Remarks,**  
 On account of the length of this vessel exceeding 13 depths of hold the main sheerstrake is increased 7/16 in thickness for 3/4 length and the stringer plate 3/16 for 3/5 length. The bulge keelson is fitted with a hull iron (of the size for the midship beam) for 3/5 length and two strakes of plating at the bulge on each side for half the vessel's length are increased 7/16 in thickness. In accordance with the rules for this depth of hold there is a hull plate added for 3/5 length at the head stringer to which height all the reversed angle irons are brought. These are also extended to the deck stringer on each frame in the engine and boiler space and in alternate frames in the rest of the midship body. The deck stringer plate is increased in breadth & dispense with diagonal ties, and is doubled in the waterway space over the paddle shaft. One strake at bulge has also been doubled outside for 6 feet. The butts strapped and double riveted. In what manner are the surfaces preserved from oxidation? Inside Paint and Cement Outside Paint.

I am of opinion this Vessel should be Classed QA1

The amount of the Entry Fee .....£ 4 : : : is received by me,  
 Special .....£ 18 : 9 : :  
 Certificate .... Twenty

(Travelling Expenses)  
 (if any) £ 5.5

Committee's Minute 23rd May 18 71

Character assigned QA1

*[Signature]*  
 This Paddle Steamer, under Special Survey, approved for classification as recorded above.

