

IRON SHIP.

No. 4502 Survey held at *Glasgow*
On the *S. S. "Summerville"*Date, First Survey *23rd Feb'y.* Last Survey *20th Augt.* 1877Master *Wm W. Clements*

TONNAGE under } *1093.88* ONE OR TWO DECKED, THREE DECKED VESSEL.
Tonnage Deck }
Ditto of Third, Spar }
or Lower Deck }
Ditto of Poop, or }
Raised Q. Dk. }
Ditto of Houses } *5.01*
on Deck } *2.63*
Ditto of Forecastle }
Gross Tonnage } *1101.52*
Less Crew Space } *44.33*
Less Engine Room } *224.40*
Register Tonnage } *832.79*
as out on Beam }

HALF BREADTH (moulded) ... *17.25*
DEPTH from upper part of Keel to top of Upper Deck Beams ... *18.7*
GIRTH of Half Midship Frame (as per Rule) ... *31.7*
1st NUMBER ... *67.65*
1st NUMBER, if THREE DECKED VESSEL ...
[deduct 7 feet]
LENGTH ... *249*
2nd NUMBER ... *16844*
PROPORTIONS—Breadths to Length ... *7.2*
Depths to Length—Upper Deck to Keel ... *13.3*
Main Deck ditto ...

Built at *Glasgow*
When built *1877* Launched *12th July 1877*
By whom built *J. G. Thomson*
Owners *Walter Neilson & others*
of *West George St Glasgow*
Port belonging to *Glasgow*
Destined Voyage *Not determined*
Surveyed while Building, Afloat, or in *the Dock*

LENGTH	Feet.	Inches.	BREADTH	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid	Nº. of Tiers of Beams
on deck as	249	-	Moulded...	34	6	top of Floors to Upper	17	-	Engines ...	120	One	Two
per Rule ...						Deck Beams						
						Do. do. Main Deck Beams						
Dimensions of Ship per Register, length, 251 breadth, 34.85 depth, 16.75												
KEEL, depth and thickness	9	2 1/2	9	2 1/2								
STEM, moulding and thickness	8 1/2	2 1/2	8 1/2	2 1/2								
STERN-POST for Rudder do. do.	8 1/2	5	8 1/2	5								
for Propeller	8 1/2	5	8 1/2	5								
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24									
FRAMES, Angle Iron, for 1/2 length amidships	4	3	4	3								
Do. for 1/2 at each end	4	3	4	3								
REVERSED FRAMES, Angle Iron	3	3	3	3								
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	20 1/2	8	20 1/2	8								
thickness at the ends of vessel	7		7									
depth at 3/4 the half-bdth. as per Rule	10 1/4		10 1/4									
height extended at the Bilges	Twice		Twice									
BEAMS, Upper, Spar, or Awning Deck												
Single or double Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper edge												
Average space	6	3	6	3								
BEAMS, Main, or Middle Deck												
Single or double Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron, on Upper Edge												
Average space	10	10	10	10								
BEAMS, Lower Deck, Hold, or Orlop												
Single or double Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper Edge												
Average space	17	12	17	12								
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates												
Rider Plate	11	12	11	12								
Bulb Plate to Intercoastal Keelson	5	4	5	4								
Angle Irons	5	4	5	4								
Double Angle Iron Side Keelson	5	4	5	4								
Side Intercoastal Plate												
do. Angle Irons	3	3	3	3								
Attached to outside plating with angle iron												
BILGE Angle Irons	5	4	5	4								
do. Bulb Iron	8	8	8	8								
do. Intercoastal plates riveted to plating for length												
BILGE STRINGER Angle Irons	5	4	5	4								
Intercoastal plates riveted to plating for length												
SIDE STRINGER Angle Irons												
Transoms, material. Knight-heads. Hawse Timbers.												
Windlass <i>Muir & Caldwell's</i> Pall Bitt												

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 *lower deck* and to *main deck* 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 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 *3* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps. *1/6* 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 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 *or single* 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* Breadth of laps of plating in single riveting
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double *or single* Riveted?
Waterway, how secured to Beams *Iron Deck* (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? *By knees turned down* No. of Breasthooks, *Four* Crutches, *Three*
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Mossend Boiler*
Manufacturer's name or trade mark, *Mossend*

The above is a correct description.

