

# IRON SHIP.

4425

No. 4425 Survey held at Dundee Date, First Survey 17<sup>th</sup> Nov 1880 Last Survey 31<sup>st</sup> August 1881

On the S.S. *Haverley*

<b>Tonnage</b> under Tonnage Deck } <b>2766.84</b>	<b>ONE OR TWO DECKED, THREE DECKED VESSEL,</b>	Master <i>A. Burgess</i>
Ditto of Third, Spar, Deck } <b>206.36</b>	<del>SPAR, OR AWNING DECKED VESSEL.</del>	Built at <i>Dundee</i>
Ditto of Poop, Deck } <b>60.51</b>	Half Breadth (moulded) ... .. <b>20.00</b>	When built <i>1881</i> Launched <i>28<sup>th</sup> July</i>
Ditto of Houses on Deck } <b>10.13</b>	Depth from upper part of Keel to top of Upper Deck Beams <b>30.375</b>	By whom built <i>Cowley Bros &amp; Co.</i>
Ditto of Forecastle Deck } <b>48.55</b>	Girth of Half Midship Frame (as per Rule) ... .. <b>45.46</b>	Owners <i>Williamson Milligan &amp; Co.</i>
Gross Tonnage } <b>3096.13</b>	1st Number, if a 3-Decked Vessel .. deduct 7 feet <b>7.00</b>	Residence <i>Liverpool</i>
Less Crew Space } <b>83.33</b>	Length .. .. <b>338.16</b>	Port belonging to <i>Liverpool</i>
Less Engine Room } <b>990.76</b>	2nd Number .. .. <b>30038.75</b>	Destined Voyage <i>Cape of Good Hope</i>
Register Tonnage as cut on Beam } <b>2022.04</b>	Proportions— Breadths to Length .. .. <b>8.45</b>	If Surveyed while Building, Afloat, or in Dry Dock. <i>Surveyed while building</i>
	Depths to Length— Upper Deck to Keel .. .. <b>11.13</b>	
	Main Deck ditto .. .. <b>14.78</b>	

LENGTH on deck as per Rule ...	Feet. Inches. <b>338 2</b>	BREADTH— Moulded ...	Feet. Inches. <b>40 0</b>	DEPTH top of Deck Beams to Upper Deck Beams .. ..	Feet. Inches. <b>26 10 1/2</b>	Power of Engines ...	Horse. <b>320</b>	Nº. of Decks with flat laid	<i>two &amp; 1/2</i>
				Do. do. Main Deck Beams .. ..	Feet. Inches. <b>19 4 1/2</b>			Nº. of Tiers of Beams	<i>three</i>

