

# IRON SHIPS.

Recd 22/5/11

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, THREE DECKED VESSELS.  
 SPAR, OR AWNING DECKED VESSELS.  
 Half moulded breadth 12.5 Total Depth if three or more Decks 19.2 1/2  
 Depth from upper part of Keel to top of Upper Deck Beams 5 Total Girth of Half Mid-ship Frame 23.03  
 Girth of Half Mid-ship Frame (Upper Deck) 23.03 3rd Number 49.03  
 1st Number 49.03 Length 160.75  
 2nd Number 0.010 4th Number 175.10  
 Depths to Length under 14 Breadths to Length under 7

Built at Dumbarton  
 When built 1870 Launched 7<sup>th</sup> March  
 By whom built C. McMillan & Son  
 Owners Submarine Telegraph Comp<sup>y</sup>  
 Port belonging to London  
 Destined Voyage Dmb. Coaster  
 If Surveyed while Building, Afloat, or in Dry Dock.

Length on deck as per Rule 160.9 Moulded Breadth 25 Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 19 2 1/2 Feet. Inches. Power of Engines, 165 Horse. N<sup>o</sup>. of Decks, 1 N<sup>o</sup>. of Tiers of Beams 1

Dimensions of Ship per Register, length, 162 breadth, 25 depth, 19 1

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<u>1 1/4 x 1 1/2</u>	<u>1 1/4 x 1 1/2</u>						
Do. if centre through plate, depth and thickness	<u>6 1/2 x 1 1/2</u>	<u>6 1/2 x 1 1/2</u>						
Stem, if bar iron, moulding and thickness	<u>6 1/2 x 1 1/2</u>	<u>6 1/2 x 1 1/2</u>						
Stern-post for Rudder do. do.	<u>6 1/2 x 1 1/2</u>	<u>6 1/2 x 1 1/2</u>						
Stern-post for Propeller	<u>22</u>	<u>22</u>						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22</u>	<u>22</u>						
Frames, size of Angle Iron, for 1/2 length amidships	<u>3 2 1/2</u>	<u>3 2 1/2</u>						
Do. for 1/2 at each end	<u>3 2 1/2</u>	<u>3 2 1/2</u>						
Reversed Frames, size of Angle Iron	<u>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>						
Do. at the ends	<u>1 1/2</u>	<u>1 1/2</u>						
Do. do. do. at Bilge Keelson	<u>1 1/2</u>	<u>1 1/2</u>						
Do. height extended at the Bilges	<u>31</u>	<u>31</u>						
Beams, Upper, Spar, or Awning Deck (No. single or double Angle Iron, Plate or Tee Bulb Iron)	<u>6 1/2</u>	<u>6 1/2</u>						
Single or double Angle Iron on Upper edge	<u>2 1/2</u>	<u>2 1/2</u>						
Average space	<u>44</u>	<u>44</u>						
Beams, Main or Middle Deck (No. single or double Angle Iron, Plate or Tee Bulb Iron)	<u>6 1/2</u>	<u>6 1/2</u>						
Single or double Angle Iron on Upper Edge	<u>2 1/2</u>	<u>2 1/2</u>						
Average space	<u>44</u>	<u>44</u>						
Beams, Lower Deck, Hold or Orlop (No. single or double Angle Iron, Plate or Tee Bulb Iron)	<u>3</u>	<u>3</u>						
Single or double Angle Iron on Upper Edge	<u>2 1/2</u>	<u>2 1/2</u>						
Average space	<u>44</u>	<u>44</u>						
Keelson Centre line, single or double plate, box, or intercostal, size of Plates	<u>1 1/2</u>	<u>1 1/2</u>						
Do. Bulb Plate to Intercostal Keelson	<u>6 1/2</u>	<u>6 1/2</u>						
Do. Size of Angle Irons	<u>3 1/2</u>	<u>3 1/2</u>						
Do. Side Intercostal Keelson, size of Plates	<u>1 1/2</u>	<u>1 1/2</u>						
Do. Angle Irons on tops of Floors	<u>6 1/2</u>	<u>6 1/2</u>						
Do. Bilge Keelson, Bulb Iron	<u>6 1/2</u>	<u>6 1/2</u>						
Do. Intercostal plates riveted to plating for length	<u>3 1/2</u>	<u>3 1/2</u>						
Do. do. Angle Irons	<u>3 1/2</u>	<u>3 1/2</u>						
Side Stringers (No. repair) size of Angle Irons	<u>3 1/2</u>	<u>3 1/2</u>						
Do. Intercostal plates riveted to plating for length	<u>6 1/2</u>	<u>6 1/2</u>						
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.								
Knight-heads <u>Iron</u> Hawse Timbers <u>Chock's Rock Elm</u>								
Windlass <u>English oak</u> Pall Bitt <u>English oak</u>								
The Frames extend in one length from <u>Keel</u> to <u>Deck Plating</u>								
The Reverse Angle Irons on the floors and frames extend from the middle line <u>in every frame</u> to <u>about the middle line</u>								
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>								
Plates, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (1/4 in.) diameter, averaging 3 ins. from centre to centre.								
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 ins.) from centre to centre.								
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1/2 in.) thick, double or single Riveted; with Rivets (3/4 in.) diameter averaging (3 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>								
Do. of no Strakes at Bilge for half length, riveted with Butt Straps <u>16</u> thicker than their plates.								
Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single riveted; with rivets (5/8 in.) diameter, averaging (2 1/2 ins.) from centre to centre.								
Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge <u>Single</u> At lower edge <u>Double</u>								
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (1/2 in.) thick, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre.								
Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted half length amidships. Breadth of laps of plating in double Riveting (1/2 in.) Breadth of laps of plating in single Riveting (1/2 in.)								
Keelsons, Stringer and Tie Plates, treble, double or single Riveted?								
Secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.) <u>Waterway</u>								
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.?								
For trade mark, <u>Morse &amp; Britton &amp; others</u>								
Is a correct description of the several particulars therein given.								
Arch <sup>d</sup> ow <u>William Iron</u> Surveyor's Signature, <u>W. S. Munro</u>								

