Spar, ~~or Awning~~ Dk. ~~IRON OR~~ STEEL STEAMER.

No. 17024

State if Report is also sent on the Machinery of the Vessel Yes

Port of Glasgow Date of completion of Report 20th May 1899 Received at London Office WED, 24 MAY 1899

Survey held at Dumbarton Date, First Survey Mar 2nd 1898 Last Survey May 24 MAY 1899

"Canadia" Rig Schooner

PLANS CARE

Tonnage under Tonnage Deck	4114.36
Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.	
Total under Upper Dk.	
Do. of Poop	85.82
Do. of Bridge House	75.62
Do. of Forecastle	56.36
Do. of Houses on Deck	
Do. of excess of Hatchways	23.30
Do. above Crown of Engine Room	78.06
Gross Tonnage	4314.08
Less Crew Space	88.91
Less above Crown of Engine Room	78.06
Tonnage for Fees	4147.11
Less Engine Room	1360.51
Less Navigation Spaces	56.314
Register Tonnage as cut on Beam	2789.32

SPAR, ~~AWNING OR PART AWNING~~ DECKED VESSEL, ~~or a Vessel having a continuous Shade Deck.~~

CLASS 100 A 1

	Feet.
Half Breadth (moulded)	24.16
Depth from upper part of keel to top of Main Deck Beams	21.98
Girth of Half Midship Frame (as per Rule)	42.25
1st Number	88.39
Length	373.16
2nd Number	32983
Proportions—Breadths to Length	7.7
Depths to Length—Main Deck to top of Keel	16.91

Master C. E. Troensegaard

Year of Appointment (1) As Master in service of owner of present vessel:—18 89 (2) As Master of this vessel 1898

Built at Dumbarton

When built 1898–99 Launched Nov. 5th 1898

By whom built A. McMillan & Son. Lim.

Owners Heckshers & Son

Managers (Where necessary to be entered in Reg. Book.)

Residence Copenhagen

Port belonging to Copenhagen

Destined Voyage Cape Breton. ~~If~~ Surveyed while Building, Afloat, ~~or~~ and in Dry Dock.

LENGTH on Deck as per Rule	Feet. 373	Inches. 2	BREADTH—Moulded	Feet. 48	Inches. 4	DEPTH, top of Floors to Spar ~~or Awn.~~ Dk. Beams / Do. do. Main Deck Beams actual	Feet. 26 / 17	Inches. 5½ / 11½	Power of Engines	Horse.	No. of Decks with flat laid 2 / No. of Tiers of Beams 2

Dimensions of Ship per Register, Length 375 breadth 48.5 depth 26.4 Spar ~~or Awn. Dk.~~ / 17.9 Main Deck. Moulded depth, ft. 20 ins. 6 To Main Dk. Round up of Beam, Main Dk. 11½ ins.

