

3 Decks.

IRON OR STEEL STEAMER.

(Received at London Office 11006 1894)

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

Date of completion of report 29th May 1894 Port of Greenock

No. 11006 Survey held at Greenock Date, First Survey 11th August 1893 Last Survey 22nd May 1894

On the "Strathgairn" Rig Schooner

TONNAGE under Tonnage Deck... 3909.23

THREE DECKED VESSEL

Master R. Mc Kenzie

Do. between Tonnage Dk. and 3rd and 4th Dk.

CLASS X00A1

Year of appointment (1) As Master in service of owner of present vessel - 1894 (2) As Master of this vessel - 1894

Total under Upper Dk. 136.54

Half Breadth (moulded) 23.58

Built at Greenock

Do. of Poop 34.20

Depth from upper part of Keel to top of Upper Deck Beams 30.64

When built 1894 Launched 22nd March

Do. of Bridge House 19.56

Girth of Half Midship Frame (as per Rule) 49.40

By whom built Russell & Co.

Do. of excess of Hatchways 39.50

deduct 7 feet 7.00

Owners Brunell & Son

Do. of Forecastle

1st Number 96.92

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

Do. above Crown of Engine Room 4142.03

Length 364.5

Residence 54 George Square, Glasgow

Gross Tonnage 4142.03

2nd Number 356.18

Port belonging to Glasgow

Less Crew Space 97.44

Proportions - Breadth to Length 7.82

Less above Crown of Engine Room 4044.59

Depth to Length - Upper Deck to top of Keel 11.99

TONNAGE FOR FEES 4044.59

Main Deck ditto 16.48

Less Engine Room 1325.45

Destined Voyage Las Palmas If Surveyed while Building, Afloat, or in Dry Dock Buildings Afloat.

Less Navigation Spaces 40.73

Register Tonnage 2678.41

Table with columns: LENGTH on Deck as per Rule, BREADTH Moulded, DEPTH top of Floors to Upper Deck Beams, Power of Horse Engines, No. of Decks with flat laid, No. of Tiers of Beams.

Dimensions of Ship per Register, Length 364.5 breadth 47.5 depth 26.9 Moulded depth, ft. 29 ins. 8 To Upper Dk. Round up of Beam, Upper Dk. 48 ins.

Main table with columns: FORGINGS & BRASSINGS, KEELSONS & STRINGERS, FRAMING, PLATING. Rows include: STEEL, Bar or Side Plates, STEM, STERN-POST, MAIN-PIECE of Rudder, RUDDER, FLOOR PLATES, BEAMS, PILLARS, WEB FRAMES, BRACKET PLATES.

Ceiling betwixt Decks, thickness and material		BULKHEADS. No. in Vessel		No. Reqd. by Rule	
Thickness	Angles	Spacing	Height up.	Sag or Dble Frames	
2" M.P.					
2 1/2" R.P.					
Number of Breasthoops	Prime & deep floors				
Crutches	Sic & deep floors				

The **FRAMES** extend in one length from Margin plate to Gunwale Riveted through plates with 7/8 in. Rivets, about 6 1/2" apart. The **REVERSED ANGLE** on floors and frames from ~~ceiling to upper deck~~ <sup>ceiling to upper deck for 3' length, and aft of the after peak bulkhead;</sup> before and aft of 3' length to upper & main deck alternately, and on alternate frames to fore deck. Double in E.T.B. space.

**RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.**

**Garboard**, double riveted to ~~the keel~~ Flat Plate Keel, with rivets 1 in. diameter, averaging 4 in. 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 in. from centre to centre.

**Butts from Keel to turn of Bilge**, worked carvel, treble or double riveted; treble for ~~whole~~ length; with rivets 1 in. dia., averaging 3 1/2 in. from cr. to cr.

**Butts of all Strakes at Bilge** for ~~whole~~ length, treble riveted with Butt Straps thicker than the plates they connect.

**Edges from Bilge to Sheerstrake**, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 in. from centre to centre.

**Butts from Bilge to Sheerstrake**, worked carvel, treble or double riveted; treble for ~~whole~~ length; with rivets 1 in. dia., averaging 3 1/2 in. from cr. to cr.

**Butts from Bilge to Sheerstrake** overlapped for ~~whole~~ length, treble riveted for ~~whole~~ length; with rivets 7/8 in. dia., averaging 3 3/8 in. from cr. to cr.

**Edges of Sheerstrake**, double riveted.

**Butts of Sheerstrake**, treble riveted for ~~whole~~ length amidships.

**Butts of Middle Deck Stringer Plate**, treble riveted for ~~whole~~ length amidships. **Butts of Upper Deck Stringer Plate**, treble riveted for ~~whole~~ length.

