

# IRON SHIP.

No. 1256 Survey held at *Sunderland* Date, First Survey *September 9<sup>th</sup> 80* Last Survey *January 12<sup>th</sup> 1881*  
 On the *S.S. "Violet"* *Yard No. 163* Master *A. Ross*

<b>TONNAGE</b> under Tonnage Deck } <i>1214.26</i>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <i>Sunderland</i>
<i>Reckonings</i> } <i>76.12</i>	SPAR, OR AWNING DECKED VESSEL.	When built <i>1880</i> Launched <i>Dec 13<sup>th</sup></i>
Ditto of Poop, or <i>Reckonings</i> } <i>-64.73</i>	<b>HALF BREADTH</b> (moulded) ... .. Feet <i>17.50</i>	By whom built <i>J. L. Thompson &amp; Sons</i>
Ditto of Houses } <i>117.29</i>	<b>DEPTH</b> from upper part of Keel to top of Upper Deck Beams <i>19.54</i>	Owners <i>Messrs Gordon &amp; Stamps</i>
Ditto of Forecabin } <i>37.21</i>	<b>GIRTH</b> of Half Midship Frame (as per Rule) ... .. <i>33.42</i>	Port belonging to <i>London</i>
Gross Tonnage } <i>1509.61</i>	<b>1st NUMBER</b> ... .. <i>70.46</i>	Destined Voyage <i>Coasting</i>
Less Crew Space } <i>45.53</i>	<b>1st NUMBER, if 2-DECKED VESSEL, about 1 foot</b> <i>247</i>	<input checked="" type="checkbox"/> Surveyed while Building, Afloat, or in Dry Dock.
Less Engine Room } <i>483.08</i>	<b>LENGTH</b> ... .. <i>247</i>	
Register Tonnage } <i>981.00</i>	<b>2nd NUMBER</b> ... .. <i>17,403</i>	
as cut on Beam } <i>981.00</i>	<b>PROPORTIONS</b> —Breadths to Length ... .. <i>7.05</i>	
	Depths to Length—Upper Deck to Keel ... .. <i>12.6</i>	
	Main Deck ditto ... ..	

<b>LENGTH</b> on deck as per Rule ... .. <i>247</i>	<b>BREADTH</b> Moulded ... .. <i>35</i>	<b>DEPTH</b> top of Floors to Upper Deck Beams ... .. <i>17</i>	<b>DEPTH</b> Do. do. Main Deck Beams ... .. <i>6</i>	Power of Engines ... .. <i>160</i>	Horse. <i>160</i>	No. of Decks with flat laid <i>one</i>	No. of Tiers of Beams <i>two</i>
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Dimensions of Ship per Register, length, *248* breadth, *35.3* depth, *17.6*

