

# STEEL IRON SHIP.

(Received at London Office,

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No. 411 Survey held at Glasgow Date, First Survey 1<sup>st</sup> May 1885 Last Survey 24<sup>th</sup> October 1885  
On the Steel Screw Steamer "Saltees" (Two masts, fore and aft rig)

<b>TONNAGE</b> under Tonnage Deck <u>467.55</u>	<b>ONE, OR TWO DECKED, THREE DECKED VESSEL,</b>	Master <u>S. Walton</u>
Ditto of Third, Spar, or Awning Deck <u>2.20</u>	<b>SPAR, OR AWNING-DECKED VESSEL.</b>	Built at <u>Glasgow</u>
Ditto of Poop, or Raised Or. Dk. <u>56.24</u>	Half Breadth (moulded) <u>13.87</u>	When built <u>1885</u> Launched <u>23 Sept.</u>
Ditto of Houses on Deck <u>30.56</u>	Depth from upper part of Keel to top of Upper Deck Beams <u>15.5</u>	By whom built <u>D. &amp; W. Henderson &amp; Co.</u>
Ditto of Forecastle <u>20.33</u>	Girth of Half Midship Frame (as per Rule) <u>26.15</u>	Owners <u>Glyde Shipping Co.</u>
Gross Tonnage <u>576.96</u>	1st Number <u>5552</u>	Residence <u>Glasgow</u>
Less Crew Space <u>43.71</u>	1st Number, if a 3-Decked Vessel deduct 7 feet <u>-</u>	Port belonging to <u>Glasgow</u>
Less Engine Room <u>305.10</u>	Length <u>185</u>	Destined Voyage <u>Coasting</u>
Register Tonnage as cut on Beam <u>228.15</u>	2nd Number <u>10271</u>	<input checked="" type="checkbox"/> Surveyed while Building, Afloat, or in Dry Dock.
	Proportions— Breadths to Length <u>6.68</u>	<u>White building and afloat.</u>
	Depths to Length—Upper Deck to Keel <u>11.94</u>	
	Main Deck ditto <u>-</u>	

