9140

IRON SHIPS.

Rec 24/7/71

No. 5984 Survey held at Greenock Date, First Survey 20th March Last Survey 20th July 1871

On the Iron Barque "Lake Simcoe" Master Stewart

Tonnage under Tonnage Deck	336.86
Ditto of Third Spar, or Awning Deck.	
Ditto of ~~Poop~~, or Raised Qr. Dk.	13.24
Ditto of Houses on Deck	
Ditto of Forecastle	
Gross Tonnage	350.10
Crew Space, as per Rule	15.99
Register Tonnage, cut on Beam	334.11
~~Engine~~ Room	
Register Tonnage, as a Steamer, cut on Beam	

ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.

Half moulded breadth	12.1
Depth from upper part of Keel to top of Upper Deck Beams	15.9
Girth of Half Midship Frame (as per Rule)	23.9
1st Number	51.9
Length	144
	20 76 6
	20 76
	519
2nd Number	7473.6
Depths to Length.	under 10

THREE DECKED VESSELS.

Half Moulded Breadth	
Total Depth if three or more Decks	
Total Girth of Half Midship Frame	
3rd Number	
Length	
4th Number	
Breadths to Length	under 6

Built at Greenock

When built 1871 Launched 4th July 1871

By whom built Robert Steele & Co.

Owners A. Rendall

Port belonging to Glasgow

Destined Voyage Clyde to Marseilles

If Surveyed while Building, Afloat, or in Dry Dock. While Building and Afloat

Length on deck as per Rule, Feet. 145 Inches. | Moulded Breadth, Feet. 24.2 Inches. | Depths from top of Floors to Upper and Main Deck Beams, as per Rule ..... Feet. 14 Inches. 6½ | Power of Engines, Horse. | N°. of Decks with flat laid One | N°. of Tiers of Beams Two

Dimensions of Ship per Register, length, 152.2 breadth, 24.1 depth, 14.3

	Inches in Ship.	Inches required per Rule.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths required per Rule.
Keel, if bar iron, depth and thickness	6 3/4 × 2	7½ × 1 1/8				
Do. if centre through plate, depth and thickness	6½ × 2	6½ × 1 7/8				
Stem, if bar iron, moulding and thickness	6½ × 2	6½ × 1 7/8				
Stern-post for Rudder do. do.						
Stern-post for Propeller						
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	(Class 100 A 22)				
Frames, size of Angle Iron, for 3/5 length amidships	3	3	2½	6/16	2½	6/16
Do. for ⅕ at each end	3	3	2½	5/16	2½	5/16
Reversed Frames, size of Angle Iron	2¼	2¼	2¼	5/16	2¼	5/16
Floors, depth and thickness of Floor Plate at mid line for half the length amidships			16½	6/16	16	6/16
Do. at the ends			3	6/16		6/16
Do. do. do. at Bilge Keelson			7	6/16		6/16
Do. height extended at the Bilges	4 feet	32 inches				
Beams, Upper, ~~Spar, or Awning Deck~~ (No.) ~~single or double Angle Iron, Plate or Tee~~ Bulb Iron			6	6/16	6	6/16
Single or double Angle Iron on Upper edge	2¼	2¼	2½	5/16	2¼	4/16
Average space	42 inches	44 inches				
Beams, Main ~~or Middle~~ Deck (No.) ~~single, or double Angle Iron, Plate or Tee~~ Bulb Iron			6	6/16	6	6/16
~~Single, or double~~ Angle Iron, on Upper Edge	2¼	2¼	2¼	5/16	2¼	4/16
Average space	84 ÷ 42 inches	88 ÷ 44 inches				
Beams, Lower Deck, Hold or Orlop (No.) single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	—			
Single or double Angle Iron on Upper Edge	—	—	—			
Average space	—	—	—			
Keelson Centre line, single ~~or double~~ plate, ~~box, or Intercostal~~, ~~size of Plates~~			11	9/16	10¾	9/16
Do. Bulb Plate to Intercostal Keelson						
Do. Size of Angle Irons	3½	3½	3	6/16	3	6/16
Do. Side Intercostal Keelson, size of Plates	Wash plated					
Do. Angle Irons on tops of Floors						
Do. Bilge Keelson, Bulb Iron						
Do. do. Intercostal plates riveted to plating for ___ length						
Do. do. Angle Irons	3½	3½	3	6/16	3	6/16
Side Stringers (No.) size of Angle Irons						
Do. Intercostal plates riveted to plating for length.						

