

28th DEC. 82.

No. 1382 Survey held at Port Glasgow. Date, First Survey 2^d May/52 Last Survey 22^d Dec. 1852
On the Ship "Can Mackenzie" (37 weeks)

On the Ship "Clan Mackenzie"
TONNAGE 1130 M TWO DECKED THREE DECKED V

Tonnage under Tonnage Deck }	1532.99
Ditto of Third, Spar, or Awinng Deck. }	
Ditto of Poop, or Raised Qr. Dk. }	75.03
Ditto of Houses on Deck }	17.32
Ditto of Forecastle	59.12
Gross Tonnage	<hr/> 1684.46
Less Crew Space	87.05
Less Engine Room	
Register Tonnage as cut on Beam }	1597.41

ONE, OR TWO DECKED, THREE DECKED VESSEL,		Feet.
SPAR, OR AILING DECKED VESSEL.		
Half Breadth (moulded)		19.0
Depth from upper part of Keel to top of Upper Deck Beams		25.25
Girth of Half Midship Frame (as per Rule)		39.33
1st Number		83.58
1st Number, if a 3-Decked Vessel .. deduct 7 feet		
Length		248.5
2nd Number		20769.6
Proportions— Breadths to Length		6.57
Depths to Length— Upper Deck to Keel		9.8
Main Deck ditto		

Master *J. Ewan*
Built at *Port Glasgow*
When built *1882* Launched *30th Nov 1882*
By whom built *Robt Dunlop & Co*
Owners *Thos Dunlop & Sons*
Residence *Corn Exchange Bldg
Glasgow*
Port belonging to *Glasgow*
Destined Voyage *San Francisco.*
If Surveyed while Building, Afloat, or in Dry Dock.
Whilst Building & afloat

LENGTH on deck as per Rule ...	Feet. Inches. 248 6	BREADTH Moulded... ..	Feet. Inches. 38 0	DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams.....	Feet. Inches. 23 2 1/2	Power of Engines	Horse. ✓	N^o. of Decks with flat laid Two N^o. of Tiers of Beams Two	Inches. 16ths. Inches. 16ths.
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Dimensions of Ship per Register, length 259.45 breadth, 38.2 depth, 23.05