<b>LENGTH</b> on deck as per Rule <u>185</u>	<b>BREADTH</b> Moulded <u>27.74</u>	<b>DEPTH</b> top of Floors to Upper Deck Beams <u>14.2</u>	<b>Power of Engines</b> <u>105</u>	<b>Horse.</b> <u>105</u>	<b>N<sup>o</sup>. of Decks with flat laid</b> <u>2</u>	<b>N<sup>o</sup>. of Tiers of Beams</b> <u>2</u>
Dimensions of Ship per Register, length, <u>186</u> breadth, <u>28</u> depth, <u>14.2</u>						
<b>KEEL</b> , depth and thickness <u>7 1/2 x 2 1/2</u>	Inches in Ship <u>7 1/2</u>	Inches per Rule <u>2 1/2</u>	<b>PLATES</b> in Garboard Strakes, br'dth & thickness <u>32</u>	Inches in Ship <u>32</u>	Inches per Rule <u>16</u>	Inches in Ship <u>32</u>
<b>STEM</b> , moulding and thickness <u>7 1/2 x 2 1/2</u>	Inches in Ship <u>7 1/2</u>	Inches per Rule <u>2 1/2</u>	" From Garboard to upper part of Bilges <u>13 1/4</u>	Inches in Ship <u>13 1/4</u>	Inches per Rule <u>13 1/4</u>	Inches in Ship <u>13 1/4</u>
<b>STERN-POST</b> for Rudder do. do. <u>7 1/2 x 4</u>	Inches in Ship <u>7 1/2</u>	Inches per Rule <u>4</u>	" Of plating at Bilge, or increased thickness, and length applied <u>14</u>	Inches in Ship <u>14</u>	Inches per Rule <u>14</u>	Inches in Ship <u>14</u>
" " for Propeller <u>7 3/4 x 4</u>	Inches in Ship <u>7 3/4</u>	Inches per Rule <u>4</u>	" From up. prt of Bilge to l. edge of Sh'rstrake <u>13 1/4</u>	Inches in Ship <u>13 1/4</u>	Inches per Rule <u>13 1/4</u>	Inches in Ship <u>13 1/4</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>22</u>	Inches in Ship <u>22</u>	Inches per Rule <u>22</u>	" Main Sheerstrake, breadth and thickness <u>36</u>	Inches in Ship <u>36</u>	Inches per Rule <u>20</u>	Inches in Ship <u>33</u>
<b>FRAMES</b> , Angle Iron, for 1/2 length amidships <u>3 1/2</u>	Inches in Ship <u>3 1/2</u>	Inches per Rule <u>3 1/2</u>	" Of plating at Sh'stk. & lng. applied <u>-</u>	Inches in Ship <u>-</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
Do. for 1/2 at each end <u>3 1/2</u>	Inches in Ship <u>3 1/2</u>	Inches per Rule <u>3 1/2</u>	" From M'n. to Up. or Spar Dk. Sh'rstrake <u>-</u>	Inches in Ship <u>-</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
<b>REVERSED FRAMES</b> , Angle Iron <u>3</u>	Inches in Ship <u>3</u>	Inches per Rule <u>2 1/2</u>	" Up. or Spar Dk. Sh'rstrake, br'dth & thickness <u>-</u>	Inches in Ship <u>-</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships <u>15 1/2</u>	Inches in Ship <u>15 1/2</u>	Inches per Rule <u>12</u>	Butt Straps to outside plating, breadth & thickness <u>16 3/4</u>	Inches in Ship <u>16 3/4</u>	Inches per Rule <u>10</u>	Inches in Ship <u>22 1/2</u>
" thickness at the ends of vessel <u>11</u>	Inches in Ship <u>11</u>	Inches per Rule <u>11</u>	Lengths of Plating <u>7 frame spaces</u>	Inches in Ship <u>7</u>	Inches per Rule <u>32</u>	Inches in Ship <u>32</u>
" depth at 3/4 the half-bdth. as per Rule <u>8</u>	Inches in Ship <u>8</u>	Inches per Rule <u>7 3/4</u>	Shifts of Plating, and Stringers <u>3 frame spaces</u>	Inches in Ship <u>3</u>	Inches per Rule <u>14</u>	Inches in Ship <u>14</u>
" height extended at the Bilges <u>31</u>	Inches in Ship <u>31</u>	Inches per Rule <u>31</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness <u>40</u>	Inches in Ship <u>40</u>	Inches per Rule <u>14</u>	Inches in Ship <u>14</u>
<b>BEAMS</b> , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>7</u>	Inches in Ship <u>7</u>	Inches per Rule <u>5</u>	Angle Iron on ditto <u>4 x 3 x 11</u>	Inches in Ship <u>4 x 3 x 11</u>	Inches per Rule <u>4 x 3 x 11</u>	Inches in Ship <u>4 x 3 x 11</u>
Single or double Angle Iron on Upper edge <u>7</u>	Inches in Ship <u>7</u>	Inches per Rule <u>5</u>	Tie Plates fore and aft, outside Hatchways <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>14</u>	Inches in Ship <u>14</u>
Average space <u>44</u>	Inches in Ship <u>44</u>	Inches per Rule <u>44</u>	Diagonal Tie Plates on Beams No. of Pairs <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>14</u>	Inches in Ship <u>14</u>
<b>BEAMS</b> , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>6</u>	Inches in Ship <u>6</u>	Inches per Rule <u>4 1/2</u>	Flat of Up., Spar, or Awning Dk. <u>3 1/2</u>	Inches in Ship <u>3 1/2</u>	Inches per Rule <u>3 1/2</u>	Inches in Ship <u>3 1/2</u>
