

IRON SHIPS.

No. 1141 Survey held at Newcastle Date, First Survey 3rd Oct 1870 Last Survey 4th April 1871

On the V.S.S. "Nellie" Master Walker

Tonnage under Tonnage Deck	693.62	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS	THREE DECKED VESSELS	Built at <u>Newcastle</u>
Ditto of Spar Deck, or Awning Deck	132.87	Half moulded breadth ...	Half Moulded Breadth ...	When built <u>1871</u> Launched <u>22 Feb 71</u>
Ditto of Poop, Raised Or Deck	2.05	Depth from upper part of Keel to top of Upper Deck Beams ...	Total Depth if three or more Decks ...	By whom built <u>W. B. Hornby</u>
Ditto of Houses on Deck	18.78	Girth of Half Midship Frame (as per Rule) ...	Total Girth of Half Midship Frame ...	Owners <u>Grey, Taylor & Co.</u>
Ditto of Forecastle	247.32	1st Number ...	3rd Number ...	Port belonging to <u>Whitby</u>
Gross Tonnage	28.10	Length ...	Length ...	Destined Voyage <u>Copenhagen</u>
Crew Space, as per Rule	271.14	2nd Number ...	4th Number ...	If Surveyed while Building, Afloat, or in Dry Dock. <u>while building.</u>
Register Tonnage, as a Steamer, cut on Beam	548.00	Depths to Length. <u>13.5</u>	Breadths to Length ...	

Length on deck as per Rule, 215 10 Moulded Breadth, 29 0 Depths from top of Floors to Upper Deck Beams, as per Rule, 15 11 Power of Engines, 90 N^o. of Decks, one N^o. of Tiers of Beams, two

Dimensions of Ship per Register, length 217.4 breadth 28.9 depth 15.55

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, $\frac{1}{2}$ bar iron, depth and thickness	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8	8 x 2 3/8				
Do. if centre through plate, depth and thickness	8 x 2 3/8	7 x 2 3/8						
Stem, $\frac{1}{2}$ bar iron, moulding and thickness	8 x 4 3/4	8 x 4 3/4						
Stern-post for Rudder do. do.	8 x 4 3/4	8 x 4 3/4						
Stern-post for Propeller	8 x 4 3/4	8 x 4 3/4						
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	(Class 22 90 A)						
Frames, size of Angle Iron, for $\frac{3}{4}$ length amidships	4 x 3	4 x 3	4 x 3	4 x 3				
Do. for $\frac{1}{2}$ at each end	4 x 3	4 x 3	4 x 3	4 x 3				
Reversed Frames, size of Angle Iron	3 x 3	3 x 3	3 x 3	3 x 3				
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	18 1/2 x 8	18 1/2 x 8						
Do. at the ends	7	7						
Do. do. do. at Bilge Keelson	12	12						
Do. height extended at the Bilges	37	37						
Beams, Upper, Spar, or Awning Deck (No. 57) single or double Angle Iron, Plate or Tee Bulb Iron	7 1/4 x 7	7 1/4 x 7						
Bulb Iron	2 3/4	2 3/4	6	2 3/4	2 3/4	5		
Single or double Angle Iron on Upper edge	on alternate frames							
Average space								
Beams, Main or Middle Deck (No.) single or double Angle Iron, Plate or Tee Bulb Iron	7 1/4 x 7	7 1/4 x 7						
Single or double Angle Iron on Upper Edge	2 3/4	2 3/4	6	2 3/4	2 3/4	6		
Average space	on every fourth frame							
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	18 x 8	18 x 10						
Do. Bulb Plate to Intercoastal Keelson	4	4	4	4 1/2	3 1/2	4		
Do. Size of Angle Irons	4	4	4	4 1/2	3 1/2	4		
Do. Side Intercoastal Keelson, size of Plates								
Do. Angle Irons on tops of Floors	7 1/4 x 7	7 1/4 x 7						
Do. Bilge Keelson, Bulb Iron	7 1/4 x 7	7 1/4 x 7						
Do. do. Intercoastal plates riveted to plating for length	4	4	4	4 1/2	3 1/2	4		
Do. do. Angle Irons	4	4	4	4 1/2	3 1/2	4		
Side Stringers (No. one) size of Angle Irons	4	4	4	4 1/2	3 1/2	4		
Do. Intercoastal plates riveted to plating for length								
Transoms, material <u>iron</u> or, if none, in what manner compensated for.								
Knight-heads <u>iron</u> Hawse Timbers <u>iron & wood</u>								
Windlass <u>Patent, iron</u> Pall Bitt <u>iron</u>								
The Frames extend in one length from <u>Keel</u> to <u>gunwale</u> Riveted through plates with (<u>3/4</u> in.) Rivets, about <u>6</u> apart.								
The Reverse Angle Irons on the floors and frames extend <u>across</u> the middle line to <u>Upper turn of bilge</u> and to <u>gunwale</u> alternately								
Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>yes</u> And are their butts properly shifted? <u>yes</u>								
Plating, Garboard, double or Riveted to Keel, double or at upper edge, with Rivets (<u>1 x 3/8</u> in.) diameter, averaging (<u>5 x 3/8</u> ins.) from centre to centre.								
Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (<u>3/4</u> in.) diameter, averaging (<u>3 1/4</u> ins.) from centre to centre.								
Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (<u>8 x 9</u>) thick, double or single Riveted; with Rivets (<u>3/4</u> in.) diameter averaging (<u>3 1/4</u> ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>no</u>								
Do. of <u>2</u> Strakes at Bilge for <u>1/2</u> length, treble riveted with Butt Straps <u>one</u> thicker than their plates.								
Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (<u>1/16</u>) thick, or clencher, double or single riveted; with rivets (<u>5/8</u> in.) diameter, averaging (<u>2 1/2</u> ins.) from centre to centre.								
Do. Edges of Sheerstrake, <u>Main</u> , double or single Riveted. Upper, double or single Riveted. At upper edge <u>single</u> At lower edge <u>double</u>								
Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (<u>7/16</u>) thick, double or single Riveted; with Rivets (<u>5/8</u> in.) diameter, averaging (<u>2 1/2</u> ins.) from centre to centre.								
Do. Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for <u>1/2</u> length amidships. Breadth of laps of plating in double Riveting (<u>4 1/2</u>) Breadth of laps of plating in single Riveting (<u>5 1/4</u>)								
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>double and treble riveted</u>								
Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)								
Beams of the various Decks, how secured to the sides? <u>welded lines riveted</u> No. of Breasthooks, <u>4</u> Crutches, <u>3</u>								
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. <u>Frames & angles from Fraser, Roberts & Co.</u>								
Manufacturer's name or trade mark, <u>Beams - John Wilson & Bell; Plating - Palmer</u>								
We certify that the above is a correct description of the several particulars therein given.								
Builder's Signature, <u>W. B. Hornby</u> Surveyor's Signature, <u>A. A. Reed</u>								