FRAMING.	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as	Inches per Rule Approved.	20ths per Rule
FRAME, Angles, ~~or Z, [or [Bars~~, for ½ length amidships	5½	3½	8	5½	3½	8
Do. for ¼ at each end	5½	3½	7	5½	3½	7
Do. in way of Double Bottoms at Solid Floors	3½	3½	8	3½	3½	8
" " ~~at intermdt. Plts.~~						
Distance of Frames from moulding edge to moulding edge, all fore and aft	24			24		
REVERSED FRAME, Angles	6	3½	8	6	3½	8
DEEP FRAMING, depth of girder	8½			8½		
~~FLOORS, depth and thickness of Floor Plate, at mid-line for ½ length amidships~~						
~~" in way of Engines and Boilers~~						
~~" thickness at the ends of vessel~~						
~~" depth at ¾ the half-bdth. as per Rule~~						
~~" height extended at the Bilges~~						
FLOORS & BRACKETS, in Cell Dble Bottoms			8			8
" " Distance apart	24			24		
CENTRE GIRDER, in Double bottom, depth and thickness	42		10	42		10
" " Angles, Top	4	4	9	4	4	9
" " " Bottom	6½	4½	9	6½	4½	9
SIDE GIRDERS, number and thickness 1			8			8
" Angles	3½	3½	8	3½	3½	8
MARGIN PLATE, depth (exclusive of flange) and thickness	40		8	28		8
" Angles	4	4	9	4	4	9
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	42		10	36		10
" " thickness in Engine and Boiler space	in E space	10/20	in B space	12/20		10
" " " Remainder in Holds			8			8
BEAMS, Spar ~~or Awning~~ Deck, ~~Single Angle~~, Bulb Angle, ~~Plate or Tee Bulb~~	8½	3	11	8½	3	11
" ~~Angles on upper edge~~						
" Average space	24			24		
BEAMS, Main Deck, ~~Single Angle~~, Bulb Angle, ~~Plate or Tee Bulb~~	9	3	13	9	3	13
" ~~Angles on upper edge~~						
" Average space	24			24		
~~BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb~~						
" ~~Angles on upper edge~~						
" ~~Average space~~						
~~BEAMS, Hold, or Orlop, Plate or Tee~~ Bulb						
" ~~Angles on upper edge~~						
" ~~Average space~~						
BEAMS, Poop Deck, ~~Angle, Bulb Angle, Plate or~~ Tee Bulb	8		8	8		8
" ~~Angles on upper edge~~						
" Average space	48			48		
BEAMS, Bridge Deck, ~~Angle, Bulb Angle, Plate or~~ Tee Bulb	8		8	8		8
" ~~Angles on upper edge~~						
" Average space	48			48		
BEAMS, Forecastle Deck, ~~Angle, Bulb Angle, Plate or~~ Tee Bulb	9		8	9		8
" ~~Angles on upper edge~~						
" Average space	48		in	48		in
PILLARS, In 'tween Deck, size and spacing	2¾		48	2¾		48
" " Hold " "	4		48	4		48
" Quarter, 'tween Dks., " "	2¾		192	2¾		192
" " in Hold " "	4		192	4		192
~~WEB FRAMES, In Fore Body, No. and spacing~~						
" " " ~~brdth. & thicknss~~						
" ~~No. of Side Stringers~~ " "						
WEB FRAMES, In E. & B. Space, No. & spacing	2 as on plans					
" " " brdth. & thickness	30		8	30		8
WEB FRAMES, In After Body, No. and spacing	1 as on plan					
" " " brdth. & thicknss	18		8	18		8
" No. of Side Stringers " "	3					
" Size of Angles ~~or Tee Bars~~ to Web Frames	4	3½	8	4	3½	8
~~BRACKET PLATES to Stringers between Web Frames, depth and thickness~~						

FORGINGS AND CASTINGS.	Inches in Ship.	Inches per Rule. Or as Approved.
~~KEEL, Bar or Side Plates, depth and thickness~~		
STEM, moulding and thickness	11 × 2⅞	11 × 2⅞
STERN-POST for Rudder do. do.	11 × 6¾	11 × 6¾
" " for Propeller	11 × 6¾	11 × 6¾
MAIN PIECE of Rudder, diameter at head	9½	9½
do. at heel	7½	7½

RUDDER, how constructed Single plate 22/20

Can the Rudder be unshipped afloat? Yes.

KEELSONS AND STRINGERS.	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as	Inches per Rule Approved.	20ths per Rule
~~CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercostal Plate~~						
" Rider Plate						
" Bulb Plate to Intercostal Keelson						
" Horizontal Plates on Floors						
" Angles						
SIDE KEELSON, Angles						
" Bulb or Plate above floors, for lng.						
" Intercostal Plate, for length						
" Attached to outside plating with Angle						
BILGE KEELSON, Angles						
" Bulb or Plate above floors, for lng.						
" Intercostal Plate, for length						
" Attached to outside plating with Angle						
BILGE STRINGER Angles						
" Bulb Plate, for length						
" Intercostal Plate, for length						
3 Side Stringers " Attached to outside plating with Angle						
SIDE STRINGER ~~Angles~~. Bulb Angles	8½	3	10	8½	3	10
" Bulb or Intercostal Plate, for whole lng.	17		8	17		8
" Attached to outside plating with Angle	3½	3½	10	3½	3½	10