Dimensions of Ship per Register, length, 340.0 breadth, 40.7 depth, 26.8

<b>KEEL</b> , depth and thickness ...	<i>Centre through plate</i>			<b>PLATES</b> in Garboard Strakes, br'dth & thickness	<i>36 12 36 12</i>		
<b>STEM</b> , moulding and thickness ...	<i>10 x 3</i>	<i>11 x 2 3/4</i>		From Garboard to upper part of Bilges ...	<i>11 x 10</i>	<i>11 x 10</i>	
<b>STERN-POST</b> for Rudder do. do. ...	<i>12 x 5</i>	<i>11 x 5 1/2</i>		Of Bilge, <i>increased thickness</i>	<i>12</i>	<i>12</i>	
" " for Propeller ...	<i>12 x 5</i>	<i>11 x 5 1/2</i>		From up. prt of Bilge to lr. edge of Sh'rstrake ...	<i>12 x 11</i>	<i>12 x 11</i>	
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	<i>24</i>	<i>24</i>		Main Sheerstrake, breadth and thickness ...	<i>40 14 40 14</i>		
<b>FRAMES</b> , Angle Iron, for 3/4 length amidships ...	<i>5 1/2 3 1/2 8</i>	<i>5 1/2 3 1/2 8</i>		Of Bilge at Sh'rstrake & Ings applied			
Do. for 1/2 at each end ...	<i>3 1/2 3 1/2 8</i>	<i>3 1/2 3 1/2 8</i>		Upper Sp'r Deck Strakes, br'dth & thickness ...			
<b>REVERSED FRAMES</b> , Angle Iron ...	<i>3 1/2 3 1/2 8</i>	<i>3 1/2 3 1/2 8</i>		Butt Straps to outside plating, breadth & thickness	<i>19 1/2 15 1/2 9 19 1/2 15 1/2 9</i>		
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ...	<i>cellular double bottom</i>			Lengths of Plating	<i>in frame spaces</i>		
" thickness at the ends of vessel ...				Shifts of Plating, and Stringers <i>not less than two frame spaces</i>			
" depth at 3/4 the half-bdth. as per Rule ...				Gunwale Plate on ends of <i>Upper Deck Beams, breadth and thickness ...</i>	<i>4 1/2 9 4 1/2 9</i>		
" height extended at the Bilges ...				Angle Iron on ditto ...	<i>4 1/2 x 9 4 1/2 x 9</i>		
<b>BEAMS</b> , Upper, Spar, or Awning Deck } Single <i>double</i> Angle Iron on Upper edge ...	<i>7 7 7 7</i>	<i>7 7 7 7</i>		Flat of Up., Spar, or Awning Dk. <i>from complete with wood 2 1/2 inches</i>	<i>7 5 6 7 5 6</i>		
Average space ...	<i>on every frame</i>			How fastened to Beams ...	<i>iron deck riveted, wood deck with 2 cross bolts</i>		
<b>BEAMS</b> , Main, or Middle Deck } Single <i>double</i> Angle Iron, on Upper Edge ...	<i>7 1/2 7 7 1/2 7</i>	<i>7 1/2 7 7 1/2 7</i>		Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ...	<i>4 1/2 10 4 1/2 10</i>		
Average space ...	<i>on every frame</i>			Is the Stringer Plate attached to the outside plating?	<i>Yes</i>		
<b>BEAMS</b> , Lower Deck } Single <i>double</i> Angle Iron on Upper Edge ...	<i>10 10 10 10</i>	<i>10 10 10 10</i>		Angle Irons on ditto, No. <i>2</i>	<i>4 1/2 x 9 4 1/2 x 9</i>		
Average space ...	<i>on alternate frames</i>			Tie Plates, outside Hatchways ...	<i>4 1/2 x 9 4 1/2 x 9</i>		
<b>BEAMS</b> , Hold, or Orlop } Single <i>double</i> Angle Iron, on Upper Edge ...	<i>3 1/2 3 1/2 7 3 1/2 3 1/2 7</i>	<i>3 1/2 3 1/2 7 3 1/2 3 1/2 7</i>		Flat of Middle Deck* do. do. <i>from complete</i>	<i>7 5 6 7 5 6</i>		
Average space ...				How fastened to Beams	<i>riveted</i>		
<b>KEELSONS</b> Centre line, <i>Circle through plate</i> } <i>4 1/2 x 4 1/2 x 9 1/6</i>				Stringer Plates on ends of Lower Deck, <i>Hold</i> Beams ...	<i>4 1/2 9 4 1/2 9</i>		
" Intercostal Plates ...				Is the Stringer Plate attached to the outside plating?	<i>Yes</i>		
" Bulb Plate to Intercostal Keelson ...				Angle Irons on ditto, No. <i>2</i>	<i>4 1/2 x 9 4 1/2 x 9</i>		
" Angle Irons ...				Stringer or Tie Plates, outside Hatchways	<i>17 10 17 10</i>		
" Double Angle Iron Side Keelson ...				Flat of Lower Deck *			
" Side Intercostal Plate ...				Ceiling betwixt Decks, thickness and material ...	<i>2 1/2 A. Blu</i>		
" Attached to outside plating with <i>Circle through plate</i> ...				" in hold do. do. ...	<i>4 B. Pine</i>		
" <i>Circle through plate</i> ...				Main piece of Rudder, diameter at head ...	<i>8</i>		
" <i>Circle through plate</i> ...				do. at heel ...	<i>8</i>		
" <i>Circle through plate</i> ...				Can the Rudder be unshipped afloat? <i>Yes</i>	<i>4</i>		
" <i>Circle through plate</i> ...				Bulkheads No. <i>5</i> No. per Rule <i>4</i>	<i>7 5 6 7 5 6</i>		
" <i>Circle through plate</i> ...				" Thickness of <i>7 1/6 15 6 1/6</i>			
" <i>Circle through plate</i> ...				" Height up <i>No 1 &amp; 4 to upper deck. No 2, 3 &amp; 5 to lower deck but fitted with horns</i>			
" <i>Circle through plate</i> ...				" How secured to sides of ship <i>double frames</i>			
" <i>Circle through plate</i> ...				" Size of Vertical Angle Irons <i>3 1/2 x 3 1/2 x 9/16</i> and distance apart <i>30 ins.</i>			
" <i>Circle through plate</i> ...				" Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>			

The **FRAMES** extend in *three* length from *Keel* to *gunwale* Riveted through plates with *7/8* in. Rivets, about *6* apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from *middle line* to *main deck* and to *upper 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 1/2* in. diameter, averaging *5 1/2* ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 1/2* ins. from centre to centre.

Butts of *3* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *7/8* thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double *single* riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.

Edges of Main Sheerstrake, double *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 1/2 x 6 1/2*. Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble *double or single* Riveted? No. of Breasthooks, *5* Crutches, *5*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Widney ship plate*

Manufacturer's name or trade mark *Duffin - Orman & Co. H<sup>c</sup> - Plates from Head H<sup>c</sup> - Bolton & Vaughan H<sup>c</sup> - Rowell & Cleveland & Brown H<sup>c</sup>*

The above is a correct description.

Builder's Signature, *Cowley Brothers & Co* Surveyor's Signature, *W. Cooper*

Surveyor to Lloyd's Register of British and Foreign Shipping.

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel. \* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

Official Number 84

Cellular double bottom

Form No. 1 for Iron Ship