IRON 448-0269

Workmanship. Are the butts of plating planed or otherwise fitted? otherwise fitted 8918 Iron
 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? solid single pieces
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? fairly so and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? yes
 Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

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 riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
	Number for equipment <u>14 33%</u>		<u>2 1/2</u>	<u>1 1/2</u>	<u>34.0.0.0</u>	<u>1 1/2</u>	<u>34.0.0.0</u>						
	Fore Sails,	Chain											
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).											
	Fore Topmast Stay Sails	Hempen Stream Cable	<u>75</u>	<u>3/4</u>									
	Main Sails,	Hawser	<u>70</u>	<u>8</u>									
	Main Top Sails,	Towlines	<u>70</u>	<u>6 1/2</u>									
		Warp	<u>70</u>	<u>5 1/2</u>									
		All of <u>good</u> quality.	<u>29</u>	<u>3</u>									
			<u>29</u>	<u>3</u>									

Her Standing and Running Rigging hemp sufficient in size and good in quality. She has one life long Boat and two Thwarts

The present state of the Windlass is good Capstan good and Rudder good Pumps good and sufficient

Engine Room Skylights.—How constructed? solid shutters & bullseyes How secured in ordinary weather? latched down

What arrangements are there for deadlights in such for bad weather? bullseyes are covered with tarpaulins.

Coal Bunker Openings.—How constructed? of cast iron How are lids secured? cap lids How high above deck? about 5 1/2

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? ports, and mooring pipes &c., on each side

Cargo Hatchways.—How formed? as usual (State size Fore 14.8 x 10.0)

If of extraordinary size, state how framed and secured? ordinary size (State size Mizzen 14.8 x 10.0)

What arrangement for shifting beams? bullplate & double angles

Hatches, themselves, whether strong and efficient? yes Main Hatchways.—State size 22.0 x 10.0

Order for Special Survey No.	DATE	of	1st.	2nd.	3rd.	4th.	5th.
No. <u>70</u>	<u>22 Sept 1878</u>	Surveys held	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the progress 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

General Remarks, Length of Poop 105 feet Forecastle 22 feet.

This vessel is fitted with water ballast tanks (top plating 5/16) before and abaft the engine room.

In what manner are the surfaces preserved from oxidation? Inside by cement and paint Outside paint of composition.

I am of opinion this Vessel should be Classed 90A.1.

The amount of the Entry Fee £ 5 : : is received by me, P. Reed.
 Special £ 40 : 19 :
 Certificate

(Travelling Expenses) (if any) £ —

Committee's Minute 18 April 1878

Character assigned 90A.1
(AFC)
M.C.
April 17/78

No. 10. P. Reed, Shipbuilder, Washington, New Castle on Tyne

This vessel built under S.S. appears eligible for Classification 90A.1 as recommended above. The length of water ballast tanks not stated above.
 Foundation