Single or double Angle Iron, on Upper Edge <u>6</u>	Inches in Ship <u>6</u>	Inches per Rule <u>4 1/2</u>	How fastened to Beams <u>galvanised iron screw bolts</u>	Inches in Ship <u>-</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
Average space <u>44</u>	Inches in Ship <u>44</u>	Inches per Rule <u>44</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness <u>-</u>	Inches in Ship <u>-</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
<b>BEAMS</b> , Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron <u>12</u>	Inches in Ship <u>12</u>	Inches per Rule <u>16</u>	Is the Stringer Plate attached to the outside plating? <u>yes</u>	Inches in Ship <u>yes</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
Single or double Angle Iron on Upper Edge <u>12</u>	Inches in Ship <u>12</u>	Inches per Rule <u>16</u>	Angle Irons on ditto, No. <u>2</u>	Inches in Ship <u>2</u>	Inches per Rule <u>13</u>	Inches in Ship <u>13</u>
Average space <u>44</u>	Inches in Ship <u>44</u>	Inches per Rule <u>44</u>	Tie Plates, outside Hatchways <u>3 1/2 x 2 1/2 x 11</u>	Inches in Ship <u>3 1/2 x 2 1/2 x 11</u>	Inches per Rule <u>3 1/2 x 3 1/2 x 11</u>	Inches in Ship <u>3 1/2 x 3 1/2 x 11</u>
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>16</u>	Diagonal Tie Plates on Beams, No. of pairs <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>12</u>	Inches in Ship <u>12</u>
" Rider Plate <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>16</u>	Flat of Middle Deck do. <u>do.</u>	Inches in Ship <u>do.</u>	Inches per Rule <u>do.</u>	Inches in Ship <u>do.</u>
" Bulb Plate to Intercostal Keelson <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	How fastened to Beams <u>yes</u>	Inches in Ship <u>yes</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
" Angle Irons <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams <u>23</u>	Inches in Ship <u>23</u>	Inches per Rule <u>13</u>	Inches in Ship <u>13</u>
" Double Angle Iron Side Keelson <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Is the Stringer Plate attached to the outside plating? <u>yes</u>	Inches in Ship <u>yes</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
" Side Intercostal Plate <u>10</u>	Inches in Ship <u>10</u>	Inches per Rule <u>10</u>	Angle Irons on ditto, No. <u>2</u>	Inches in Ship <u>2</u>	Inches per Rule <u>12</u>	Inches in Ship <u>12</u>
" do. Angle Irons <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Stringer or Tie Plates, outside Hatchways <u>9</u>	Inches in Ship <u>9</u>	Inches per Rule <u>12</u>	Inches in Ship <u>12</u>
" Attached to outside plating with angle iron <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Flat of Lower Deck <u>White pine</u>	Inches in Ship <u>White pine</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
<b>BILGE</b> Angle Irons <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Ceiling betwixt Decks, thickness and material <u>1 1/2 Pine spanning</u>	Inches in Ship <u>1 1/2 Pine spanning</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
" do. Bulb Iron <u>6 1/2</u>	Inches in Ship <u>6 1/2</u>	Inches per Rule <u>11</u>	" in hold do. do. <u>2 1/2 Pine</u>	Inches in Ship <u>2 1/2 Pine</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
" do. Intercostal plates riveted to plating for length <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Main piece of Rudder, diameter at head <u>5</u>	Inches in Ship <u>5</u>	Inches per Rule <u>1 1/2</u>	Inches in Ship <u>1 1/2</u>
<b>BILGE STRINGER</b> Angle Irons <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	" do. at heel <u>3</u>	Inches in Ship <u>3</u>	Inches per Rule <u>2 3/4</u>	Inches in Ship <u>2 3/4</u>
" Intercostal plates riveted to plating for length <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Can the Rudder be unshipped afloat? <u>yes</u>	Inches in Ship <u>yes</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>
<b>SIDE STRINGER</b> Angle Irons <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>3</u>	Bulkheads No. <u>6</u> No. per Rule <u>4</u>	Inches in Ship <u>4</u>	Inches per Rule <u>-</u>	Inches in Ship <u>-</u>