	Inches in Ship.			Inches per Rule.		
	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches per Rule.	Inches per Rule.	16ths per Rule.
KEEL , depth and thickness	9 1/2	2 1/2	8	9 1/2	2 1/2	8
STEM , moulding and thickness... ..	9	2 1/2	8	9	2 1/2	8
STERN-POST for Rudder do. do.	9	2 1/2	8	9	2 1/2	8
" " for Propeller						
Distance of Frames from moulding edge to moulding edge, all fore and aft	24			24		
FRAMES , Angle Iron, for 3/4 length amidships	5	3 1/2	8	5	3 1/2	8
Do. for 1/2 at each end	5	3 1/2	7	5	3 1/2	7
REVERSED FRAMES , Angle Iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	2 1/2		10	2 1/2		10
" thickness at the ends of vessel			9 1/8			9 1/8
" depth at 3/4 the half-bdth. as per Rule	12 1/2			12 1/4		
" height extended at the Bilges... ..	4 9			4 9		
BEAMS , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge	9		9	9		9
Average space... ..	3 1/2	3	7	3 1/2	3	7
BEAMS , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single, or double Angle Iron, on Upper Edge						
Average space... ..						
BEAMS , Lower Deck— Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge	9		9	9		9
Average space... ..	3 1/2	3	7	3 1/2	3	7
BEAMS , Hold, or Orlop— Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge						
Average space... ..						
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates on Floor " Rider Plate	18		13	18		13
" Full Plate to Intercoastal Keelson	12		13	12		13
" Angle Irons	18		8	18		8
" Double Angle Iron Side Keelson	5 1/2	4	9	5 1/2	4	9
" Side Intercoastal Plate	5 1/2	4	9	5 1/2	4	9
" do. Angle Irons			8			8
" Attached to outside plating with angle iron	3	3	7	3	3	7
BILGE Angle Irons	5 1/2	4	9	5 1/2	4	9
" do. Bulb Iron... ..						
" do. Intercoastal plates riveted to plating for length						
EDGE STRINGER Angle Irons	5 1/2	4	9	5 1/2	4	9
Intercoastal plates riveted to plating for length						
DE STRINGER Angle Irons	5 1/2	4	9	5 1/2	4	9
Flat Keel Plates, breadth and thickness						
PLATES in Garboard Strakes, br'dth & thickness " From Garboard to upper part of Bilges... ..	36	12	36	12		
" Of d'bling at Bilge, or increased thickness, and length applied 3 Strakes and 6		10 1/2			10 1/2	
" From up. prt of Bilge to l. edge of Sh'rstrake... ..		10 1/2			10 1/2	
" Main Sheerstrake, breadth and thickness.....	40	13	40	13		
" Of d'bling at Sh'stk. & lng. applied						
" From M'n. to Up. or Spar Dk. Sh'rstrake... ..						
" Up. or Spar Dk Sh'rstrake, brdth & thicken'ss... ..						
Butt Straps to outside plating, breadth & thickness Lengths of Plating	8	10	12	8	10	12
Shifts of Plating, and Stringers	2	3	4	2	3	4
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	36	10	36	10		
Angle Iron on ditto	5 1/2	4	9	5 1/2	4	9
Tie Plates fore and aft, outside Hatchways	14	10	14	10		
Diagonal Tie Plates on Beams No. of Pairs	6		6			
Flat of Up., Spar, or Awning Dk * Yellow Pine	4		4			
How fastened to Beams		9				
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	3 1/2		3 1/2			
Diagonal Tie Plates on Beams, No. of pairs	2 1/8		2 1/8			
Flat of Middle Deck* do. do.						
How fastened to Beams						
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	35	9	35	9		
Is the Stringer Plate attached to the outside plating?						
Angle Irons on ditto, No. 2						
Stringer or Tie Plates, outside Hatchways	4	4	4	4	4	4
Flat of Lower Deck * Part laid of Y.P.	14	9	14	9		
Ceiling betwixt Decks, thickness and material	2		2			
" in hold do. do.	2 1/2		2 1/2			
Main piece of Rudder, diameter at head	6 1/4		6 1/4			
do. at heel	3 1/2		3 1/4			
Can the Rudder be unshipped afloat?						
Bulkheads No. One No. per Rule						
" Thickness of 7/8						
" Height up upper deck						
" How secured to sides of ship Double Frames						
" Size of Vertical Angle Irons 3 1/2 x 3 1/2 x 9 and distance apart 30 ins						
" Are the outside Plates doubled two spaces of Frames in length?						

The **FRAMES** extend in one length from *Keel* to *summit* Riveted through plates with *7/8* in. Rivets, about *two* apart.

The **REVERSED ANGLE IRONS** on floors and frames extend *from* middle line to *upper Stringer* and to *on each frame* alternately

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 1/2* 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 3/4* 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 *four* 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 ~~or single~~ riveted; with rivets *7/8* in. diameter, averaging *3 3/4* 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 or single riveted. Upper Sheerstrake, double ~~or single~~ riveted.

Butts of Main Sheerstrake, treble riveted for *✓* length amidships. Butts of Upper ~~or Spar~~ Sheerstrake, treble riveted *half* length amidships.

Butts of Main Stringer Plate, treble riveted for *✓* length amidships. Butts of Upper ~~or Spar~~ Stringer Plate, treble riveted for *half* length.

