

# IRON SHIPS.

No. 244 Survey held at Penryn Date November 10<sup>th</sup> Recd 20/11/85  
 on the Screw S<sup>r</sup> "Hunsale" Master Crawford  
 Tonnage under tonnage deck 444 Built at Penryn When built 1875 Launched 5<sup>th</sup> Dec. 1875  
 Ditto of poop 13 or spar deck 13 By whom built Henderson & Co. Ltd. Owners Glasgow, Cork & Waterford S<sup>r</sup>  
 Ditto of engine room 11 Port belonging to Glasgow Destined Voyage Coasting  
 Total Register tonnage 383 Surveied while Building, Afloat, or in Dry Dock whilst building

Length aloft 191 Feet. Extreme Breadth 25 Feet. Depth from top of Upper Deck Beam to top of Floor 14 Feet. Power of Engines 95 Horse. N<sup>o</sup>. of Decks One  
 Dimensions of Ship per Register, length 191 breadth 25 depth 14

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness.....	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	Plates in Garboard Strakes, breadth and thickness.....	<u>24</u>	<u>24</u>
„ if plate iron, breadth and thickness....	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	Ditto from Garboard to upper part of Bilges..	<u>8</u>	<u>8</u>
Stem, if bar iron, moulding and thickness....	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	„ from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3rds the entire depth of Hold.....	<u>7</u>	<u>7</u>
„ if plate iron, breadth and thickness....	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	„ from 2/3rds depth of Hold to lower edge of Sheerstrake.....	<u>7</u>	<u>7</u>
Stern-post, if bar iron, moulding and thickness	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	„ Sheerstrake, breadth and thickness....	<u>38</u>	<u>38</u>
„ if plate iron, breadth and thickness	<u>0 3/4 x 2 1/2</u>	<u>0 3/4 x 2 1/2</u>	Butt Straps to outside plating, breadth and thickness.....	<u>9</u>	<u>9</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft.....	<u>21</u>	<u>21</u>	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	<u>28</u>	<u>28</u>
Frames, Size of Angle Iron, single or double..	<u>3 1/2</u>	<u>3 1/2</u>	Angle Iron on ditto.....	<u>4</u>	<u>4</u>
Reversed Iron, if to every frame	<u>to the upper part of</u>	<u>to the upper part of</u>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways..	<u>10</u>	<u>10</u>
No. of every frame.....	<u>to the upper part of</u>	<u>to the upper part of</u>	Diagonal Tie Plates on ditto.....	<u>10</u>	<u>10</u>
Floors, depth and thickness of Floor Plate at mid line.....	<u>10 1/2</u>	<u>10 1/2</u>	Planksheer, materials and scantlings.....	<u>10</u>	<u>10</u>
„ Ditto ditto at Bilge Keelson	<u>9</u>	<u>9</u>	Waterway ditto ditto.....	<u>10</u>	<u>10</u>
„ Size of Reversed Angle Iron, and No. at top of Floor Plate	<u>2 1/2</u>	<u>2 1/2</u>	Flat of Upper Deck, thickness and material.....	<u>3 1/2</u>	<u>3 1/2</u>
Beams, Deck (N <sup>o</sup> . -) double Angle Iron, Plate, Tee, or Bulb Iron.....	<u>0</u>	<u>0</u>	„ „ how fastened to Beams.....	<u>to the upper part of</u>	<u>to the upper part of</u>
„ „ double or single Angle Iron, on upper edge.....	<u>2 1/2</u>	<u>2 1/2</u>	Ceiling betwixt Decks and in Hold, thickness and material.....	<u>to the upper part of</u>	<u>to the upper part of</u>
„ „ average space between.....	<u>3 feet</u>	<u>3 feet</u>	Clamps or Spirketting ditto.....	<u>to the upper part of</u>	<u>to the upper part of</u>
„ Hold, or Lower Deck (N <sup>o</sup> . -) double Angle, Tee, Plate, or Bulb Iron	<u>0</u>	<u>0</u>	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>21</u>	<u>21</u>
„ „ double or single Angle Iron, on upper edge.....	<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>
„ „ average space between.....	<u>3 feet</u>	<u>3 feet</u>	Stringers in Hold.....	<u>4</u>	<u>4</u>
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron	<u>0</u>	<u>0</u>	Flat of Lower Deck, thickness and material..	<u>4 1/2</u>	<u>4 1/2</u>
„ Engine	<u>to the upper part of</u>	<u>to the upper part of</u>	Main piece of Rudder, diameter at head....	<u>4 1/2</u>	<u>4 1/2</u>
Keelson, single or double plate, box, or intercostal	<u>15</u>	<u>15</u>	„ „ „ at heel....	<u>3 1/2</u>	<u>3 1/2</u>
„ Size of Plates.....	<u>0</u>	<u>0</u>	(Can the Rudder be unshipped afloat?) <u>Yes</u>	<u>to the upper part of</u>	<u>to the upper part of</u>
„ Size of Angle Irons.....	<u>0</u>	<u>0</u>	Bulkheads, N <sup>o</sup> . and Thickness of.....	<u>to the upper part of</u>	<u>to the upper part of</u>
„ Side, single or double plate, box, or intercostal	<u>4</u>	<u>4</u>	„ Height up upper deck.....	<u>to the upper part of</u>	<u>to the upper part of</u>
„ Bilge (No. -) at each Bilge, single, or double, plate, or box.....	<u>4</u>	<u>4</u>	„ how secured to the sides of the ship.....	<u>to the upper part of</u>	<u>to the upper part of</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  
 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 (1/2 in.) diameter, averaging (3 in.) apart.  
 „ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart.  
 „ Butts from Keel to turn of bilge, worked carvel with butt straps (7/8 in.) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 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 (3/4 in.) diameter, averaging (2 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 (7/8 in.) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart. Breadth of laps in double rivetting (3 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?  
 Planksheer, how secured to the plating of the sides Explain by sketch  
 Waterway „ „ planksheer and to the Beams if necessary.  
 Deck Beams, how secured to the side? Welded knees rivetted to Beams  
 Hold or Lower Deck ditto Do

