

633

1868

Date 10th Sept

Screw Steamer 'Duro

Master Antonio de Menchaca

Built at Pennock

When built

1868 *in State annexed*
Launched 1st of Nov.

By whom wilt

Owners Don Oscar de Chavarria

Port belonging to

Destined Voyage Glyde to Liverpool & thence

IX Surveyed while Building, Afloat, or in Dry Dock *While Building*

Feet.		Inches.		Feet.		Inches.		Feet.		Inches.		Horse.		N ^o . of Decks	
Length aloft		Extreme Breadth		Depth from top of Upper Deck Beam to top of Floor		Power of Engines		N ^o . of Decks							
(Dimensions of Ship per Register, length <u>160</u> breadth <u>22</u> depth <u>12 5/10</u>)															
Keel, if bar iron, depth and thickness				Inches in Ship. <u>6 1/2 x 1 3/8</u>		Inches required per Rule. <u>6 1/2 x 2</u>		Plates in Garboard Strakes, breadth and thickness							
„ if plate iron, breadth and thickness				<u>6 1/2 x 1 3/8</u>		<u>6 1/2 x 2</u>		Ditto from Garboard to upper part of Bilges..							
Stem, if bar iron, moulding and thickness				<u>6 1/2 x 1 3/8</u>		<u>6 1/2 x 2</u>		„ from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3rds the entire depth of Hold							
„ if plate iron, breadth and thickness				<u>6 1/2 x 1 3/8</u>		<u>6 1/2 x 2</u>		„ from 2/3rds depth of Hold to lower edge of Sheerstrake							
Stern-post, if bar iron, moulding and thickness				<u>6 1/2 x 3 3/4 outer</u>		<u>6 1/2 x 4</u>		„ Sheerstrake, breadth and thickness							
„ if plate iron, breadth and thickness				<u>6 1/2 x 4 inner</u>		<u>6 1/2 x 4</u>		Butt Straps to outside plating, breadth and thickness							
Distance of Frames from moulding edge to moulding edge, all fore and aft				<u>2 1</u>		<u>2 1</u>		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness							
with doubling pieces 4 feet long all fore & aft				<u>2 1/2</u>		<u>3</u>		Angle Iron on ditto							
Frames, Size of Angle Iron, single or double				<u>2 1/2</u>		<u>3</u>		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways ..							
„ „ Reversed Iron, 1 to every frame				<u>2 1/2</u>		<u>2 1/2</u>		Diagonal Tie Plates on ditto							
and on every alternate frame to gunwale				<u>2 1/2</u>		<u>2 1/2</u>		Planksheer, materials and scantlings							
Floors, depth and thickness of Floor Plate at mid line				<u>15</u>		<u>14 3/8</u>		Waterway ditto ditto from bottom							
„ Ditto ditto at Bilge Keelson				<u>9</u>		<u>6 1/8</u>		Flat of Upper Deck, thickness and material							
„ Size of Reversed Angle Iron, and No. single at top of Floor Plate				<u>2 1/2</u>		<u>2 1/2</u>		„ „ how fastened to Beams by screw bolts & nuts from above							
Beams, Deck (N ^o .) double Angle Iron, Plate, Tee, or Bulb Iron				<u>6</u>		<u>5 1/2</u>		Ceiling betwixt Decks and in Hold, thickness and material							
„ „ double or single Angle Iron, on upper edge				<u>5</u>		<u>5 1/2</u>		Clamps or Spirketting ditto							
„ „ average space between				<u>2 1/2</u>		<u>2 1/2</u>		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness							
„ Hold, or Lower Deck (N ^o .) double Angle, Tee, Plate, or Bulb Iron				<u>3 1/2</u>		<u>3</u>		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams							
„ „ double or single Angle Iron on edge				<u>6 1/2</u>		<u>6 1/2</u>		Stringers in Hold double Angle Iron							
„ „ average space between				<u>3 1/2</u>		<u>3</u>		Flat of Lower Deck, thickness and material ..							
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron				<u>12</u>		<u>3 1/2</u>		Main piece of Rudder, diameter at head							
„ Engine „ „ „ „				<u>3 1/2</u>		<u>3</u>		„ „ „ at heel							
Keelson, single or double plate, box, or intercostal				<u>12</u>		<u>3 1/2</u>		(Can the Rudder be unshipped afloat <u>No</u>)							
„ Size of Plates side plates				<u>12</u>		<u>3 1/2</u>		Bulkheads, N ^o five Thickness of							
„ Size of Angle Irons				<u>3 1/2</u>		<u>3</u>		„ Height up to upper Decks							
„ Side, single or d'ble, plate, box, or intercostal				<u>3 1/2</u>		<u>3</u>		„ how secured to the sides of the ship between double frames							
„ Bilge (No. two) at each Bilge, single or double, plate, or box				<u>3 1/2</u>		<u>3</u>		„ size of vertical angle irons 2 1/2 x 2 x 1/4 and their distance apart about 30 inches							
Transoms, material Iron or, if none, in what manner compensated for.				<u>3 1/2</u>		<u>3</u>		The Frames extend in one length from Keel to Gunwale rivetted through plates with (5/8 in.) rivets, about (6 inches) apart.							
Knight-heads, and Hawse Timbers Iron				<u>3 1/2</u>		<u>3</u>		The reverse angle irons on the floors extend in one length across the middle line from upper part of bilge and to Gunwale alternately							
The Frames extend in one length from Keel to Gunwale				<u>3 1/2</u>		<u>3</u>		„ „ and on the frames „ „ from to							