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

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double Plate* No. of Breasthooks, *Five* Crutches, *Four*

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

Manufacturer's name or trade mark, *Angels & Bulbs - Cook; Plates Middleborough*

The above is a correct description

Builder's Signature, *[Signature]* Surveyor's Signature, *J. Dawkins*

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

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? *Yes a few*

Masts, Bowsprit, Yards, &c., are of *Sound Wood* 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 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. *Yes*
State also Length and Diameter of Lower Masts and Bowsprit *Manufactured at W. Harlepool*

Fore Mast 88.6 31x8 1/2, 27 1/2 x 6 1/2, 24 x 6 1/2, 20 x 6 1/2
Main 89.7 31x8 1/2, 27 1/2 x 6 1/2, 24 x 6 1/2, 20 x 6 1/2
Mizen 85.3 30x8 1/2, 25x6 1/2, 23x6 1/2, 19x6 1/2
Bowsprit 24.0 31x8 1/2, 25x6 1/2, 20x6 1/2
Diagrams formed with 3 plates & 3 angles, the fore main main couple 4x3x7/16 and the mizen 3x3x7/16. Ropes double runted. Mast & bowsprit formed with 3 plates in the round & 4 angles 4x3x7/16. Diagonal plate 10 1/2 x 7 1/2. Ropes double, butts hollow up & double at heel.

NUMBER FOR EQUIPMENT		Fathoms.	Inches.	Test per Certificate	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.							Bower Anchors					
N ^o .	Chain	34 1/2	135 1/2	1 1/4	6 1/2	9 1/2	270	2 1/2	37-8-13	33-16-3-4	36-2-0	
Fore Sails,	Iron Stream	34 1/2	135 1/2	1 1/4	6 1/2	9 1/2	270	2 1/2	37-8-13	33-16-3-4	36-2-0	
Fore Top Sails,	or Steel Wire											
Fore Topmast Stay Sails,	or Hempen Strm Cable											
Main Sails,	Towline, Hemp.	90	11		90	11						
Main Top Sails,	or Steel Wire											
and others	Hawser	00	10 1/2		90	10 1/2						
	Warp	90	6 1/2		90	6 1/2						
	quality	Good										
Standing and Running Rigging	Sufficient in size and good in quality. She has <i>Two Large Long Boats</i> and 2 others.											

The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*
Engine Room Skylights—How constructed? *Good* How secured in ordinary weather? *Sufficient*

What arrangements for deadlights in bad weather? *Good*
Coal Bunker Openings.—How constructed? *Good* How are lids secured? *Good* Height above deck? *Good*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Five scuppers and five ports each side.*

Cargo Hatchways.—How formed? *Common plates 33x9 1/2 rusted to beams and half beams.*
State size Main Hatch *15-10x10-0* Forehatch *8 1/2 x 6 1/2* Quarterhatch *8-0 x 7-0*

If of extraordinary size, state how framed and secured? *Ordinary size.*

What arrangement for shifting beams? *A shifting beam in the main & strong fore & after.*

Hatches, If strong and efficient? *Yes. 3 in solid.*

Order for Special Survey No. *1091* Date *3rd Feby 1882*
Order for Ordinary Survey No. *185* Date *185*
No. *185* in builder's yard.
1st. On the several parts of the frame, when in place, and before the plating was wrought
2nd. On the plating during the process 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 1882:—
May 2. 15. 22. 30; June 5. 7. 9. 19; July 13. 14. 21. 27;
Augt 14. 16. 18. 23. 30. 31; Sept 7. 11. 21; Oct 4. 6. 10. 17. 20. 24. 27;
Nov 6. 10. 13. 20. 30; Dec 4. 6. 15. 22

General Remarks (State quality of workmanship, &c.) *Quality of materials & workmanship good*
This vessel has been constructed in accordance with the accompanying approved sketches of midship section & deck plans and in all other respects with the Rules.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate sheet for)

How are the surfaces preserved from oxidation? Inside *Cement & 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, *Special ... £ 64 : 18 : 6 23/12/1882*
Certificate ... *Gratis*
(Travelling Expenses, if any, £ ...)

Committee's Minute *Friday, 23rd December, 1882*

Character assigned *100 A 1*

Surveyor to Lloyd's Register of British and Foreign Shipping.
It is submitted that this vessel appears eligible to be classed 100 A 1 as recommended.
one dock
25/12/82