Paddle „ „ No. of breasthooks three crutches three  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Hartford 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  
 Lloyd's Register Foundation  
 IRON 439-0019



**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? *are they in short lengths of various thicknesses?* *Yes*

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 in corners of Butts*

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.

She has SAILS.

N<sup>o</sup>.

Fore Sails,

Fore Top Sails,

Fore Topmast Stay Sails,

Main Sails,

Main Top Sails,

CABLES, &c.

Chain

Hempen Stream Cable

Hawser

Towlines

Warp

All of *Good* quality.

ANCHORS and their weights.

Bowers,

Stream,

Kedges,

Weight, Tested to.

Ex. Stock Tons.

12.2.24 14.10

12.2.4 14.7

10.3.8 12.15

12.1.4 12.15

12.1.4 12.15

12.1.4 12.15

12.1.4 12.15

12.1.4 12.15

Her Standing and Running Rigging *Good* sufficient in size and *Good* in quality.

She has *one 34-foot life* *Long Boat* and *one 34-foot* *Boat*, *30-foot* *Gid.* *33-foot* *Quindry*

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

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

No. *380*

Date *March 22/65*

Surveys held

while building

2nd. On the plating during the progress of rivetting *Built under special survey*

3rd. When the beams were in and fastened, and before the decks were laid *from the 28<sup>th</sup> March*

4th. When the ship was complete, and before the plating was finally coated *to the 10<sup>th</sup> Nov<sup>r</sup> 1865*

5th. After the ship was launched

Order for Ordinary Survey

No. *1*

Date *1/65*

as per

Section 18.

State if she has a Spar Deck *Two*

Poop *Yes*

or Forecastle *Yes*

General Remarks,

The Hold beams are spaced three feet six inches apart, the beams are alternately built and single Angle Bar, 8x10 built iron, and 8x3x10 Angle Bars with 70 bracket Plates rivetted to ends. Bilge Keelson fitted with a built Bar 8x10. Sheerstrake doubled its whole depth with a 50 plate for three fourths the entire length of the vessel in way of Engine and Coal Bunker spaces in form of stringed Plate, a foundation plate 15x70 and built Bar 8x10 and two Angle Bars 4x3x10 are substituted, and in after body a 8x10 built iron with two Angle Bars 4x3x10 as per approved accompanying drawing.

In what manner are the surfaces preserved from oxidation? Inside *Flat of Bottom with Asphalt, red lead*

Ditto

ditto

Outside *Black paint and oil paint*

I am of opinion this Vessel should be Classed *A.1*

The amount of the Fee .....£ 5 : : : is received by me,

Special .....£ 25 : : : *W. W. W.*

Certificate (if required) .....£ *Gratis*

Committee's Minute *21<sup>st</sup> November 1865*

Character assigned *A*

*A.C.P.*



Lloyd's Register Foundation