

# 4390 IRON SHIPS.

No. 244 Survey held at Penryn Date November 10<sup>th</sup> Recd 20/11/65  
 on the Screw S<sup>r</sup> "Hinsale" Master Crawford 18  
 Tonnage under tonnage deck 444 Built at Penryn When built 1875 Launched 5<sup>th</sup> Dec 1875  
 Ditto of poop 13.03 or spar deck 3.65 By whom built Henderson & Co. Ltd. Owners Glasgow, Camb. & Waterford S<sup>r</sup>  
 Ditto of engine room 1.92 11.6.51 Port belonging to Glasgow Destined Voyage Coasting  
 Total Register tonnage 383.39 188.74 116.51 116.51 116.51 116.51  
 Gross tonnage 444.0 103.15  
 Surveyed while Building, Afloat, or in Dry Dock whilst building

Length aloft 191 Feet. Extreme Breadth 25.1 Feet. Depth from top of Upper Deck Beam to top of Floor 14.6 Feet. Power of Engines 95 Horse. N<sup>o</sup>. of Decks One  
 Dimensions of Ship per Register, length 191.8 breadth 25.1 depth 14.5

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	$0\frac{3}{4} \times 2\frac{1}{2}$	$0\frac{3}{4} \times 2\frac{1}{2}$						
„ if plate iron, breadth and thickness								
Stem, if bar iron, moulding and thickness	$0\frac{3}{4} \times 2\frac{1}{2}$	$0\frac{3}{4} \times 2\frac{1}{2}$						
„ if plate iron, breadth and thickness								
Stern-post, if bar iron, moulding and thickness	$0 \times 4\frac{1}{2}$	$0\frac{3}{4} \times 5$						
„ if plate iron, breadth and thickness								
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>						
Frames, Size of Angle Iron, single or double	$3\frac{1}{2} \times 3$	$3\frac{1}{2} \times 3$						
Reversed Iron, if to every frame	<u>to the upper part of</u>	<u>to the upper part of</u>						
No. of Reversed Iron, if to every frame	<u>to the upper part of</u>	<u>to the upper part of</u>						
Floors, depth and thickness of Floor Plate at mid line	<u>10 1/2</u>	<u>10 1/2</u>						
„ Ditto ditto at Bilge Keelson	<u>9</u>	<u>9</u>						
„ Size of Reversed Angle Iron, and No. at top of Floor Plate	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$						
Beams, Deck (N <sup>o</sup> . of double Angle Iron, Plate, Tee, or Bulb Iron)	<u>0</u>	<u>0</u>						
„ „ double or single Angle Iron, on upper edge	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$						
„ „ average space between	<u>3 feet</u>	<u>3 feet</u>						
„ Hold, or Lower Deck (N <sup>o</sup> . of double Angle, Tee, Plate, or Bulb Iron)	<u>0</u>	<u>0</u>						
„ „ double or single Angle Iron, on upper edge	$2\frac{1}{2} \times 2\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$						
„ „ average space between	<u>3 feet</u>	<u>3 feet</u>						
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron								
„ Engine								
Keelson, single or double plate, box, or intercostal	$1\frac{1}{2} \times 1\frac{1}{2}$	$1\frac{1}{2} \times 1\frac{1}{2}$						
„ Size of Plates	<u>15</u>	<u>15</u>						
„ Size of Angle Irons	<u>3</u>	<u>3</u>						
„ Side, single or double plate, box, or intercostal	<u>4</u>	<u>4</u>						
„ Bilge (No. of single, or double, plate, or box)	<u>4</u>	<u>4</u>						

	Inches in Ship.	16ths in Ship.	Inches required per Rule.	16ths required per Rule.
Plates in Garboard Strakes, breadth and thickness	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>
Ditto from Garboard to upper part of Bilges	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>
„ from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>
„ from 3/4ths depth of Hold to lower edge of Sheerstrake	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
„ Sheerstrake, breadth and thickness	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>
Butt Straps to outside plating, breadth and thickness	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	<u>28 1/2</u>	<u>28 1/2</u>	<u>28 1/2</u>	<u>28 1/2</u>
Angle Iron on ditto	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Diagonal Tie Plates on ditto	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Planksheer, materials and scantlings	<u>Red Pine</u>	<u>Bulwarks</u>	<u>Red Pine</u>	<u>Bulwarks</u>
Waterway ditto ditto	<u>Red Pine</u>	<u>Red Pine</u>	<u>Red Pine</u>	<u>Red Pine</u>
Flat of Upper Deck, thickness and material	<u>Yellow pine</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
„ „ how fastened to Beams	<u>Butt &amp; Screw Bolts</u>			
Ceiling betwixt Decks and in Hold, thickness and material	<u>Patent</u>	<u>American</u>	<u>Patent</u>	<u>American</u>
Clamps or Spirketting ditto				
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Stringers in Hold	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Flat of Lower Deck, thickness and material	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Main piece of Rudder, diameter at head	<u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>
„ „ „ at heel	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
(Can the Rudder be unshipped afloat)	<u>Yes</u>			
Bulkheads, N <sup>o</sup> . and Thickness of	<u>70</u>			
„ Height up upper deck				
„ how secured to the sides of the ship	<u>riveted between the frames</u>			
„ size of vertical angle irons and their distance apart	<u>30</u>			

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

Knight-heads, and Hawse Timbers Iron

The Frames extend in one length from middle line to Gunwale rivetted through plates with ( $\frac{3}{4}$  in.) rivets, about (10) apart.

The reverse angle irons on the floors extend in one length across the middle line from upper part of Hold Beams to Gunwale.

„ „ „ on the frames „ „ „ from middle line 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, double or single at upper edge, with rivets ( $\frac{3}{4}$  in.) diameter, averaging (3 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 1/2 in.) apart.

„ Butts from Keel to turn of bilge, worked carvel with butt straps (7 or 8) thick, double or single rivetted; with rivets ( $\frac{3}{4}$  in.) diameter, averaging (3 1/2 in.) 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 ( $\frac{3}{4}$  in.) diameter, averaging (3 1/2 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 lower edge double

„ Butts from bilge to planksheers, worked carvel with butt straps (7 or 8) thick, double or single rivetted; with rivets ( $\frac{3}{4}$  in.) diameter, averaging (3 1/2 in.) apart. Breadth of laps in double rivetting (5 1/2 in.) Breadth of laps in single rivetting (3 1/2 in.)

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

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

Waterway „ „ planksheer and to the Beams if necessary See Bulwarks

Deck Beams, how secured to the side? Welded knees riveted to Beams

Hold or Lower Deck ditto Do

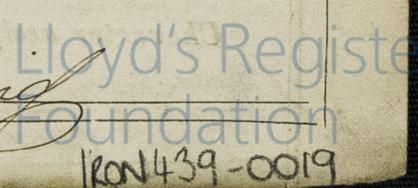
Paddle „ „ No. of breasthooks Three crutches Four

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Hartlepool Rolling Mill

Manufacturer's name or trade mark

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

Builder's Signature Henderson & Co. Ltd. Surveyor's Signature A. J. Darling



IRON 439-0019

