

# IRON SHIPS.

Requisition No. 214

No. 4341 Survey held at Greenock Date 27<sup>th</sup> June 1861  
 on the Screw Steam Schooner "Carver" for trans. Master

Tonnage Gross 323<sup>69</sup>/<sub>100</sub> Engine Room 82<sup>42</sup>/<sub>100</sub> Register 241<sup>72</sup>/<sub>100</sub> Built at Greenock

When Built 1861 By whom built Robert Steele & Co. Owners Robert Steele & Co.

Launched 28<sup>th</sup> March 1861 Port belonging to Greenock Destined Voyage Glyde to

If Surveyed Afloat or in Dry Dock While building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
.....	168 <sup>3</sup> / <sub>10</sub>		.....	23 <sup>4</sup> / <sub>10</sub>		.....	12 <sup>7</sup> / <sub>10</sub>		.....	75. Four Engines
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	16ths required per Rule.	Stem, $\frac{1}{2}$ bar iron, moulding and thickness	Inches in Ship.	16ths required per Rule.	Inches in Ship.	16ths required per Rule.
	18	✓ 18				„ if plate iron, breadth and thickness	6 $\frac{1}{2}$ x 2 $\frac{1}{2}$	✓ 6 $\frac{1}{2}$ x 2 $\frac{1}{2}$		
Floors, Size of Angle Iron, and No. <u>Single</u> at bottom of Floor Plate	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	16ths required per Rule.	Stern-post, $\frac{1}{2}$ bar iron, moulding and thickness	6 $\frac{1}{2}$ x 4 $\frac{1}{2}$	✓ 6 $\frac{1}{2}$ x 4 $\frac{1}{2}$		
„ depth and thickness of Floor Plate at mid line	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	2 $\frac{1}{2}$	✓ 2 $\frac{1}{2}$	✓ 16	„ „ <u>bar</u> if plate iron, breadth and thickness	6 $\frac{1}{2}$ x 4 $\frac{1}{2}$	✓ 6 $\frac{1}{2}$ x 4 $\frac{1}{2}$		
„ depth and thickness of Floor Plate at Bilge Keelson	13	✓ 13	7 $\frac{1}{2}$	✓ 7 $\frac{1}{2}$	✓ 12 $\frac{3}{4}$	Keel, $\frac{1}{2}$ bar iron, depth and thickness	6 $\frac{1}{2}$ x 2 $\frac{1}{2}$	✓ 6 $\frac{1}{2}$ x 2 $\frac{1}{2}$		
„ Size of Reversed Angle Iron, and No. <u>Single</u> at top of Floor Plate	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	7 $\frac{1}{2}$	✓ 7 $\frac{1}{2}$	✓ 16	„ if plate iron, breadth and thickness				
Frames, Size of Angle Iron, single or double Reversed Iron, <u>to every frame</u>	2 $\frac{1}{2}$	✓ 2 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Garboard Plates, thickness	Description of Iron.	9 $\frac{1}{8}$	✓ 9 $\frac{1}{8}$	9 $\frac{1}{8}$
„ „ <u>every other</u> frame	2 $\frac{1}{2}$	✓ 2 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	From Garboard to upper part of Bilge		8 $\frac{1}{8}$	✓ 8 $\frac{1}{8}$	8 $\frac{1}{8}$
Beams, Deck (N <sup>o</sup> . ) <u>double Angle Iron</u>	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	From upper part of Bilge to Sheerstrakes		7 $\frac{1}{8}$	✓ 7 $\frac{1}{8}$	7 $\frac{1}{8}$
„ „ <u>with double Angle Iron on top</u>	2 $\frac{1}{2}$	✓ 2 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Sheerstrakes		8 $\frac{1}{8}$	✓ 8 $\frac{1}{8}$	8 $\frac{1}{8}$
„ „ depth & thickness of plate amidships	6	✓ 6	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Breadth & thickness of Butt Straps to outside plating	8	8 $\frac{1}{2}$ x 7 $\frac{1}{2}$	✓ 8 $\frac{1}{2}$ x 7 $\frac{1}{2}$	
„ „ double or single Angle Iron, on lower edge	6	✓ 6	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Planksheers	Material.			
„ „ average space between	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Gunwale Plate or Stringer on ends of Up. Dk Beams	Plate Iron	18	✓ 18	7 $\frac{1}{2}$
„ „ if wood (N <sup>o</sup> . ) sided & moulded	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Angle Iron on ditto	3 $\frac{1}{2}$ x 8 x 7 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$ x 8 x 7 $\frac{1}{2}$	✓ 16	7 $\frac{1}{2}$
„ Hold, or Lower Deck (N <sup>o</sup> . ) double Angle Iron <u>or Bull Iron</u> with double Angle Iron on top	6	✓ 6	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Waterway	Red Pine	6 $\frac{1}{2}$	✓ 6 $\frac{1}{2}$	8 $\frac{1}{2}$
„ „ depth & thickness of plate amidships	6	✓ 6	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Deck	Yellow Pine	3	✓ 3	3
„ „ double or single Angle Iron, on lower edge	6	✓ 6	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Ceiling in Hold	American Rock Elm	2 $\frac{1}{4}$	✓ 2 $\frac{1}{4}$	
„ „ average space between	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Ceiling betwixt Decks				
„ „ if wood (N <sup>o</sup> . ) sided & moulded	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Beam Clamps				
„ Paddle, wood, sided and moulded or if Iron, size of Plate	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	„ Shelf				
„ Engine	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	„ Stringer Plates on ends of Hold or Lower Dk Beams	Bull Iron	8	✓ 8	16 $\frac{1}{2}$ 7 $\frac{1}{2}$
Keelson, wood, sided & moulded, iron, size of plate, if <u>Iron</u> , give sketch & dimensions	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Ceiling between Decks	Double Angle Iron	3 $\frac{1}{2}$ x 3 x 5 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$ x 3 x 5 $\frac{1}{2}$	✓ 16
„ Side or Bilge	3 $\frac{1}{2}$	✓ 3 $\frac{1}{2}$	5 $\frac{1}{2}$	✓ 5 $\frac{1}{2}$	✓ 16	Stringer or Tie Plates out- side Hatchways	Plate Iron	9	✓ 9	8 $\frac{1}{2}$ 7 $\frac{1}{2}$
„ Number	3	✓ 3	5	✓ 5	✓ 16	Deck Beam Clamps				
						„ „ Shelf				
						Stringers in Hold	See Keelsons			
						Deck, Lower				
						Deck, Upper, how fastened to Beams	By struts and screws from above			