	Inches in Ship.		Inches per Rule.		Flat Keel Plates, breadth and thickness ... ..	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
	In Ship.	In Ship.	Inches	16ths					
<b>KEEL</b> , depth and thickness ... ..	<i>9</i>	<i>2 1/2</i>	<i>9</i>	<i>2 1/2</i>	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges ... ..	<i>43</i>	<i>11</i>	<i>36</i>	<i>11</i>
<b>STEM</b> , moulding and thickness ... ..	<i>8 1/2</i>	<i>2 1/2</i>	<i>8 1/2</i>	<i>2 1/2</i>	" of doubling at Bilge, or increased thickness, and length applied ... ..	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>
<b>STERN-POST</b> for Rudder do. do. ... ..	<i>8 1/2</i>	<i>5</i>	<i>8 1/2</i>	<i>5</i>	" fm up. part of Bilge to Ir. edge of Sh'rstrake. ... ..	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>
" " for Propeller ... ..	<i>8 1/2</i>	<i>5</i>	<i>8 1/2</i>	<i>5</i>	" Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. ... ..	<i>40</i>	<i>14</i>	<i>40</i>	<i>14</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..	<i>24</i>		<i>24</i>		" Up. or Spar Dk Sh'rstrake, brdth & thickness				
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships ... ..	<i>4 1/2</i>	<i>3</i>	<i>4 1/2</i>	<i>3</i>	Butt Straps to outside plating, breadth & thickness	<i>9 1/2</i>	<i>19</i>	<i>8 1/2</i>	<i>19</i>
Do. for 1/3 at each end ... ..	<i>4 1/2</i>	<i>3</i>	<i>4 1/2</i>	<i>3</i>	Lengths of Plating ... ..	<i>Five</i>	<i>spaces</i>	<i>of</i>	<i>frames</i>
<b>REVERSED FRAMES</b> , Angle Iron ... ..	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	Shifts of Plating, and Stringers ... ..	<i>Two</i>	<i>3</i>	<i>2</i>	<i>2</i>
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ... ..	<i>2 1/2</i>	<i>9</i>	<i>2 1/2</i>	<i>9</i>	Gunwale Plate on ends of <i>Awning Spar</i> , or Upper Deck Beams, breadth and thickness ... ..	<i>36</i>	<i>10</i>	<i>36</i>	<i>10</i>
" thickness at the ends of vessel ... ..	<i>8</i>	<i>7</i>	<i>8</i>	<i>7</i>	Angle Iron on ditto ... ..	<i>5.4</i>	<i>9</i>	<i>5.4</i>	<i>9</i>
" depth at 2/3 the half-bdth. as per Rule ... ..	<i>10 3/4</i>		<i>10 3/4</i>		Tie Plates fore and aft, outside Hatchways	<i>Iron</i>	<i>Deck</i>		
" height extended at the Bilges ... ..	<i>4 1/2</i>		<i>4 1/2</i>		Diagonal Tie Plates on Beams No. of Pairs				
<b>BEAMS</b> , Upper, Spar, or Awning Deck ... ..	<i>5 1/2</i>	<i>3</i>	<i>5 1/2</i>	<i>3</i>	Planksheer material and scantling ... ..				
do. Middle Ang. Iron, Plate or Tee Bulb Iron ... ..	<i>4 1/2</i>	<i>3</i>	<i>4 1/2</i>	<i>3</i>	Waterways do. do. ... ..				
do. double Angle Iron on Upper edge ... ..	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Flat of Upper Deck do. do. <i>Iron plates</i>	<i>8.7.6.5</i>		<i>8.7.6.5</i>	
Average space ... ..	<i>as per profile</i>		<i>as per profile</i>		How fastened to Beams ... ..	<i>Rivets</i>			
<b>BEAMS</b> , Main, or Middle Deck ... ..					Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... ..				
do. single, or double Angle Iron, on Upper Edge ... ..					Is the Stringer Plate attached to the outside plating?				
Average space ... ..	<i>From five to ten frames</i>		<i>From five to ten frames</i>		Angle Irons on ditto, No. ... ..	<i>Three</i>		<i>4.4.9</i>	<i>4.4.9</i>
<b>KEELSONS</b> Centre line, single or double plate, ... ..	<i>17</i>	<i>12</i>	<i>17</i>	<i>12</i>	Tie Plates, outside Hatchways ... ..	<i>5.4.9</i>		<i>5.4.9</i>	<i>5.4.9</i>
do. or Intercostal Plates ... ..	<i>11</i>	<i>12</i>	<i>11</i>	<i>12</i>	Diagonal Tie Plates on Beams, No. of pairs				
" Rider Plate ... ..					Waterways materials and scantlings ... ..				
" Bulb Plate to Intercostal Keelson ... ..	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	Flat of Middle Deck do. do. ... ..				
" Angle Irons ... ..	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	How fastened to Beams ... ..				
" Double Angle Iron Side Keelson ... ..	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	Stringer Plates on ends of <i>Lower Deck, Hold</i> or <i>Orlop</i> Beams ... ..	<i>32</i>	<i>9</i>	<i>32</i>	<i>9</i>
" Side Intercostal Plate ... ..		<i>8</i>		<i>8</i>	Is the Stringer Plate attached to the outside plating?	<i>Yes</i>			
" do. Angle Irons ... ..	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	Angle Irons on ditto, No. <i>three</i> ... ..	<i>4.4.9</i>		<i>4.4.9</i>	<i>4.4.9</i>
" Attached to outside plating with angle iron	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	Stringer or Tie Plates, outside Hatchways	<i>5.4.9</i>		<i>5.4.9</i>	<i>5.4.9</i>
<b>BILGE</b> Angle Irons ... ..	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	Flat of Lower Deck ... ..				
do. Bulb Iron ... ..	<i>22</i>	<i>7</i>	<i>22</i>	<i>7</i>	Ceiling betwixt Decks, thickness and material ... ..	<i>10.9.1 1/4</i>	<i>bottom</i>	<i>6</i>	<i>space</i>
do. Intercostal plates riveted to plating for length					" in hold do. do. ... ..	<i>2 1/2</i>	<i>Solid</i>	<i>to</i>	<i>Bilges</i>
<b>BILGE STRINGER</b> Angle Irons ... ..	<i>5</i>	<i>4</i>	<i>5</i>	<i>4</i>	Main piece of Rudder, diameter at head ... ..	<i>6 1/4</i>		<i>6 1/4</i>	
Intercostal plates riveted to plating for length					" do. at heel ... ..	<i>3 1/4</i>		<i>3 1/4</i>	
<b>SIDE STRINGER</b> Angle Irons ... ..					Can the Rudder be unshipped afloat? <i>Yes</i>				
ransoms, material. Knight-heads. Hawse Timbers. <i>Iron</i>					Bulkheads No. <i>4</i> Thickness of <i>5.6</i>				
Windlass <i>Harfield's patent</i> PA R R R Secured to plates <i>Yes</i>					" Height up <i>To upper Deck</i>				
The FRAMES extend in one length from <i>Keel</i> to <i>gunwale</i> Riveted through plates with <i>7/8</i> in. Rivets, about <i>6</i> in.					" How secured to sides of ship <i>between double frames</i>				
The REVERSED ANGLE IRONS on floors and frames extend from middle line to <i>H<sup>2</sup>D<sup>2</sup> Sta angle</i> and to <i>gunwale</i> alternately					Size of Vertical Angle Irons <i>3.3.7/16</i> and distance apart <i>30</i> ins.				
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? <i>Yes</i> And butts properly shifted? <i>Yes</i>					Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>				
PLATING. Garboard, double riveted to Keel, with rivets <i>1 1/8</i> in. diameter, averaging <i>5 1/2</i> ins. from centre to centre.									
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets <i>7/8</i> in. diameter, averaging <i>3 1/2</i> ins. from centre to centre.									
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets <i>7/8</i> in. diameter averaging <i>3 1/2</i> ins. from centre to centre.									
Butts of <i>three</i> Strakes at Bilge for <i>half</i> length, treble riveted with Butt Straps <i>1/16</i> thicker than the plates they connect.									
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets <i>7/8</i> in. diameter, averaging <i>3 1/2</i> ins. from cr. to cr.									
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets <i>7/8</i> in. diameter, averaging <i>3 1/2</i> ins. from cr. to cr.									
Edges of Main Sheerstrake, double or single riveted. <i>Upper Sheerstrake, double or single riveted.</i>									
Butts of Main Sheerstrake, treble riveted for <i>half</i> length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.									
Butts of Main Stringer Plate, treble riveted for <i>1/2</i> length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.									
Breadth of laps of plating in double riveting <i>5 1/4</i> Breadth of laps of plating in single riveting <i>Nil</i>									
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <i>Double and Treble</i>									
Waterway, how secured to Beams <i>Iron Deck</i> (Explain by Sketch, if necessary.)									
Beams of the various Decks, how secured to the sides? <i>Bracket knees riveted to frs</i> No. of Breasthooks, <i>5</i> Crutches, <i>three</i>									
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <i>Angles &amp; Bulbs S. T. Jackson &amp; Co</i>									
Manufacturer's name or trade mark, <i>Plates</i> <i>Consett Iron Co.</i> <i>Stockton Mar. S. Co.</i>									