Builder's Signature, *J. G. Thomson*Surveyor's Signature, *Saml. Laphore*

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? *A few* 19080 *Ln*

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, Schooner Rigged*
"Mossend" {Fore Mast 68 x 22 } 2 plates in circle 65 double riveted edges, treble riveted butts
"Best Best Iron" {Main Mast 69 x 22 } with wood poles
Hulk and Cudd Mizzen Mast 82 x 20 - Oregon Pine Pole-mast
test it, Fore Yard 40 x 14 - 45 3/4 singly riveted edges, treble riveted butts
16 2 plates in circle

NUMBER for EQUIPMENT <i>16844</i>		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr 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.
One such	SAILS.						Bowers	1	22.0.17	22.10.1.0	21	21 1/2
	Fore Sails,	240	1 1/2	40 10/20	240-1 1/2	40 7/10	(State Machine where Tested, Date, & name of Surveyor.)	Stock	5.1.19			
	Fore Top Sails,	15 fathoms to 38 14/20						1	20.3.28	21.12.2.0	20	20 1/2
	Fore Topmast Stay Sails							Stock	4.3.18			
	Main Sails,	90	1 5/8		90-1 5/8	40 10/20		1	18.2.18	19.13.4.0	19	
	Main Top Sails,	40	3 1/4		40-3 1/4	40 10/20		Stock	4.1.12			
	and foremast staysails	250	5		250-5	40 10/20		Total	61.3.2	Total	60	
	CABLES, &c.						Stream	1	9.0.25	9.13.3.0	9	
	Chain	15 fathoms to 38 14/20					Kedges	1	4.1.19	5.18.3.0	4 1/2	
	Hawser ...	250	5		250-5	40 10/20		1	2.1.13	4.14.1.0	2 1/4	
	Towlines ...	120	5		120-5	40 10/20						
	Warp	250	4 1/2		250-4 1/2	40 10/20						
	quality	New										

Standing and Running Rigging *Wire V. Hemp* sufficient in size and *good* in quality. She has *Three* ~~long~~ Boat ~~sails~~
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good and efficient*

Engine Room Skylights. How constructed? *Iron framing on iron* How secured in ordinary weather? *Iron Bars*

What arrangements for deadlights in bad weather? *Thick glass, protected with iron bars and Paulines*

Coal Bunker Openings. How constructed? *Circular castings* How are lids secured? *Screwed* Height above deck? *Flush*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *5 scuppers and nearly flush gunwale*

Cargo Hatchways. How formed? *Plate and angle iron*

State size Main Hatch *16' x 10'* Fore hatch *8' x 8' - 2 fore 18' x 10'* Quarter hatch *6' x 6'*

If of extraordinary size, state how framed and secured? *Two strong Portable Beams in 3rd Fore hatch and one*

What arrangement for shifting beams? *at Main Hatch.*

Hatches, If strong and efficient? *Yes.*

Order for Special Survey No. *128* 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 1877- Feb. 23-26. March 7. 14. 17. 21

Date *April 14/77* 2nd. On the plating during the process of riveting April. 6. 11. 18. 25. May. 4. 9. 15. 18. 23. 29

Order for Ordinary Survey No. *159* in builder's yard. 3rd. When the beams were in and fastened, and before the decks were laid.... June 6. 12. 19. 25. 28. July 6. 11. 23. 30

Date *April 14/77* 4th. When the ship was complete, and before the plating was finally coated or cemented.. Aug. 6. 8. 9. 13. 14. 15. 17. 20

No. *159* in builder's yard. 5th. After the ship was launched and equipped

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

The workmanship is of good quality - Built in accordance with the approved sketches of midship and longitudinal sections herewith and in general conformity with the Rules with a view to the grade contemplated

The Ballast Tank is well secured and has been properly tested

Fittings on Deck. Chart Room under Bridge 7'2" x 10'6" amidships, wings at sides 7'2" x 4'6"
Iron Casing over galley and Engine and Boiler spaced 39'6" x 10'3" by 7'0" in height

State if one, two, or three, decked vessel, or if spar, or running decked, and the lengths of poop, forecabin, 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 *100A1*

The amount of the Entry Fee ... £ 5 : - : is received by me, *Sam. Laphorn*

Special ... £ 52 : 8 : 6 August 1877

Certificate ... *British*

(Travelling Expenses, if any, £ 6.6/6

Committee's Minute *24th August 1877*

Character assigned *100A1* *Iron Deck* *Two Fr. B.* *Registered* *Foundation* *24/8/77*