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

Plates, Garboard, double ~~or~~ rivetted to keel, double ~~or~~ at upper edge, with rivets ($1\frac{5}{8}$ ins.) diameter, averaging ($4\frac{1}{2}$ in.) apart.

„ Edges from Garboards to upper part of bilge, worked clencher, double ~~or~~ single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (3 ins.) apart.

„ Butts from Keel to turn of bilge, worked carvel with butt straps ($\frac{1}{8}$, $\frac{3}{8}$, $\frac{1}{2}$) thick, double ~~or~~ single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (3 ins.) apart. Do the butt straps 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; with rivets ($\frac{3}{4}$, $\frac{5}{8}$ in.) diameter, averaging ($2\frac{1}{2}$ to 3 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

„ Edges of Sheerstrake, double or single rivetted? At upper edge Single At Angle Iron Double At lower edge Double

„ Butts from bilge to planksheers, worked carvel with butt straps ($\frac{7}{8}$, $\frac{1}{2}$, $\frac{3}{8}$) thick, double ~~or~~ single rivetted; with rivets ($\frac{1}{2}$ in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting ($4\frac{1}{2}$ inches) Breadth of laps in single rivetting ($2\frac{3}{4}$ inches)

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

Planksheer, how secured to the plating of the sides (Explain by sketch)

Waterway	“	“	planksheer and to the Beams	<i>if necessary.</i>
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Deck Beams, how secured to the side? Beam ends turned down

Hold or Lower Deck ditto

Paddle	"	"	No. of breasthooks	Three	crutches	Three
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What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? *Wassend Iron* *Blackburn Iron*

Manufacturer's name or trade mark *Messing Iron Co. Blochstein Iron Co.*

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Macnab Surveyor's Signature

IRON 443-0003

6533. Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter 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 lengths
Do the holes for rivetting plate to frames, butt straps, 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, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.)

Tested at "Lloyds" Netherthorpe Proving House, near Dudley. W. K. Read.										Tested at "Lloyds" Netherthorpe Proving House, near Dudley. W. K. Read.									
She has SAILS.					CABLES, &c.					ANCHORS, &c.					BOWERS				
N ^o .					Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	N ^o .					N ^o .				
	Fore Sails,				90	1 1/2	20.6.0.0	1 1/2	20.6.0.0	1					1				
	Fore Top Sails,				45	1 1/2	5.12.2.0	1 1/2	5.12.2.0	1					1				
	Fore Topmast Stay Sails				45	1 1/2	5.12.2.0	1 1/2	5.12.2.0	1					1				
	Main Sails,				90	6 1/2													
	Main Top Sails,				90	4													
	and spary sails																		
	Her Standing and Running Rigging																		
	She has																		
	The present state of the Windlass																		

Order for Special Survey No. 423 Date 20th April 1867
Order for Ordinary Survey No. _____ Date _____
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
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 while Building from June 1867 to Sept 1868 in all 18 Visits

State if she has a Spar Deck No Poop Yes Forecastle Yes

General Remarks, This vessel has been built under special survey as per Order No. 423; Is Schooner rigged, has a full poop, and fore-castle with a house on deck for part crew.
Diagonal plates on deck beams have been dispensed with as per Committee's letter dated 20th June 1867, as shown on sketch of midship section and deck plan submitted and herewith attached.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement between floor to upper part of bilges, & has coats Red lead above
Ditto ditto Outside Three coats of Red lead, and Black paint on topsides.

We are of opinion this Vessel should be Classed A1
The amount of the Fee £ 4 : " : " is received by me,
Special £ 15 : 9 : "
X Certificate (if required) £ " : " : "

Committee's Minute 15th September 1868

Character assigned A1

Joseph Tucker
This Don built Sun Thomas is 1861
in my recent Report to Committee of
Don built at Greenwich, She appears
to have been built in accordance with the
Plans submitted to me on June 1867,
I am of opinion she is eligible for classification
as recommended above. J. H. 14/10/68