**Butts of Inner Bottom Plating** double riveted for ~~whole~~ length. **Butts of Centre Girder** ~~double~~ riveted.

**Breadth of edge laps of Shell Plating** in double riveting 5 1/2 x 6". **Breadth of edge laps of Shell Plating** in single riveting 19 x 19 1/2".

**Butt Straps of Shell Plating**, breadth and thickness 1 1/2 x 1 1/2". **Butts if Lapped**, breadth of laps 9" x 10 1/2".

**Butt Straps of Keelsons, Stringer and Tie Plates**, treble or double riveted? Treble.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? (Siemens Martin process) Frames - Lanarkshire, Beams - Lanarkshire, Dalzell, Ballieid, Keelsons - Dalzell, Stringer plates - Clydebridge, Floors - Cornhill, Outside plating - Dalzell, Glasgow, Workmanship. Are the butts of plating planed or otherwise fitted? Planed.

Is the riveted work properly closed? 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 facing surfaces? Yes. Do any rivets break into or through the seams or butts of the plating? A few.

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

**MASTS, SPARS, &c.**

LOWER MASTS...	Material	Total Length	DIAMETER AND THICKNESS.			No. of plates in round	ANGLES.	RIVETING.
			At Partners	Heel	Hounds & Head			
Fore	Steel	79.0	23 x 4 1/2	18 x 6 1/2	14 x 6 1/2	2	Full	Single
Main	"	70.6	"	"	"	"	"	"

Topmasts, Yards and Remainder of Spars Wood.

**Rigging**, Material and Size, Shrouds 3/4" Wire 3 1/2 and backstay 4". Stays 4 in. 3/4" Wire.

**Sails**, One Suit of Sails, and the following spare sails (Full).

**EQUIPMENT No. 40410 LETTER X ANCHORS.**

Number of Certificate	WEIGHT, EX-STOCK			TEST, PER CERTIFICATE			WEIGHT REQ. BY RULE			Description of Anchor	Makers	Where and when tested, and Superintendent			
	Cwts.	qrs.	lbs.	Tons	Cwts.	qrs.	lbs.	Cwts.	qrs.				lbs.		
34447	42	1	23	10	1	7	54	10	0	0	41	2	0	Hodgers	St. Dunstons & Rathfriland, 25/10/93
34448	42	1	0	10	1	18	34	6	1	0	41	2	0	"	"
34449	40	1	24	9	3	16	36	2	2	0	41	2	0	"	"
34444	34	2	6	9	1	16	34	4	1	11	35	1	0	"	"
Collective weight	162	2	25				159	3	0						
34473	13	0	24	3	1	22	14	19	1	14	12	3	0	"	"
34474	6	2	7	1	3	1	8	14	2	0	6	2	0	"	"

**CHAIN CABLES.**

Number of Certificate	Fathoms	Size	Test per Certificate Tons	Weight of Chain Cable		Fathoms & size. Description.	Makers of Cables	Where and when tested, and Superintendent	Material	Fathoms	Size	Fathoms & Size. Per Rule.
				Cwts.	qrs.							
24950 (21959)	240	2 1/2	11 3/4	67	3.2	270 x 2 1/2	Sudlink & Wingley	Donegal, 30/10/93	Towline	30	1 3/4	30 x 1 3/4
26993	90 1/2	1 3/4	3 1/2	66	3.3	90 x 1 3/4	"	"	"	90	3	90 x 3
Iron steam chain	90	4 1/2	39	120	4 1/2	90 x 4 1/2	"	"	"	90	3	90 x 3

**HAWSERS AND WARPS.**

Number of Certificate	Fathoms	Size	Fathoms & Size. Per Rule.				
				Material	Fathoms	Size	Fathoms & Size. Per Rule.
24950 (21959)	30	1 3/4	30 x 1 3/4	Towline	30	1 3/4	30 x 1 3/4
26993	90	3	90 x 3	Hawser	90	3	90 x 3
Iron steam chain	90	3	90 x 3	"	90	3	90 x 3

Boats 4 No. 2-25 ft. Life Boats, 1-20 ft. Jolly Boat & 1-23 1/2 ft. Gig.

**Pumps**, Number Seven. Diameter of Barrel and Tail Pipe 5" Barrels, 2 1/2" Tail pipes.

The Windlass is Iron (Napier's patent) and Capstan Good.

**Engine Room Skylights**—How constructed? Steel frame.

What arrangements for deadlights in bad weather? Lead flaps with Bull's eye.

**Coal Bunker Openings**—How constructed? 9" full angle coaming. How are lids secured? Hatch covers with 2" height above deck.