	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths required per Rule.
Flat Keel Plates, breadth and thickness				
Plates in Garboard Strakes, breadth and thickness	30	9/16	30	9/16
Do. from Garboard to upper part of Bilges		8/16		8/16
Do. of doubling at Bilge, or increased thickness, and length applied				
Do. fm up. part of Bilge to lr. edge of Sh'rstrake		7/16		7/16
Do. Main Sheerstrake, breadth and thickness	30	9/16	30	9/16
Do. of d'bling at Sh'rstrake, & length applied				
Do. from Mn. to Upr. or Spar Dk. Sh'rstrake.				
Do. Up. or Spar Dk Sh'rstrake, brdth & thickns				
Butt Straps to outside plating, breadth & thickness	9¾ ÷ 8	9.8/16	9½ ÷ 8	9.8/16
Lengths of Plating	10 feet 6 inches		five spaces	
Shifts of Plating, and Stringers	Two frames		Two spaces	
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	21	7/16	20½	7/16
Angle Iron on ditto	3½ × 3 × 6/16		3½ × 3 × 6/16	
Tie Plates (fore and aft), outside Hatchways	7	7/16	7	7/16
Diagonal Tie Plates on Beams (No. of Pairs,)	7	7/16	7	7/16
Planksheer material and scantling				
Waterways do. do.	Iron Gutter.			
Flat of Upper Deck do. do.	Yellow Pine	3½	3½	
How fastened to Beams	By Bolts and Screw Bolts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	—	—	—	
(*Is the Stringer Plate attached to the outside plating?*)	—		—	
Angle Irons on ditto (No.)	—	—	—	
Tie Plates, outside Hatchways	—	—	—	
Diagonal Tie Plates on Beams (No. of pairs,)	—	—	—	
Waterways materials and scantlings	—	—	—	
Flat of Middle Deck do. do.	—	—	—	
How fastened to Beams	—	—	—	
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	18 15" inside frame	7/16	18 15" inside frame	7/16
(*Is the Stringer Plate attached to the outside plating?*)	Yes			
Angle Irons on ditto (No.)	3×3× 6/16		3×3× 6/16	
Stringer or Tie Plates, outside Hatchways	5×4× 9/16			
Flat of Lower Deck Angle Iron amidships Mahogany				
Ceiling betwixt Decks, thickness and material	6 × 2			
Do. in hold do. Red Pine Boarding Pitch Pine do.	2½		2½	
Main piece of Rudder, diameter at head	3¾		3¾	
Do. do. at heel	2¼		2¼	
(*Can the Rudder be unshipped afloat?* Yes)				
Bulkheads No. One Thickness of		4/16		4/16
Do. Height up to Main deck				
Do. How secured to the sides of the ship Between double frames				
Do. Size of Vertical Angle Irons 2½ × 2½ × 7/16 and their distance apart, 30 inches				
Do. Are the outside Plates doubled two spaces of Frames in length? Yes				

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads Iron Hawse Timbers Iron

Windlass Patent Purchase Gear Pall Bitt Iron

The Frames extend in one length from Keel to Gunwale Riveted through plates with (¾ in.) Rivets, about 5 ins apart.

The Reverse Angle Irons on the floors and frames extend across the middle line ___ to Upper turn of Bilge and to Gunwale alternately

Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

Plates, Garboard, double ~~or~~ ___ Riveted to Keel, double ~~or~~ ___ at upper edge, with Rivets (1 ÷ ¾ in.) diameter, averaging (4 ÷ 3 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double ~~or single~~ Riveted; with Rivets (¾ in.) diameter, averaging (3 ins.) from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (9 ÷ 8/16) thick, double ~~or single~~ Riveted; with Rivets (¾ 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? No

Do. of One Strake at Bilge for half length, ~~treble~~ Double riveted with Butt Straps 1/16 thicker than their plates.

Do. Edges from bilge to Main Sheerstrake, worked ~~carvel with a lining piece (___) thick, or~~ clencher, double ~~or single~~ riveted; with rivets (⅝ in.) diameter, averaging (2¾ ins.) from centre to centre.

Do. Edges of Sheerstrake, Main, double ~~or single~~ Riveted. ~~Upper, double or single Riveted~~. At upper edge Single At lower edge Double

Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (8, 7/16) thick, double ~~or single~~ Riveted; with Rivets (¾ ÷ ⅝ in) diameter, averaging (3 ÷ 2¾ 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 for ___ length amidships. Breadth of laps of plating in double Riveting (3½ ÷ 4⅛) Breadth of laps of plating in single Riveting (2¼ ÷ 2¾)

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double

Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (*Explain by Sketch, if necessary.*) Iron Gutter.

Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, Three Crutches, Three

What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Palmers Iron

Manufacturer's name or trade mark, Palmers Shipbuilding & Iron Co. Limited

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, Robert Steele & Co. *Surveyor's Signature,* [signature]

IRON 449 - 0040

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

Do the edges of the carvel work and of the butts fay close together throughout their length without requiring any making good of deficiencies? Yes

Do the fillings between the ribs and plates fill in solid with single pieces? Yes or are they in short lengths of various thicknesses? No

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet ho well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? A few

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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

Fore mast, Main Mast and Bowsprit are of Pitch Pine of Wood
Mizen Mast of Red Pine

9140 Lrn

Number for equipment 7493

N°.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.
Two Suits of Sails	Fore Sails,	5476. 13. 10/7/1871 Chain ..... (State Machine where Tested, and name of Superintendent).	210 Stud	1 3/16	25 10/20 tons "Lloyd's" Tipton Proving House Samuel Fregenna, Superintendent	1 3/16 210 fathoms	25 8/20 tons
	Fore Top Sails,						
	Fore Topmast Stay Sails	~~Hempen~~ Stream Chain Cable	90 Shott	4/16		4/16	
	Main Sails,	Hawser	90	7½		7½	
	Main Top Sails,	Towlines	90	5½		5½	
and,		Warp.....	90	4			
		All of Good quality.					

ANCHORS, &c.	N°.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
12.C. 3/7/1871	5009	12. 0. 12	13. 19. 2. 21	12. 0. 0	13 8/20 tons
13.8. 3/7/1871 Bowers	5010	12. 0. 13	13. 19. 2. 21	12. 0. 0	13 8/20 "
12.C. 10/7/1871 (State Machine where Tested, and name of Superintendent).	5011	10. 1. 7	12. 6. 2. 7 "Lloyd's" Tipton Proving House Samuel Fregenna, Superintendent	10. 0. 23	12 4/20 "
Stream 3/7/1871	7916	5. 0. 7	Neptune Forge Works Dudley, Emanuel Binns, Superintendent 6. 9. 0. 0	5. 0. 0	
3/7/1871	7922	2. 2. 0	4. 10. 0. 0	2. 2. 0	
Kedges 3/7/1871	7357	1. 1. 0	3. 7. 2. 0	1. 1. 0	

Her Standing and Running Rigging Hemp sufficient in size and Good in quality. She has One Life Long Boat and Two Others

The present state of the Windlass is Good with patent purchase Capstan and Rudder Good with patent Steering Gear Pumps Two Main & Two Bilge Cast Iron Good

Engine Room Skylights.—How constructed? How secured in ordinary weather?

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

Coal Bunker Openings.—How constructed? How are lids secured? How high above deck?

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? Ports in Bulwarks

Cargo Hatchways.—How formed? Iron Comings State size

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, themselves, whether strong and efficient? Strong & Efficient **Main Hatchways.**—State size 11 feet by 7 feet

Order for Special Survey No. 566 Date 17th March 1871
Order for Ordinary Survey No. ___ Date ___ No. 76 in builder's yard.

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
2nd. On the plating during the progress of riveting
3rd. When the beams were in and fastened, and before the decks were laid
4th. When the ship was complete, and before the plating was finally coated or cemented
5th. After the ship was launched and equipped

Specially Surveyed whilst building from March to July 1871 in all 18 visits

General Remarks, This vessel has been built under Special Survey as per Order N°. 566. Is Barque rigged and has a raised Quarter deck.

Some of the Frames at the Bow are rather closer, and also the plates are from One to two sixteenth thicker about the Water line to fortify the Bow against Ice for the Trade she is intended; viz.- to Canada.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecastle or raised quarter deck, or of double or part double bottom.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement to upper part of Bilge and Oxide of Iron paint above. Outside Three Coats of Oxide of Iron paint and Patent Grease on bottom, Black paint on topsides

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

The amount of the Entry Fee .....£ 4 : „ : „ is received by me,
July 1871 Special .....£ 16 : 14 : „
×Certificate .... „ : „ : „
(Travelling Expenses) (if any) £

Committee's Minute 25th July 1871

Character assigned 100 A 1 A 1 C P

I concur in the opinion that This vessel should be classed 100 A 1.
24/7/71