	Inches in Ship.	20ths in Ship.	Inches per Rule.	20ths per Rule
Spar, ~~or Awning~~ Deck Stringer Plates, breadth and thickness	70	9	70	9
" Angle on ditto	4 × 4 ×	9	4 × 4 ×	9
" ~~Tie Plates, fore and aft, outside Hatchways~~				
" ~~Diagonal Tie Plates, No. of prs.~~				
" Deck.* ~~Iron or~~ Steel, for whole lng.		8		8
" ~~Wood Deck, Material & thickness~~				
Main Deck Stringer Plate, breadth & thickness	68	10	68	10
" Angles on ditto, No. 2	4 × 4 ×	9	4 × 4 ×	9
" ~~Tie Plates, outside Hatchways~~				
" ~~Diagonal Tie Plates, No. of prs.~~				
" Deck.* ~~Iron or~~ Steel, for whole lng.		8		8
" ~~Wood Deck, Material & thickness~~				
~~Lower Deck Stringer Plates, br'dth & thickn's~~				
" ~~Angles on ditto, No.~~				
" ~~Tie Plates, outside Hatchways~~				
" ~~Deck.* Material and thickness~~				
~~Hold, or Orlop Stringer Plate, br'dth & thckn's~~				
" ~~Angles on ditto, No.~~				
" ~~Tie Plates, outside Hatchways~~				
" ~~Deck, Material and thickness~~				
Poop Deck Stringer Plate, breadth & thickness	30	6	30	6
" Angles on ditto	3 × 3 ×	7	3 × 3 ×	7
" Tie Plates				
" Deck. Material and thickness Steel		6/6		6/6
Bridge Deck Stringer Plate, br'dth & thickness	40	8	40	8
" Angle on ditto	3 × 3 ×	9	3 × 3 ×	9
" Tie Plates				
" Deck. Material and thickness Steel		6/6		6/6
Forecastle Deck Stringer Plate, b'dth & th'kns	30	6	30	6
" Angle on ditto	3 × 3 ×	7	3 × 3 ×	7
" Tie Plates	13½	6	13½	6
" Deck. Material and thickness Y.P.	3		3	

* *If Iron or Steel Deck, state if whole or part, and if wood deck is laid thereon.*

BULKHEADS.	Number. In Vessel.	Number. Per Rule.	Thickness. ~~16ths or~~ 20ths.	Stiffeners. Horizontal. Inches.	Stiffeners. Vertical. Inches.	Spacing. Inches.	Single or Double Frames.	Height up.
W. T. BULKHEADS	6	6	7.6	8½ × 3 × 11/20	5½ × 3 × 8/20	30	dble	Spar
PARTITION "						48		dk
LONGITUDINAL "	also vert. webs and semi box beams as per Rule							

Are the outside Plates doubled two spaces of Frames in length? Yes.

Form No. 10.

GLS184-0110 (1/2)

17024 Gls

PLATING.

STRAKES.	As in Ship. Amidship. Breadth. (Inches.)	Amidship. Thickness. (16ths or 20ths)	Forward. Thickness. (16ths or 20ths)	Aft. Thickness. (16ths or 20ths)	Per Rule or as Approved. Amidship. Breadth. (Inches.)	Amidship. Thickness. (16ths or 20ths)
Flat Plate Keel (If Bar Keel, state Riveting)	36	20	13	13	36	20
Garboard or A Strake	59	15	12	15	36	15
B (State actual thickness in way of Double Bottom.)		11	9	13		11
C		11	9	13		11
D		11	9	13		11
E		13	10	13		13
F		13	10	13		13
G		13	10	10		13
H		12	9	9		12
J		12	9	9		12
K		12	9	9		12
Main Sheerstrake L	48	13	9	9	45½	13
M		14	9	9		14
Spar Sheerstrake N	43	17	9	9	40	17
~~O~~						
~~P~~						
~~Q~~						
~~Doubling of Flat Plate Keel~~						
Length and thickness ~~of Bilges~~						
Length and thickness of Sheerstrakes		14 for 20 ft at each end of bridge				
Length and thickness ~~of Strake below~~						
Poop Sides		7				7
Bridge Sides		9.8				9.8
Forecastle Sides		7				7

RIVETING.

STRAKES.	Edges. Single or Double.	Edges. Breadth of Lap. (Inches.)	Edges. Rivets. Diam. (Inches.)	Edges. Rivets. Spacing cr. to cr. (Inches.)	Butts. Double or Treble and for what Length.	Butts. Rivets. Diam. (Inches.)	Butts. Rivets. Spacing cr. to cr. (Inches.)	Butts. Straps. Breadth. (Inches.)	Butts. Straps. Thickness. (Inches.)	Butts. If Lapped. Breadth. (Inches.)	Butts. If Lapped. For what Length. (Feet.)
Flat Plate Keel	dble	6	1	3½	treble	1	3½	19	14·13/20	dble ✓	straps
Garboard or A Strake	do	6	1	3½	Quad	1	3½	✓	✓	13½	whole
B	do	5¼	7/8	3 3/7	treble	7/8	3 3/16	✓	✓	9	do
C	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	9	✓
D	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	9	✓
E	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	9	✓
F	do	5¼	7/8	3 3/7	Quad + Treb	7/8	3 3/16	✓	✓	12·9	✓
G	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	12·9	✓
H	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	12·9	✓
J	do	5¼	7/8	3 3/7	do	7/8	3 3/16	✓	✓	12·9	✓
K	do	5¼	7/8	3 3/7	Quad	7/8	3 3/16	✓	✓	12	✓
L	do	6	1	4	Treble	7/8	3 3/16	✓	✓	9	✓
M	do	6	1	4	Quad	1	3½	✓	✓	14	✓
N					Treble	1	3½	19	13·10/20 dble straps	✓	✓
Poop Sides	single										
Bridge Sides	dble + single										
Forecastle Sides	single										

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.? Siemens Martin. Mossend, Clydebridge, Colville, Steel Co of Scotland, Lanarkshire Steel Co + Palmers.