**Number of Scuppers**, and number and dimensions of **Freeing Ports**, &c. Fore side: 2 scuppers & 3 Ports. Aft side: 2 scuppers & 3 Ports. 2 1/2 x 1 1/2, 2 1/2 x 1 1/2, 2 1/2 x 1 1/2. Aft side of keel: 2 scuppers & 3 Ports. 2 1/2 x 1 1/2, 2 1/2 x 1 1/2, 2 1/2 x 1 1/2.

**Cargo Hatchways**—How formed? Deep plates forming coaming & Carling. Hatches, if strong and efficient? Yes. 3 Hatches.

State size No. 1 Hatch (Forward) 23' 9" x 15' 11". No. 2 Hatch 31' 4" x 15' 11". No. 3 Hatch 27' 10" x 15' 11". No. 4 Hatch 21' 9" x 15' 10".

**Number of Web Plates, Shifting Beams, and Fore and Afters** to each Hatch. Two Web Plates and Three Fore and Afters to each of Nos. 1, 3 and 4 Hatches, and Three Web Plates and Three Fore and Afters to No. 2 Hatch.

**Bulwarks**, height above deck and description. Height 4' 6" 6" steel. Main Rail, material and size. Channel 10 x 3 1/2 with hollow 3" round on outside and solid 2" round on inside.

The above is a correct description.

Builder's Signature (here only) *Rossell M.* Surveyor's Signature, *J. J. Howell* Surveyor to Lloyd's Register of British and Foreign Shipping.

Order for Special Survey No. 1882  
Date 7th June 1894  
Order for Ordinary Survey No. 343  
Date 14th June 1894  
No. 343 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

Build under S.S. and Surveyed  
Date of First Survey August 11th 1893  
S. List " May 26th 1894

Total No. of Visits 85

State dates and initials of letters respecting this case. M. 1893-23 & 30/6, 40 & 5/4, 14/4, 18 & 25/8, 2, 18, 21, 27, 28 & 29/9, 3, 4, 5, 14, 19, 21 & 24/10, 14/11 & 1/12. E. 20 & 27/10. E. 1894-15/1 & 5/2.

**General Remarks** (State quality of workmanship, &c.)  
This Vessel has been built in accordance with the accompanying approved plans, as amended, the tracing of which is forwarded on the 26th Gray, for the preparation of the Certificate of Class, and otherwise in compliance with the Rules.  
The quality of workmanship and material is good.  
The pumps are in efficient working order, also watertight doors, and the deck has been tested by being flooded with water with satisfactory results.  
Two reports on forgings herewith

**PARTICULARS FOR RECORD in the REGISTER BOOK.**—Length of Poop 52 ft., R.Q.D. or Break A., Bridge Dk. 82 ft., F'castle 38 ft. (in feet and tenths) where the Poop is joined to the B.D., this should be distinctly stated.

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) 2 Decks (Iron), 2 in B.  
Official No. 102693; Signal Letters

**PARTICULARS OF WATER BALLAST.**  
Double bottom, aft, length and water capacity in tons. Double bottom, forward, length and water capacity in tons.  
Double bottom, under engines and boilers, length and water capacity in tons. If under engine only, or boilers only, state which.  
Double bottom, constructed on the cellular system, length 310 feet and water capacity in tons 760.  
Fore peak tank, water capacity in tons 195. After peak tank, water capacity in tons 32.  
Midship deep tank, length 62 feet and water capacity in tons 460. Other tanks, if fitted, length and water capacity in tons.  
The above have now been tested as required by the Rules.  
How are the surfaces preserved from oxidation? Inside Paint, Outside Paint.

**FREEBOARD** assigned by the Committee, as per Secretary's Letter dated. In Summer 0 in. In Winter 0 in. For Winter in North Atlantic 0 in. Fresh Water above the centre of disc 0 in.

The amount of Entry Fee £ 5 is received by me. Special £ 120 2 6 1894. Certificate £. Travelling Expenses, if any £. I am of opinion this Vessel should be Classed 100 A1 Steel.

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

**Committee's Minute** FRI 1 JUN 1894  
Character assigned 100 A1 Steel  
This vessel appears to have been built in accordance with the Rules and the approved plans, and it is submitted she is eligible to be classed 100 A1 (Steel) as recommended.  
+ 100 A1 (Steel)  
2 Sts (Iron) & deep framing 3 R. Rule  
M.B. = Cell D.B. 1/2 (particulars above)  
F.R. at Asp. pt. Cam.  
The Surveyor should be requested to state the age of the engine bar connecting the main plate with the side plating, as this appears to be incorrectly stated in the report.