

IRON SHIP.

No. 4576 Survey held at Glasgow Date, First Survey 14th Dec^r 1876 Last Survey 12th Jan^y 1878

On the S. "Cape Breton"

Master Geo. Young

TONNAGE under 1360.32 ONE, OR TWO DECKED, THREE DECKED VESSEL.

Built at Glasgow

SPAR, OR AWNING DECKED VESSEL.

When built 1876-77 Launched 6th Dec^r 1877

HALF BREADTH (moulded)... .. 18.75 Feet.

By whom built J. & G. Thompson

DEPTH from upper part of Keel to top of Upper Deck Beam 24.5

Owners A. Lyle & Co.

GIRTH of Half Midship Frame (as per Rule) 37.5

Port belonging to Greenock

1st NUMBER 86.75

Destined Voyage Rio de Janeiro

1st NUMBER, if a THREE-DECKED VESSEL 86.75

Surveyed while Building, Afloat, or in Dock ✓

1st NUMBER, if a THREE-DECKED VESSEL 86.75

LENGTH 229

2nd NUMBER 18491

PROPORTIONS—Breadths to Length 6.1

Depths to Length—Upper Deck to Keel —

Main Deck ditto 9.3

Register Tonnage 1421.41

as cut on Beam

LENGTH on deck as per Rule 229 **BREADTH** Moulded... 37 **DEPTH** top of Floors to Upper Deck Beams 22 **Power of Engines** 5 1/2 **Horse.** — **N^o. of Decks with flat laid** Two **N^o. of Tiers of Beams** Two

