Request for S. S. No. 336 — 1817 — 3938

IRON SHIPS.

Rec 5/12/64

No. 2267 Survey held at Glasgow Date Nov. 28th 1864

On the Screw Sr. "Spartan" pro tem. Master not appointed

Tonnage Gross 390 39 Engine Room 94.12 Register 296 27 Built at Glasgow

When Built 1864 Launched September By whom built A. Stephen & Sons

Owners Little & others Port belonging to Greenock Destined Voyage not fixed

If Surveyed Afloat or in Dry Dock whilst building

	Feet.	Inches.		Feet.	Inches.		Feet.	Inches.		Horse.
Length aloft	176	.3	Extreme Breadth	22	.5	Depth from top of Upper Deck Beam to top of Floor	13	.58	Power of Engines	90

	Inches In Ship.	Inches In Ship.	16ths. In Ship.	Inches required per Rule.	Inches required per Rule.	16ths required per Rule.
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	18			21		
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	3	2½	9/16	3¼	2¾	9/16
" depth and thickness of Floor Plate at mid line	12	.	6/16	14¾	.	7/16
" depth and thickness of Floor Plate at Bilge Keelson	6	.	6/16	.		7/16
" Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	2	2	5/16	2½	2½	5/16
Frames, Size of Angle Iron, single ~~or double~~	3	2½	9/16	3¼	2¾	6/16
" " Reversed Iron, ~~if~~ to every frame / Bilges & ~~or~~ every Two frame	to the upper part of / to the Gunwale					
Beams, Deck (No. ✓) ~~double~~ Single Angle Iron, ~~Plate, or Bulb Iron~~	6	3	7/16	5½	.	5/16
" " double or single Angle Iron, on edge	"	"	.	2	2	4/16
" " average space between	3 feet			3 feet		
" " if wood (No.) sided & moulded	"	.	.			
" Hold, or Lower Deck (No. ✓) ~~double~~ Single Angle Iron, ~~Plate, or Bulb Iron~~	6	3	7/16	5½	.	5/16
" " double or single Angle Iron on edge	.	.	.	2½	2½	5/16
" " average space between	6 feet			4 feet		
" " if wood (No.) sided & moulded						
" Paddle, wood, sided and moulded, or if Iron, size of Plate	"	.	.	.	.	.
" Engine " " " "	.	.	.	.	.	
Keelson, ~~single plate, box, or~~ intercostal						
" Size of Plates	15	7/16		18¾	.	7/16
" Size of Angle Irons	3	2¾	6/16	3½	3	6/16
Ditto Bilge (No. Two)						

	Description of Iron. / Material.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule	16ths required per Rule.
Stem, if bar iron, moulding and thickness		6	1¾	6½	2¼
" if plate iron, breadth and thickness		.			
Stern-post, if bar iron, moulding and thickness		7	3½	6½	4½
" " if plate iron, breadth and thickness		.			
Keel, if bar iron, depth and thickness		6	1¾	6½	2¼
" if plate iron, breadth and thickness		.	.		
Garboard Plates, Breadth and thickness 32 ins.		✓	9/16		9/16
From Garboard to upper part of Bilge		✓	8/16 & 7/16		8/16
From upper part of Bilge to Sheerstrakes		✓	8/16 & 7/16		7/16
Sheerstrakes, Breadth and thickness 30 ins.			8/16		8/16
Butt Straps to outside plating, Breadth and thickness	9 ins. 7/16, 8/16 and 9/16				
Planksheers	None	.	.		
Gunwale Plate or Stringer on ends of Up. Dk Beams		20½	7/16	25	7/16
Angle Iron on ditto		3	3	6/16	3½ 3 6/16
Diagonal Tie Plates on Beams	None	"	"	8¼	7/16
Waterway	Red Pine	12	6	.	6½
Deck	Yellow	3	.	3	
Ceiling in Hold	Red Pine	2	.	.	
Ceiling betwixt Decks		"	.		
Beam Clamps or Spirketting		"	.	.	
" Shelf		.			
" Stringer Plates on ends of Hold or Lower Dk Beams	None / Angle Iron on ends of Bs.	3	3	6/16	18¾ 7/16
Ceiling between Decks	Battened		.		
Stringer or Tie Plates outside Hatchways		10	6/16	8¼	7/16
Deck Beam Clamps or Spirketting		"	.	.	
" " Shelf		"	.		
Stringers in Hold		3	2½	6/16	3½ 3 7/16
Deck, Lower					

Deck, Upper, how fastened to Beams Nuts and Screw Bolts

Bulkheads, No. Four Thickness of 5/16

Transoms, material Iron Plates, if none, in what manner compensated for. " how secured to the sides of the ship rivetted between two frames

Knight-heads, and Hawse Timbers Iron Frames " size of vertical angle iron and their distance apart 2 × 2 × 5/16 – 30 ins.

The Frames or Ribs extend in one length from middle line to Gunwale rivetted through plates with (7/8 in.) rivets, about (5) apart.

