

IRON SHIPS.

No. 248 Survey held at Penryn Date 14 May 1894
 on the Iron Screw Steamer Vigilant Master Swede
 Tonnage under tonnage deck 220.08 Built at Penryn When built 1886 Launched April 18
 Ditto of poop or spar deck
 Ditto of engine room 10.45 By whom built Henderson, Olmsted & Co. Owners W. Henderson
 Total Register tonnage 149.33 Port belonging to Copenhagen Destined Voyage Sweden
 Gross tonnage 220.08
 Surveyed while Building, Afloat, or in Dry Dock Whilst Building and Afloat

Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Horse.	Nº. of Decks
Length aloft	<u>115.8</u>	Extreme Breadth	<u>22.1</u>	Depth from top of Upper Deck Beam to top of Floor	<u>12.43</u>	Power of Engines	<u>40</u>
Dimensions of Ship per Register, length <u>115.8</u> breadth <u>22.1</u> depth <u>12.25</u>							
Keel, if bar iron, depth and thickness	<u>1 1/8 x 1 3/4</u>	Inches in Ship.	<u>6 1/4 x 2</u>	Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness	<u>33</u>
" if plate iron, breadth and thickness	<u>1 1/8 x 1 3/4</u>		<u>6 1/4 x 2</u>			Ditto from Garboard to upper part of Bilges	<u>1 1/8</u>
Stem, if bar iron, moulding and thickness	<u>1 1/8 x 1 3/4</u>		<u>6 1/4 x 2</u>			" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	<u>1 1/8</u>
" if plate iron, breadth and thickness	<u>1 1/8 x 1 3/4</u>		<u>6 1/4 x 2</u>			" from 3/4ths depth of Hold to lower edge of Sheerstrake	<u>1 1/8</u>
Stern-post, if bar iron, moulding and thickness	<u>1 1/8 x 4</u>		<u>6 1/4 x 4</u>			" Sheerstrake, breadth and thickness	<u>35</u>
" if plate iron, breadth and thickness	<u>1 1/8 x 4</u>		<u>6 1/4 x 4</u>			Butt Straps to outside plating, breadth and thickness	<u>1 1/8</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>10</u>
Frames, Size of Angle Iron, single or double	<u>9/16</u>	Inches in Ship.	<u>3</u>	Inches required per Rule.	<u>2 1/2</u>	Angle Iron on ditto	<u>9/16</u>
" Reversed Iron to every frame	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>9</u>
" every 11th frame	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Diagonal Tie Plates on ditto	<u>9</u>
Floors, depth and thickness of Floor Plate at mid line	<u>13 1/2</u>		<u>9/16</u>		<u>14</u>	Planksheer, materials and scantlings	<u>1 1/2</u>
" Ditto ditto at Bilge Keelson	<u>4</u>		<u>9/16</u>		<u>1</u>	Waterway ditto ditto	<u>5 x 1 1/2</u>
" Size of Reversed Angle Iron, and No. 192 at top of Floor Plate	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Flat of Upper Deck, thickness and material	<u>3 1/2</u>
Beams, Deck (No.) double Angle Iron	<u>9/16</u>		<u>6</u>		<u>5 1/2</u>	" how fastened to Beams	<u>Butt & screw Bolts</u>
" Plate, Tie, or Bulb Iron	<u>9/16</u>		<u>6</u>		<u>5 1/2</u>	Ceiling betwixt Decks and in Hold, thickness and material	<u>2 1/2</u>
" double or single Angle Iron, on Upper edge	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Clamps or Spirketting ditto	<u>1 1/2</u>
" average space between	<u>3.0</u>		<u>3.0</u>		<u>3.0</u>	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>5 x 3 1/8</u>
" Hold, or Lower Deck (No.)	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	<u>5 x 3 1/8</u>
" double Angle, Tie, Plate, or Bulb Iron	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Stringers in Hold	<u>5/16 x 3 x 3</u>
" double or single Angle Iron	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	Flat of Lower Deck, thickness and material	<u>3 1/4</u>
" average space between	<u>3.0</u>		<u>3.0</u>		<u>3.0</u>	Main piece of Rudder, diameter at head	<u>3 1/4</u>
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	" " at heel	<u>2 1/8</u>
" Engine " " " "	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	(Can the Rudder be unshipped afloat)	<u>Yes</u>
Keelson, single or double plate, box, or intercostal	<u>10</u>		<u>9/16</u>		<u>3</u>	Bulkheads, No. 4 Thickness of	<u>3/16</u>
" Size of Plates	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	" Height up	<u>1 1/2</u>
" Size of Angle Irons	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	" how secured to the sides of the ship	<u>Butt & screw Bolts</u>
" Side, single or double, plate, box, or intercostal	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>	" size of vertical angle irons	<u>5 x 3 1/8</u>
" Bilge (No.) at each Bilge, single, or double, plate, or box	<u>9/16</u>		<u>3</u>		<u>2 1/2</u>		
Transoms, material <u>in plates</u> or, if none, in what manner compensated for.							
Knight-heads, and Hawse Timbers <u>in plates</u>							
The Frames extend in one length from <u>midline</u> to <u>gunwale</u> rivetted through plates with (<u>3/4</u> in.) rivets, about (<u>5</u>) apart.							
The reverse angle irons on the floors extend in one length across the middle line from <u>midline</u> to <u>gunwale</u>							
" " " on the frames " " " from <u>midline</u> to <u>gunwale</u>							
Keelson, how are the various lengths of plates or angle irons connected? <u>By Lining Pieces</u>							
Plates, Garboard, <u>double</u> or <u>single</u> rivetted to keel, double or <u>single</u> at upper edge, with rivets (<u>1/4</u> ins.) diameter, averaging (<u>1 1/2</u> in.) apart.							
" Edges from Garboards to upper part of bilge, worked clencher, <u>double</u> or <u>single</u> rivetted; with rivets (<u>3/4</u> in.) diameter, averaging (<u>2 1/4</u> ins.) apart.							
" Butts from Keel to turn of bilge, worked carvel with butt straps <u>1/8</u> thick, <u>double</u> or <u>single</u> rivetted; with rivets (<u>3/4</u> in.) diameter, averaging (<u>2 1/4</u> ins.) apart.							
Do the butt straps lap over and rivet through the lands of the strake below? <u>Yes</u>							
" Edges from bilge to sheerstrake, worked <u>carvel with a lining piece</u> (<u>1/8</u>) thick, or clencher, <u>double</u> or <u>single</u> rivetted; with rivets (<u>3/4</u> in.) diameter, averaging (<u>2 1/2</u> in.) apart.							
Do the butt straps lap over and rivet through the lands of the strake below? <u>Yes</u>							
" Edges of Sheerstrake, <u>double</u> or <u>single</u> rivetted? At upper edge <u>single</u> At lower edge <u>double</u>							
" Butts from bilge to planksheers, worked carvel with butt straps (<u>5/16</u>) thick, <u>double</u> or <u>single</u> rivetted; with rivets (<u>3/4</u> in.) diameter, averaging (<u>2 1/4</u> ins.) apart. Breadth of laps in double rivetting (<u>5 1/2</u>) Breadth of laps in single rivetting (<u>5 1/2</u>)							
Butt Straps of Keelsons, Stringer and Tie Plates, <u>double</u> or <u>single</u> rivetted? <u>Double</u>							
Planksheer, how secured to the plating of the sides <u>in Bulwarks</u>							
Waterway " " planksheer and to the Beams <u>in Bulwarks</u>							
Deck Beams, how secured to the side? <u>Plate Keels Rivetted to the frames</u>							
Hold or Lower Deck ditto <u>do</u>							
Paddle " " <u>do</u>							
No. of breasthooks <u>three</u> crutches <u>three</u>							
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? <u>Best quality</u>							
Manufacturer's name or trade mark <u>do</u>							