Spar ~~or Awning~~ Stringer Plate { Butts, ~~treble~~ quadruple riveted for ½ length amidship. Straps, ~~single, double or~~ overlapped for whole length ~~amidship~~.

Main Stringer Plate { Butts, treble riveted for whole length amidship. Straps, ~~single, double or~~ overlapped for whole length ~~amidship~~.

Butts of Bilge & Side Stringers and Tie Plates, treble ~~or double~~ riveted.

Inner Bottom Plating, riveting of Edges dble + single Butts double

Centre Girder Butts, treble riveted Keelson Butts, treble riveted.

Frames, riveted through Plates with 7/8 in. Rivets, about 6⅞ apart.

Rivets, state whether Iron or Steel Iron

FRAMES extend in one length from Keel to margin plate and thence to Spar dk and Gunwale

REVERSED FRAMES on floors and frames extend from middle line to margin plate and thence to Spar dk on every frame. To forecastle deck on alternate frames.

MASTS, SPARS, &c.

Lower Masts	Material.	Total Length	Diameter and Thickness. At Partners.	Heel.	Hounds.	Head.	No. of Plates in round.	Angles. Number.	Angles. Size.	Riveting. Seams.	Riveting. Butts.
Fore	Steel	54.3	19 × 7/20	15 × 6/20		12½ × 5/20	2	✓	✓	single	treble
Main	do	55.10	19 × 7/20	15 × 6/20		12½ × 5/20	2	✓	✓	do	do
Mizen	—										

Bowsprit None

Topmasts, Yards and Remainder of Spars ✓

Rigging, Material and Size, Shrouds Steel wire 3¼. Stays Steel wire 4¼

Sails. One Suit of four. Sails, and the following spare sails ✓

EQUIPMENT No. 40855 LETTER X

ANCHORS.

Number of Certificate.	Anchors.	Weight, Ex. Stock Cwts.	qrs.	lbs.	Weight of Stock. Cwts.	qrs.	lbs.	Test, per Certificate. Tons.	cwts.	qrs.	lbs.	Weight Req. by Rule. Cwts.	qrs.	lbs.	Description of Anchor. (If Patent state Name of Patentee.)	Makers.	Where and when tested and Superintendent.
34041	1st Bower	55	1	0	Stockless			45	10	2	14	54	2	0	Reliance Stockless	W. L. Byers & Co	R. W. Coms 4/8/98 H. T. Welford
34071	2nd	55	0	0	do			45	7	2	0	54	2	0	do do	do do	do 8/8/98 do
34108	3rd	46	1	0	do			40	0	2	14	46	1	0	do do	do do	do 11/8/98 do
	Collective weight	156	2	0								155	1	0			
41074	Stream	12	3	12	3	1	8	14	12	3	7	12	3	0	Rodgers	not stated	Netherton 31/8/98 H Green
41073	Kedge	6	2	11	1	2	27	8	17	2	0	6	2	0	do	do	do do do
	2nd Kedge																

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate. Tons.	Weight of Chain Cable. Supplied.	Per Rule.	Fathoms and Size Per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.
25648	135	2⅜	113¾ · 86¼	306.1.15	608.2.14	270 · 2⅜	Stud link	not stated	Netherton 31/8/98 H Green
2325	135	2⅜	do	304.1.23				J. P. Jones & Co	Glasgow 31/8/98 E. Sudlow
				610.2.10					
~~Iron Stream Chain~~ or Steel Wire	90	4½	39		90 – 4½		Steel wire	Webster	Sunderland 30/9/98

HAWSERS AND WARPS.

Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size Per Rule.
Towline	105 / 15	4½ / 13	39 manilla	120 – 4½
Hawser	90	3½	26	90 – 7
Warp	90	3	18	90 – 7
	90	6		90 – 7
	90	6		90 – 7
	+ smaller			

Boats 4 efficient.

Pumps, Number 5 in fore peak + 5 4½ Downton from all bilges. Diameter of Barrel and Tail Pipe 2½ + 3½

Windlass is Clarke Chapman's patent. Capstan ✓

Engine Room Skylights.—How constructed? Steel casings. Teak over

What arrangements for deadlights in bad weather? strong bulls eyes in solid top.