Dimensions of Ship per Register, length, 239.3 breadth, 37.85 depth, 22.15

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL , depth and thickness	9 x 2 1/2	9 x 2 1/2	FLAT KEEL PLATES , breadth and thickness	39	11
STEM , moulding and thickness... ..	8 1/2 x 2 1/2	8 1/2 x 2 1/2	PLATES in Garboard Strakes, breadth and thick-	—	10-11
STERN-POST for Rudder do. do.	8 1/2 x 2 1/2	8 1/2 x 2 1/2	ness from Garboard to upper part of Bilges	—	—
for Propeller	—	—	of doubling at Bilge, or increased thick-	—	11
Distance of Frames from moulding edge to}	24	24	ness, and length applied <u>3 strakes 1/16</u>	—	—
moulding edge, all fore and aft }	(Class 100 A)	(Class 100 A)	fm up. part of Bilge to lr. edge of Sh'rstrake	—	10
FRAMES , Angle Iron, for 2/3 length amidships ..	5 3 1/2 8	5 3 1/2 8	Main Sheerstrake, breadth and thickness	40	12
Do. for 1/3 at each end	5 3 1/2 7	5 3 1/2 7	of d'bling at Sh'rstrake, & length applied	—	—
REVERSED FRAMES , Angle Iron	3 1/2 3 1/2 8	3 1/2 3 1/2 8	from Mn. to Up. or Spar Dk. Sh'rstrake	—	—
FLOORS , depth and thickness of Floor Plate }	24 1/2 x 10	24 1/2 x 10	Up. or Spar Dk. Sh'rstrake, brdth & thickn	—	—
at mid line for half length amidships ..	—	—	Butt Straps to outside plating, breadth & thickness	16 3/4 11 1/4	13-10 16 3/4 11 1/4
thickness at the ends of vessel	—	—	Lengths of Plating	12.1	10 1/2
depth at 3/4 the half-bdth. as per Rule ..	12 1/4	12 1/4	Shifts of Plating, and Stringers... ..	Two spaces	Two spaces
height extended at the Bilges... ..	Twice	Twice	Gunwale Plate on ends of Awning, Spar, or	—	—
BEAMS, Upper, Spar, or Awning Deck }	—	—	Upper Deck Beams, breadth and thickness...	—	—
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }	—	—	Angle Iron on ditto	—	—
Single or double Angle Iron on Upper edge ..	—	—	Tie Plates fore and aft, outside Hatchways ..	—	—
Average space... ..	—	—	Diagonal Tie Plates on Beams No. of Pairs,	—	—
BEAMS, Main, or Middle Deck }	9 x 9	9 x 9	Planksheer material and scantling	—	—
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }	—	—	Waterways do. do.	—	—
Single or double Angle Iron, on Upper Edge ..	3 1/2 3 7	3 1/2 3 7	Flat of Upper Deck do. do.	—	—
Average space... ..	48	48	How fastened to Beams	—	—
BEAMS, Lower Deck, Hold, or Orlop }	9 x 9	9 x 9	Stringer Plate on ends of Main or Middle Deck }	33	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron }	—	—	Beams, breadth and thickness	—	—
Single or double Angle Iron on Upper Edge ..	3 1/2 3 7	3 1/2 3 7	Is the Stringer Plate attached to the outside plating?	Yes	Yes
Average space... ..	48	48	Angle Irons on ditto, No. 1	5 x 4 x 9	5 x 4 x 9
KEELSONS Centre line, single or double plate, }	17 x 12	17 x 12	Tie Plates, outside Hatchways	13 10	13 10
box, or Intercoastal, Plates	—	—	Diagonal Tie Plates on Beams, No. of pairs ..	13 10	13 10
" Rider Plate	11 x 12	11 x 12	Waterways materials and scantlings ..	Gutter	—
" Bulb Plate to Intercoastal Keelson ..	—	—	Flat of Middle Deck do. <u>Yellow Pine</u> ..	4 1/4	4
" Angle Irons	5 4 9	5 4 9	How fastened to Beams	Nuts and screws	—
" Double Angle Iron Side Keelson ..	5 4 9	5 4 9	Stringer Plates on ends of Lower Deck, <u>Hold or</u>	33 9	33 9
" Side Intercoastal Plate	—	—	Orlop Beams	—	—
" do. Angle Irons	3 1/2 3 8	3 1/2 3 8	Is the Stringer Plate attached to the outside plating?	Yes	Yes
" Attached to outside plating with angle iron }	3 1/2 3 8	3 1/2 3 8	Angle Irons on ditto, No. 2	4 x 4 x 9	4 x 4 x 9
BILGE Angle Irons	5 4 9	5 4 9	Stringer or Tie Plates, outside Hatchways ..	13 9	13 9
" do. Bulb Iron	—	—	Flat of Lower Deck	3	3
" do. Intercoastal plates riveted to	—	—	Ceiling between Decks, thickness and material ..	—	—
plating for — length	—	—	in hold do. <u>Pitch Pine</u>	3	3
BILGE STRINGER Angle Irons	5 4 9	5 4 9	Main piece of Rudder, diameter at head ..	6	6
Intercoastal plates riveted to plating for	—	—	do. at heel	3	3
— length	—	—	Can the Rudder be unshipped afloat? ..	Yes	—
SIDE STRINGER Angle Irons	5 4 9	5 4 9	Bulkheads No. 1 Thickness of	7.6	7.6
Transoms, material. Knight-heads. Hawse Timbers. <u>Iron</u>	—	—	Height up to deck, placed at frame indicated in	—	—
Windlass <u>Emerson & Walker's</u> Pall Bitt ..	—	—	Committee of the 22 nd Jan ^y 1876	—	—
	—	—	How secured to sides of ship <u>By double frames</u>	—	—
	—	—	Size of Vertical Angle Irons <u>3 1/2 x 3 1/2 x 1/16</u>	—	—
	—	—	and distance apart <u>30</u> ins.	—	—
	—	—	Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>	—	—

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Main deck stringer and to gunwale

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 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 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 and riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Edges of Main Sheerstrake, double and riveted. **Upper Sheerstrake**, double or single riveted.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for — length.

Breadth of laps of plating in double riveting 5 1/2 and Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double and Riveted? Yes

Waterway, how secured to Beams Gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? By Knuts turned down No. of Breasthooks, Six Crutches, Six

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

Manufacturer's name or trade mark, Anglo and Beams "Coats," Plate "Barnesfield"

The above is a correct description.