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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

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
3	SAILS.											
	Fore Sails,	Chain	90	1 1/2	15.4.0.0	100.1.	Bowers	2422	12.1.3.	14.2.0.0	7 1/2	9 1/2
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	12 links of each chain tested & 22.15.									
	Fore Topmast Stay Sails	Hampson Stream Cable	90	3/4		7 1/2	(State Machine where Tested, and name of Superintendent).	2421	12.0.15.	14.0.0.0	3	
	Main Sails,	Hawser	70	9		5 1/2		2420	10.1.0.	12.6.0.0		
	Main Top Sails,	Towlines	70	9			Stream	1	2.3.0.	-	2 1/2	
and		Warp	70	5-			Kedges	1	1.0.10.		1 1/4	
		All of <u>Good</u> quality.										

Her Standing and Running Rigging is made sufficient in size and Good in quality. She has two Long Boats and one other

The present state of the Windlass is Good and Worked by an Engine and Rudder Good Boats forged in the Navy

Which is placed under the deck the gun wheels being casted up. Pumps Good

Engine Room Skylights. How constructed? in iron How secured in ordinary weather? With bolts & screws

What arrangements are there for deadlights in such for bad weather? Bullseyes in tops

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 iron State size 7.4 x 6.0

If of extraordinary size, state how framed and secured? Not 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 Proth under  
Date 5th Sept 1870 Surveys held 2nd. On the plating during the progress of riveting Special Survey  
Order for Ordinary Survey No. 163 while building 3rd. When the beams were in and fastened, and before the decks were laid between 3rd October 70  
Date 15th May 1871 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 visits 10

#### General Remarks,

On account of the length of this vessel exceeding 13 depths of hold the main sheerstrake is increased  $\frac{1}{16}$  in thickness for  $\frac{3}{4}$  length and the stringer plate  $\frac{3}{16}$  for  $\frac{3}{4}$  length. The bulge keelson is fitted with a bulk iron (of the size for the midship beam) for  $\frac{3}{4}$  length and two strakes of plating at the bulge on each side for half the vessel's length are increased  $\frac{1}{16}$  in thickness. In accordance with the rules for this depth of hold there is a bulk plate added for  $\frac{3}{4}$  length at the fore 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 60 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,

May 1871 Special .....£ 18 : 9 :  
Certificate .... Printed

(Travelling Expenses)  
(if any) £ 5.5

Committee's Minute 23rd May 1871

Character assigned QA1

This Paddle Steamer, under Special Survey, appears for classification as QA1  
Lloyd's Register Foundation