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads „ Seake Chocks Bulkheads, N<sup>o</sup>. Side Thickness of 5 $\frac{1}{2}$  ✓ 5 $\frac{1}{2}$

Hawse Timbers „ D. are they free from defects? yes „ how secured to the sides of the ship Between double frames ✓

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with ( $\frac{3}{4}$  in.) rivets, about (6 ins.) apart.

The reverse angle irons on the floors extend in one length across the middle line from Bilge to Gunwale alternately

„ „ „ and on the frames „ „ „ from „ to „

Keelson, how are the various lengths of plates or angle irons connected? By Angle Iron butt straps ✓

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets ( $1\frac{1}{2}$  ins.) diameter averaging (3 ins.) 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 ( $\frac{3}{4}$  in.) diameter, averaging (2 $\frac{1}{2}$  ins.) from centre to centre of rivets.

„ Butts from Keel to turn of bilge, worked carvel with a lining piece ( $\frac{3}{8}$  in.) thick, double or single rivetted; rivets ( $\frac{3}{4}$  in.) diameter, averaging (2 $\frac{1}{2}$  ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes.

„ Edges from bilge to planksheer, worked carvel with a lining piece (—) thick, double or single rivetted; rivets ( $\frac{3}{4}$  in.) diameter, averaging (2 $\frac{1}{2}$  in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes.

„ Butts from bilge to planksheers, worked carvel with a lining piece ( $\frac{3}{8}$  in.) thick, or clencher, double or single rivetted; rivets ( $\frac{3}{4}$  in.) diameter averaging (2 $\frac{1}{2}$  ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4) Breadth of laps in single rivetting (2 $\frac{1}{2}$ )

Planksheer, how secured to the plating of the sides { Explain by sketch, }

Waterway „ „ planksheer and to the Beams { if necessary. } By nuts and screws ✓

Side trussing „ „ breadth and thickness of plates „ how secured? „

Deck trussing „ „ „ By plates all fore and aft each side of hatchways 9 x 8 and diagonal plates where practicable

Deck Beams, how secured to the side? By plate knees ✓

Hold or Lower Deck „ Ditto ✓

Paddle „ „ „

No. of breasthooks Four crutches „ how are pointers compensated? „

What description of iron is used for the angle iron and plate iron in the vessel? Dundee Iron ✓

Builder's Signature

Robert Steele & Co.

IRON 435-0103



2487 *Lon*

**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 lay 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? *Solid*

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*

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

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N <sup>o</sup> .			Fathoms. Inches.	N <sup>o</sup> .	Weight.
	Fore Sails,	Chain ..... <i>Stream 32 tons...</i>	240 14	Bower, ..... <i>Patent</i>	3 <i>200 lbs</i>
	Fore Top Sails,	" <i>Stream do 7 1/2 tons</i>	90 2		13. 2. 24
	Fore Topmast Stay Sails,	Hempen Stream Cable .....	90	Stream, ..... <i>do</i>	1 5. 1. 24
<i>One</i>	Main Sails,	Hawser .....	90		
<i>Suit</i>	Main Top Sails,	Towlines .....		Kedge, ..... <i>do</i>	2 3. 1. 7
<i>of</i>		Warp .....			2. 0. 2
<i>Sails</i>		All of <i>Good</i> quality.			

and *spare sails* ✓  
Her Standing and Running Rigging *Stump* sufficient in size and *Good* in quality.

She has *One Life* Long Boat and *two others* ✓  
The present state of the Windlass is *Good* ✓ Capstan and Rudder *Good* ✓ Pumps *Four had, Good.* ✓

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  
2nd. On the plating during the progress of rivetting  
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  
5th. After the ship was launched  
} *Specially Surveyed*

*This vessel has been built under Special Survey as per order N<sup>o</sup> 214*  
*She was partly built previous to the amendment of the Iron Rules requiring ships that exceed in length more than ten times the depth of hold, and seven times the breadth, to have extra longitudinal strength in the sheerstrake &c.*  
*Engineers' Certificate herewith.*

In what manner are the surfaces preserved from oxidation? *By three coats of red lead inside, and three coats of red lead outside, and one coat of Peacock's patent composition on bottom.*

I am of opinion this Vessel should be classed *QAS*

The amount of the Fee ..... £ 4 : " : " is received by me,  
Special ..... £ 16 : 4 : "

Certificate (if required) ..... £ " : " : "

Committee's Minute *19<sup>th</sup> July 1861*  
*23<sup>rd</sup>*

Character assigned *Q1 for 9 years*  
*M.C.*

*The thickness & depth of the plates of middle keelson has been omitted to state in this report otherwise I see no objection to the above recommendation*

*Referred to Survey 16 July 1861*  
*write to Survey 19. 7. 61*