The above is a correct description.

Builder's Signature, *Joseph L. Thompson & Sons* Surveyor's Signature, *W. Mowbray*

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

3000 (17)

560939-0109

**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? *in a few cases at the butts only*

Masts, Bowsprit, Yards, &c., are *Wood* 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

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W <sup>g</sup> t req'd per Rule.	Machine where Tested & Suprntd.
								Bower Anchors	Stream					
	Chain	.....	270	1 1/16	47 5/10	66 5/10	270.1 1/10	Oct 25/80	8731	26.1.0	25.16.1.0	25.2.0	Oct 7/80	
	Fore Sails,	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)							8763	25.3.0	25.8.0.14	25.2.0	" 21/80	
	Fore Top Sails,	Iron Str'm Chain	75	1	18.27	75.1	Oct 22/80	8774	22.2.14	22.16.3.14	21.3.0	" 26/80		
	Fore Topmast Stay Sails,	Ditto do.	<i>Tested at R.W.C.P.S. by J. Hartneff</i>											
	Main Sails,	Hmpn Strm Cbl	90	10		90.10			8768	8.3.0	10.17.2.0	8.2.0	" 23/80	
	Main Top Sails, and	Hawser ...	160	8 1/2		8 1/2			8556	4.1.0	6.12.2.0	4.1.0	Aug 7/80	
		Towlines ...	180	6		6			8724	2.1.8	4.17.2.0	2.1.0	Oct 4/80	
		Warp ...	160	5					<i>Tested at R.W.C.P.S. by J. Hartneff</i>					
		quality	good	200	4 1/2									