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

Builder's Signature Henderson, Olmsted & Co. Surveyor's Signature C. V. Noble

4752 810

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? or 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? None 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.			CABLES, &c.			ANCHORS and their weights.		
No.				Fathoms.	Inches.	Tested to Tons.	No.	Weight. Ex. Stock
<i>One sheet and</i>	Fore Sails,		<i>Tested by J. P. Rade 29 March 1866</i>				<i>Tested by J. P. Rade 30 April 30 March 1866</i>	
	Fore Top Sails,		Chain	180	1 1/4	28.2.20	Bowers,	2 15.2.0 15.12.0
	Fore Topmast Stay Sails,		Hempen Stream Cable					3.0.20
	Main Sails,		Hawser	90	5 1/2		<i>Tested by J. P. Rade 30 March 1866</i>	9.3.10 11.17.0.0
	Main Top Sails,		Towlines	90	3 1/2		Stream,	1 5.0.0 6.4.2
			Warp				<i>Tested by J. P. Rade 30 March 1866</i>	
			All of <u>good</u> quality.				Kedges,	1 2.2.10 4.11.3
Her Standing and Running Rigging			<u>Good</u> sufficient in size and			<u>Good</u> in quality.		
She has			<u>Four</u> Long Boat and <u>33.0</u> Whale Boats					
The present state of the Windlass is			<u>New</u> Capstan <u>New</u> and Rudder <u>New</u> Pumps <u>New and efficient</u>					

Order for Special Survey No. 432 DATES of Surveys held 1st. On the several parts of the frame, when in place, and before the plating was wrought Build under
 Date Aug 12/66 while building 2nd. On the plating during the progress of rivetting Special Survey from the
 Order for Ordinary Survey No. 5 as per 3rd. When the beams were in and fastened, and before the decks were laid 30 Aug 1866
 Date 5 Section 18. 4th. When the ship was complete, and before the plating was finally coated until the 14
 5th. After the ship was launched May 1866

State if she has a Spar Deck No Poop Partial Forecastle Yes

General Remarks, The Power Bars are carried up to Hold Beam Steiner
The Hold Beams are 9 1/2 x 5 spaced 5 1/2 feet apart.
Is fitted with a steam crane, and has three penins in
bulwarks on each side 10 1/2 x 3 feet.
Has an angle iron fitted on hold Beams 5 x 3 x 3/8 in lieu of
Hold Beam Steiner. this arrangement was submitted and
sanctioned as per Secretary's Letter dated 1st April 1866

In what manner are the surfaces preserved from oxidation? Inside Portland Cement & Asphalt
 Ditto ditto Outside Red Lead and Oil Paint

I am of opinion this Vessel should be Classed B 1
 The amount of the Fee£ 3 : : : is received by me,
Mar 1866 Special£ 11 : : :
 Certificate (if required)£ gratis

Committee's Minute 25th May 1866

Character assigned B 1
ML ATC.P mk

J. W. Little
 This Vessel appears eligible for the Class B 1
 Lloyd's Register
 24 May 66