The reverse angle irons on the floors extend in one length across the middle line from upper part of Bilge to Ditto and

" " " on the frames " " " from to alternately to Gunwale

Keelson, how are the various lengths of plates or angle irons connected? by lining pieces

Plates, Garboard, double ~~or single~~ rivetted to keel & at upper edge, with rivets (1 & 7/8 ins.) diameter averaging (3 3 in.) from centre to centre of rivet.

" Edges from Garboards to upper part of bilge, worked ~~carvel with a lining piece~~ (in.) ~~thick, or~~ clencher, double ~~or single~~ rivetted; rivets (11/16 in.) diameter, averaging (3 ins.) from centre to centre of rivets.

" Butts from Keel to turn of bilge, worked carvel with a lining piece 9/16 & 8/16 thick, double ~~or single~~ rivetted; rivets (11/16 in.) diameter, averaging (3 ins) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

" Edges from bilge to sheerstrake, worked ~~carvel with a lining piece~~ ( ) ~~thick~~, or clencher, ~~double or~~ single rivetted; rivets (11/16 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

" Edge of Sheerstrake, double or single rivetted? Double

" Butts from bilge to planksheers, worked carvel with a lining piece 7/16 & 8/16 thick, double ~~or single~~ rivetted; rivets (11/16 in.) diameter averaging (3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting 5½ D. of Rivet Breadth of laps in single rivetting 3¼ D. of Rivet

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double

Planksheer, how secured to the plating of the sides / Waterway " " planksheer and to the Beams — *Explain by sketch if necessary.* — None. Iron Bulwarks / Nuts and Screw Bolts

Deck Beams, how secured to the side? By Plate knees rivetted to Beams and Frames

Hold or Lower Deck " Ditto — — Ditto

~~Paddle~~ " "

No. of breasthooks Four crutches Four how are pointers compensated? all Stringers run through

What description of iron is used for the angle iron and plate iron in the vessel? Glasgow Iron Co. *Builder's Signature* A. C. Stephen & Sons

3938 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? *Yes*

Do the edges of the carvel work and of the butts fay close together throughout their length without requiring any making good of deficiencies? *Yes*

Do the fillings between the ribs and plates fill in solid with single pieces, ~~or are they in short lengths of various thicknesses~~? *Yes*

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? *Yes* and are the rivet holes well and sufficiently countersunk in the outer plate? *Yes*

Are there any rivets which either break into or have been put through the seams or butts of the plating? *a few in cases of Butts*

Her Masts, Yards, &c., are in *Good* condition, and sufficient in size and length.

She has SAILS. No.		CABLES, &c.	Fathoms.	Inches.	ANCHORS, and their weights.	No.	Weight.
A Single Suit of Sails	Fore Sails,	*Tested to 22¾ Tons by* Chain	210	1⅛	*Trotmans Patent* Bower,	3	12.0.10 / 11.3.18 / 11.3.14
	Fore Top Sails,	*Jno McIntyre & Co* Hempen Stream Cable	90	7	*Tested to 13 Tons each at Seaham Iron Works Sept 22nd/64 by J. Stuart*		
	Fore Topmast Stay Sails,	*Sept 3rd/64* Hawser	-	-	Stream,	1	4.3.0
	Main Sails,	Towlines	90	5			
	Main Top Sails,	Warp	90	4	Kedge,	2	2.1.0 / 1.0.0
and		All of *Good* quality.					

Her Standing and Running Rigging *Galvd Iron & Hemp* sufficient in size and *Good* in quality.

She has *two life Boats* ~~Long Boat and~~ *and one long Boat*

The present state of the Windlass is *new* Capstan *new* and Rudder *new* Pumps *new and efficient*

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.
- 1st. On the several parts of the frame, when in place, and before the plating was wrought *Built under Special*
- 2nd. On the plating during the progress of rivetting *Survey between 29th May and 26th Novr*
- 3rd. When the beams were in and fastened, and before the decks were laid *1864*
- 4th. When the ship was complete, and before the plating was finally coated
- 5th. After the ship was launched

This vessel is built as per Specification furnished by Owners; the whole of the outside plating is double rivetted with the exception of one strake below Sheerstrake, Reverse Frames in way of Engine and Boiler spaces for a length of 27 feet are extended from middle line to gunwale on each frame. The Plating is reduced 1/10 of an inch at the ends for about a fourth of length.

The Owners wish to know what would be required to obtain the A Class, or whether the vessel will be deemed worthy of the A Class as at present built

Anchors & Chains not tested at [illegible] Machine. JWB

In what manner are the surfaces preserved from oxidation? *Flat of Bottom with Portland Cement remainder with red lead*

I am of opinion this Vessel should be classed

The amount of the Fee ....£4 : : is received by me,

Decr [illegible] Special ......£19 : 10 :

Certificate (if required) ....*Sixty*

A. C. Darling

Committee's Minute *9th December* 18*64*

Character assigned

No compensation is for extra length in [illegible] to depth of [illegible]