Coal Bunker Openings.—How constructed? Steel Comings 9/20 How are lids secured? wood latches in usual way Height above deck? 12".

Number of Scuppers, and number and dimensions of Freeing Ports, &c. 7 Scuppers on each side also 6 ports 39 × 27

Ceiling in Holds, thickness and material 2½ W. P. Ceiling 'tween Decks, thickness and material 6 × 2 battens W. P.

Cargo Hatchways.—How formed? Steel Comings in usual way. Hatches, If strong and efficient? Yes.

State size No. 1 Hatch (Forward) 24.0 × 16.0 No. 2 Hatch 26.0 × 16.0 No. 3 Hatch 26.0 × 16.0 No. 4 Hatch 24.0 × 16.0

Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch Two web plates and 3 fore + afters to each

No. of Breasthooks 6 No. of Crutches deep floors

Main Rail, material and size 6" Tyzack steel

Bulwarks, height above deck and description 4836 + 9/10 steel

The above is a correct description. FOR ARCHD McMILLAN & SON, LIMITED,

Builder's Signature (here only.) Alex McKennedy

Surveyor's Signature L. Searle

Surveyor to Lloyd's Register of British & Foreign Shipping.

Form No. 10.

17024 Glo

Correspondence.—State dates and initials of letters respecting this case (*Reference should be made to any correspondence connected with this case*) M 10-1-98, 18-3-98 2nd, 12-4-98, 12-5-98, 19-5-98; 13-6-98; E 24-6-98.

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

Is the riveted work properly closed? Yes

Are the liners between the frames 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 plating? No

Are the butts of Plating, Stringers, &c., properly shifted and strapped? Yes

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

This steel screw steamer has been built in general accordance with the Rules and the accompanying tracings submitted and approved as per Secretary's letters above referred to.

She is to carry waterballast in double bottom all fore & aft, and in after peak, for particulars please see below.

She has a short poop, bridge deck and top gallant forecastle of the lengths stated under.

Hand pumps and decks have been tested, and all other requirements of the Rules have been complied with.

The Surveyor should state the Number of Report and Name of any Sister Vessel. –

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 28 ft., R.Q.D. or Break – ft., Bridge Dk. 86 ft., F'castle 33 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated Poop is not joined to B.D.

2 dks. steel. 2 tos bms &

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) as stated above &

Official No. – ; Signal Letters –

How are the surfaces preserved from oxidation? Inside Paint & Portland Cement Outside Paint.

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system yes.

Where fitted.	Length. Feet.	Water Capacity. Tons.	Where fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	122	310	Fore peak tank,	–	–
Double bottom, forward,	154	427	After peak tank,	14	84
Double bottom, under Engines and Boilers,	42	132	Midship deep tank,	–	–
Double bottom, if under Engines only,	–	–	Other tanks, if fitted,	–	–
Double bottom, if under Boilers only,	–	– (869)	(If necessary, furnish further information by sketch.)	–	–

State whether the above have been tested as required by the Rules Yes

Order for Special Survey No. 3171 Date 31/1/98

Order for Ordinary Survey No. Date

No. 363 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	1898. Mar 2.4.8.11.15.18.22.25.29. April 1.6.12.19.22.26.29. May 4
2nd.	On the plating during the process of riveting	3.10.13.17.20.24.27.31. June 3.7.10.15.21.24.28. July 1.5.8.13.22. Aug
3rd.	When the beams were in and fastened, and before the decks were laid	2.5.9.12.15.16.19.22.26.30. Sep 2.6.9.14.16.19.21.28.29. Oct 4.7.11.
4th.	When the ship was complete, and before the plating was finally coated or cemented	18.21.27.28. Nov 6.8.11.17.21.29. Dec 7.9.23.28. 1899 Jan 23.28. Feb
5th.	After the ship was launched and equipped	9.16. Mar 7.22.24.29. April 4.11.18.27. May 2.3 12.15.16.18.19.

Total No. of Visits 94.

The amount of Entry Fee £5 : – : –
Special Survey Fee £128 : 13 : 6
Travelling Expenses, if any £

Fees applied for, 23/5/1899
Received by me 25/5/99
[illegible] 26/5/99

Certificate to be sent to Glasgow

~~We are~~ I am of opinion this Vessel should be Classed ✠ 100 A 1 "Steel" "Spardeck"
With, or without Freeboard, as condition of Class without

[signature] Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 26 MAY 1899

Character assigned 100 A1 steel Spar deck

a & C.P. + LMC 5.99

Writ Glo

The Surveyors are requested not to write on or below the Committee's Minute.

GLA384-0110 (2/2)

Hull Certificate, Written.