Builder's Signature, Wm. James & Co. Glasgow Surveyor's Signature, Saml. Lanthorn

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

IRON 475-0334

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? *A few*

Masts, Bowsprit, Yards, &c., are *all* 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 *Three Masts - Ship Rigged*
"Clydesdale" Iron
B.B. mast plate quality, Hot and Cold Heated.
Bowsprit 37-32-21 4 plates in circle. Fore & Main Mast and Bowsprit 8-7-6
Fore Mast 82-32-21 Mizzen Mast 7-6-6, double riveted edges, treble riveted butts.
Main Mast 85-35-21
Mizzen Mast 78-6-29-19
Fore & Main Mast 51x19 to 10 1/2 } 2 plates in circle 6x5 in Fore & Main 5x4 in Mizzen
Mizzen Mast 42x13 to 8 1/4 }
Lower Yards Fore & Main 82x21 to 10 1/2 } 2 plates in circle 6 to 3 1/2 in Fore & Main 5 to 3 1/2 in Mizzen
Cross Jack 65x17 to 8 1/2 }

NUMBER for EQUIPMENT 19723		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.					Bowers	1	34.3.18	32.6.2.7	34	31 12/20
Two Suits	Fore Sails,	Chain	270	1 7/8	63 1/4	270-1 1/4	Stock	1	8.2.26			
	Fore Top Sails,	19 Sept. 177			88 1/2	88 1/2	Stock	1	34.3.20	32.6.2.7	34	31 12/20
	Fore Topmast Stay Sails	8, Lewis	90	1 inch		90-10 now or 10 Hemp	Stock	1	9.0.23			
	Main Sails,	Hmpn Strm Cbl	90	3 1/2 steel		90-10	Total	4	28.1.20	24.9.2.7	29	27 16/20
	Main Top Sails,	Hawser ...	90	6		90-6			7.1.7			
and		Towlines ...	90	6			Stream	1	14.1.23	13.13.3.0	13 1/2	
		Warp ...	90	6			Kedges	1	6.1.21	7.9.2.21	6 3/4	
		quality New	90	6				1	3.1.12	5.3.3.0	3 1/4	

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Four* Boats *(1 with buoyancy)*
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good and efficient*
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? *4 side ports, 4 scuppers and 3 (three) mooring pipes each side*

Cargo Hatchways.—How formed? *Plate and angle iron*
State size Main Hatch *15.6 x 11.0* Forehatch *7.6 x 7.0* Quarterhatch *7.6 x 7.0*
If of extraordinary size, state how framed and secured? } *Portable Beam at Main Hatch*
What arrangement for shifting beams? }
Hatches, If strong and efficient? *Yes*

Order for Special Survey No. 1203	1st. On the several parts of the frame, when in place, and before the plating was wrought	1876—Decr 14. 22, 29. 1877—Jan 4. 19. 26. 30
Date 3 rd Oct. 1876	2nd. On the plating during the process of riveting	1877—Feb 4. 15. 23. 26 March 7. 14. 21. 29. April 6
Order for Ordinary Survey No. —	3rd. When the beams were in and fastened, and before the decks were laid. . .	April 11. 18. 25. May 4. 9. 15. 18. 23. 29
Date —	4th. When the ship was complete, and before the plating was finally coated or cemented. .	June 7. 12. 19. 22. 28 July 6. Aug 3. 9. 15. 27
No. 155 in builder's yard.	5th. After the ship was launched and equipped	Sept 2. 11. 25. Oct 1. 1. 4. 31. Nov 2. 8. 16. 23
		Decr 4. 17. 21. 24. 26. 1878, Jan 4. 12 th

General Remarks (State quality of workmanship, &c.)
The workmanship is of good quality, Built in accordance with the approved sketch of midship section which accompanied Report No 4572 on the Ship ^{Cape} St Vincent (as also longitudinally) with which this is a sister ship, and generally in accordance with the Rules with a view to the grade contemplated

** A similar Equipment was approved for a sister ship the Cape of Good Hope upon application of Owner dated 29th July 1876*

Fitted with Poop 27 feet long - Forecastle 38 feet long and Midship House 35 x 14.9

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

How are the surfaces preserved from oxidation? Inside *Cement and Paint* Outside *Paint*
I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee ... £ 5 : : : is received by me, *Saml. Laphorn*
Special ... £ 60 : 10 : 6 Jan 1878
Certificate ... *Gratis*
(Travelling Expenses, if any, £ 6.6.0.)

Committee's Minute 15th January, 1878.
Character assigned *100 A 1*
THW