The **FRAMES** extend in one length from keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.  
The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to main deck and to lower deck alternately  
**KEELSONS**. Are the various lengths of Plates and Angle Irons properly connected? yes And butts properly shifted? yes

**PLATING**. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.  
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from centre to centre.  
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 ins. from centre to centre.  
" Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.  
" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.  
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from cr. to cr.  
" Edges of Main Sheerstrake, double or single riveted. **Upper Sheerstrake**, double or single riveted.  
" Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
" Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.  
" Breadth of laps of plating in double riveting 5 1/4 + 4 1/2 Breadth of laps of plating in single riveting 3

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble No. of Breasthooks, 3 Crutches, deep floors  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Mild steel, tested as required.  
Manufacturer's name or trade mark, Frames, reversed frames, floors, keelsons by the Steel Co. of Scotland; Shell plates by Parkhead & Steel Co. of Glasgow; Beams, Butt Straps, &c. by the Steel Co. of Scotland.  
The above is a correct description.  
Builder's Signature, David W. Henderson & Co. Surveyor's Signature, G. Stanbury  
Surveyor to Lloyd's Register of British and Foreign Shipping.



1174 glos  
Workmanship. Are the butts of plating planed or otherwise fitted? planed  
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  
Are the fillings between the ribs and plates solid single pieces? yes  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? yes  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? yes  
Do any rivets break into or through the seams or butts of the plating? a few

Masts, Bowsprit, Yards, &c., are new in good condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials,  
and if stamped with Maker's name.  
State also Length and Diameter of Lower Masts and Bowsprit Two pitch pine pole masts carrying a light fore

and aft rig.  
Fore mast 88 feet long over all, 18 inches diameter at the partners.  
Main mast 80 do do 17 1/2 do do do.

NUMBER for EQUIPMENT 11298		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
N <sup>o</sup> .	SAILS.	CABLES, &c.										
	Fore Sails,	Chain .....										
	Fore Top Sails,	Iron Stream Chain										
	Fore Topmast Stay Sails,	or Steel Wire ..										
		or Hempen Strm Cable .....										
		Towline, Hemp.										
		or Steel Wire ..										
Main Sails,		Hawser .....										
Main Top Sails,		Warp .....										
and		quality <u>good</u>										

Standing and Running Rigging of galv'd iron wire rope sufficient in size and good in quality. She has 2 Long Boats and one life boat  
The Windlass is Napier's patent, on forecable Capstan none and Rudder good Pumps good, as per approved plan.

Engine Room Skylights. How constructed? Leak tight on iron coverings How secured in ordinary weather? galvanised iron rods  
What arrangements for deadlights in bad weather? Jarpanlins.

Coal Bunker Openings. How constructed? cast iron roundheads How are lids secured? self locking Height above deck? flush

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Three wash ports and three  
scuppers on each side.

Cargo Hatchways. How formed? Iron coverings  
State size Main Hatch 12'-6" x 9'-0" Fore hatch 9'-0" x 8'-0" Quarter hatch 9'-0" x 8'-0"

If of extraordinary size, state how framed and secured? One wood fore and after  
What arrangement for shifting beams? in each hatchway

Hatches, If strong and efficient? yes.

Order for Special Survey No. 2082  
Date 14<sup>th</sup> April 1885  
Order for Ordinary Survey No. ✓  
Date ✓  
No. 322 in builder's yard.  
State dates of letters respecting this case Secretary's letters dated 9<sup>th</sup> April '85 and 5<sup>th</sup> Sept. '85.

General Remarks (State quality of workmanship, &c.)  
This vessel has been built in accordance with the approved arrangements shown on the three accompanying tracings, and otherwise in accordance with the rules. The workmanship and material are good throughout, and the steel used has been tested at the manufacturers as required by the rules.  
The fore and after peaks have been tested by being filled with water, and the after water ballast tank has also been tested by a head of water above the load line. The floors in the ballast tank are fitted to every frame continuous from the middle line to the margin plate, as shown on the approved sketch of midship section.  
The inner bottom plating is of iron excepting the margin plates which are of steel. The bulkheads are also of iron.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, 34 ft. 6 ft. 28 ft. (If double bottom, state particulars on separate form.)  
How are the surfaces preserved from oxidation? Inside barren and paint Outside paint

I am of opinion this Vessel should be Classed \*100A.1. Steel Two decks, two tiers of beams. Bulkheads of iron.  
The amount of the Entry Fee .....£ 3 : - : - is received by me, 28/10/ 1885  
Special .....£ 20 : 13 : -

(to be sent as per margin). Certificate ... : :  
(Travelling Expenses, if any, £ - - -).

Committee's Minute FRIDAY 30 OCT 1885  
Character assigned 100A.1 Steel

JBW  
part cellular steel bottom, as per approved  
Lloyd's Register