Standing and Running Rigging *G.I.W.C. Rope* sufficient in size and *good* in quality. She has *two* lifeboats and *one* other. The Windlass is *Hartfield's Patent* Capstan *4* Winches and Rudder *good*. Pumps *Three* hand, *good*. Engine Room Skylights.—How constructed? *Wood Sk. L<sup>t</sup> Iron Coam<sup>g</sup>* How secured in ordinary weather? *hand Screws*  
 What arrangements for deadlights in bad weather? *Solid Shutters fitted with Bulls eyes*  
 Coal Bunker Openings.—How constructed? *Iron Coam<sup>g</sup>* How are lids secured? *hatch Bars* Height above deck? *18 ft 36 ins*  
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Scuppers and Poits fitted in the Bulwarks*  
 Cargo Hatchways.—How formed? *Iron Plates as Section and Profile Strengthened with Bracket Knees*  
 State size Main Hatch *22 1/4 x 15 1/2 ft* Forehatch *16 1/4 ft x 15 1/2 ft* Quarterhatch *22 1/4 ft x 15 1/2 ft & 24 ft x 15*  
 If of extraordinary size, state how framed and secured? *Fixed Beams as per Profile also shifting*  
 What arrangement for shifting beams? *Beams and three Iron Truss and aft Carriage*  
 Hatches, If strong and efficient? *Solid and efficient*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	in builder's yard.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
2906	3 <sup>rd</sup> Aug 1880			103		18.	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid...	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped
							<i>Built under 7s. and Surveyed 1880 Sep. 9 20 21 23 30 Oct 4 8 11 19 22 27 Nov. 3 4 6 10 12 18 23 26 29 Dec. 2 3 6 7 8 9 10 11 15 31</i>				

General Remarks (State quality of workmanship, &c.) *Good.* See Letters dated 27<sup>th</sup> Feb, 13<sup>th</sup> & 20<sup>th</sup> Oct 79.  
 This vessel is sister ship to S.S. "Beckton" Rep<sup>n</sup> 12,487.  
 She has a Full Poop 28 3/4 ft long; Bridge House 46 ft long and Topgallant Forecastle 26 1/2 ft long.  

Fore peak Tank	18	47
After - " - "	18	45
Fore Hold - " - "	44	110
After - " - "	40	90
- " - 2 <sup>nd</sup> Division	40	105

 The Fore<sup>nd</sup> and After Tanks are fitted as Tanks for trimming purposes. The Ballast Tank in the fore Hold is 44 ft long containing 110 Tons that in the after Hold has a division, Forward length is 40 ft containing 90 Tons; after division 40 ft long, containing 105 Tons. Each has been now tested as per Rule and proved efficient. Wing Boards are fitted in each Hold.  
 The Rules in all respects have been conformed to also the Enclosed Mid. Sec. and Profile, and letters above referred to the instructions carried out satisfactorily.

State if one, two, or three decked vessel, or if open, or covering decked, and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.  
 How are the surfaces preserved from oxidation? Inside *100.A.1* Cement to Bilges Paints above Outside *Paint*  
 I am of opinion this Vessel should be Classed *100A.1*  
 The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *J.W.*  
 Special ... £ 61 : 12 : 0 19<sup>th</sup> January 1881  
 Certificate ...  
 (Travelling Expenses, if any, £ nil.)  
 Committee's Minute 18  
 Character assigned *100A.1*  
*J.W.*  
*J. Hartneff*  
 Surveyor to Lloyd's Register of British and Foreign Shipping  
 The vessel is built in accordance with the rules and appears eligible to be classed *100 A.1* as recommended by the Register  
 2 tiers of beams  
 1 deck  
 1 iron deck  
 3/11/81

The Surveyors are requested not to write on or below the space for Committee's Minute.

No. 434  
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