

# IRON SHIP.

Recd 23/9/73

No. 10,655 Survey held at Sunderland Date, First Survey September 11/72 Last Survey September 17/73

On the Sea Steamer "Neptuno" Yard Number 9 Master Not appointed

**TONNAGE** under Deck } 869.66  
 Ditto of Third, Spar, or Awning Deck }  
 Ditto of Poop, or Raised Qr. Dk. }  
 Ditto of Houses on Deck } 4.14  
 Ditto of Forecastle }  
 Gross Tonnage } 873.79  
 Less Crew Space } 41.95  
 Less Engine Room } 279.61  
 Register Tonnage } 552.23  
 as out on Beam }

~~ONE, OR TWO DECKED, THREE DECKED VESSEL.~~  
 SPAR, ~~OR AWNING-DECKED VESSEL.~~  
**HALF BREADTH** (moulded)... .. 13.46  
**DEPTH** from upper part of Keel to top of Main Deck Beams 15.62  
**GIRTH** of Half Midship Frame (as per Rule) ... .. 24.75  
**1st NUMBER** ... .. 53.83  
**1st NUMBER, if a THREE-DECKED VESSEL**  
 deduct 7 feet ... .. ---  
**LENGTH** ... .. 218.5  
**2nd NUMBER** ... .. 11761  
**PROPORTIONS**—Breathths to Length ... .. 8  
 Depths to Length—Upper Deck to Keel ... .. 9  
 Main Deck ditto ... .. 13

Built at Sunderland  
 When built 1873 Launched 14 May/73  
 By whom built Shourne, Graham & Co  
 Owners Messrs. Nathan & Co  
 Port belonging to London  
 Destined Voyage Not fixed  
 Surveyed while Building, Afloat, or in Dry Dock.

Official Number

**LENGTH** on deck as per Rule ... 218 6 **BREADTH**—Moulded... .. 26 11 **DEPTH** top of Floors to Upper Deck Beams ... .. 21 — **Power of Engines** ... .. 130 **N° of Decks with flat laid** 2  
 Do. do. Main Deck Beams ... .. 14 4 **N° of Tiers of Beams** 2

Dimensions of Ship per Register, length 222.0 breadth, 27.3 depth, 20.6

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	16ths required per Rule	16ths required per Rule
<b>KEEL</b> , depth and thickness ... ..	<u>7 1/2 x 2 1/4</u>	<u>7 1/2 x 2 1/4</u>				
<b>STEM</b> , moulding and thickness... ..	<u>7 x 2 1/4</u>	<u>7 x 2 1/4</u>				
<b>STERN-POST</b> for Rudder do. do. ... ..	<u>8 x 4</u>	<u>7 x 4 1/2</u>				
for Propeller ... ..	<u>8 1/2 x 4</u>					
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..	<u>22 in</u>	<u>22 in</u>				
<b>FRAMES</b> , Angle Iron, for 3/4 length amidships ... ..	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>	<u>5</u>	<u>6</u>
Do. for 1/2 at each end ... ..	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>	<u>5</u>	<u>6</u>
<b>REVERSED FRAMES</b> , Angle Iron ... ..	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships ... ..	<u>15 1/2</u>	<u>6 x 7</u>	<u>15 1/2</u>	<u>6 x 7</u>		
thickness at the ends of vessel ... ..	<u>9</u>	<u>5</u>	<u>9</u>	<u>5</u>		
depth at 1/4 the half length, as per Rule ... ..	<u>9</u>	<u>5</u>	<u>9</u>	<u>5</u>		
height extended at the Bilges... ..	<u>twice midship depth</u>					
<b>BEAMS, Upper, Spar, or Awning Deck</b> Single or Double Angle Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge ... ..	<u>2 1/2</u>	<u>2 1/2</u>	<u>4</u>	<u>2 1/2</u>	<u>4</u>	<u>4</u>
Average space... ..	<u>alternate frames</u>					
<b>BEAMS, Main or Middle Deck</b> Single or double Angle Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge ... ..	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>
Average space... ..	<u>alternate frames</u>					
<b>BEAMS, Lower Deck, Hold or Outlet</b> Single or double Angle Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge ... ..	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>2 1/2</u>	<u>5</u>	<u>5</u>
Average space... ..	<u>stringer plates and angles as per sketch</u>					
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates ... ..	<u>12 1/2</u>	<u>10</u>	<u>12 1/2</u>	<u>10</u>		
" Rider Plate ... ..	<u>7 1/2</u>	<u>8</u>	<u>7</u>	<u>8</u>		
" Bulb Plate to Intercostal Keelson ... ..	<u>4 1/2</u>	<u>3</u>	<u>7</u>	<u>4 1/2</u>	<u>3</u>	<u>7</u>
" Angle Irons ... ..	<u>4 1/2</u>	<u>3</u>	<u>7</u>	<u>4 1/2</u>	<u>3</u>	<u>7</u>
" Double Angle Iron Side Keelson ... ..	<u>4 1/2</u>	<u>3</u>	<u>7</u>	<u>4 1/2</u>	<u>3</u>	<u>7</u>
" Side Intercostal Plate ... ..	<u>3</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>3</u>	<u>7</u>
" do. Angle Irons ... ..	<u>3</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>3</u>	<u>7</u>
" Attached to outside plating with angle iron ... ..	<u>3</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>3</u>	<u>7</u>
<b>BILGE</b> Angle Irons ... ..	<u>4 1/2</u>	<u>3</u>	<u>7</u>	<u>4 1/2</u>	<u>3</u>	<u>7</u>
" do. Bulb Iron ... ..	<u>6 1/2</u>	<u>6</u>	<u>6 1/2</u>	<u>6</u>		
" do. Intercostal plates riveted to plating for length ... ..						
<b>STRINGER</b> Angle Irons ... ..	<u>4 1/2</u>	<u>3</u>	<u>7</u>	<u>4 1/2</u>	<u>3</u>	<u>7</u>
intercostal plates riveted to plating for length ... ..						
<b>SIDE STRINGER</b> Angle Irons ... ..						

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness ... ..				
<b>PLATES</b> in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied (S. U. Strakes) fm up. part of Bilge to lr. edge of Sh'rstrake	<u>30</u>	<u>9 1/8</u>	<u>30</u>	<u>9 1/8</u>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>34</u>	<u>12 1/8</u>	<u>30</u>	<u>12 1/8</u>
Butt Straps to outside plating, breadth & thickness	<u>6 1/2</u>	<u>6 1/2</u>	<u>9 1/2</u>	<u>6 1/2</u>
Lengths of Plating ... ..	<u>9 feet</u>	<u>4 in</u>		
Shifts of Plating, and Stringers ... ..	<u>2 spaces of frames</u>			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	<u>4 1/2</u>	<u>6 1/2</u>	<u>4 1/2</u>	<u>6 1/2</u>
Angle Iron on ditto ... ..	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>		
Tie Plates fore and aft, outside Hatchways ... ..	<u>10</u>	<u>6</u>	<u>10</u>	<u>6</u>
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling ... ..	<u>Nil</u>			
Waterways do. do. ... ..	<u>Gutter gunwale</u>			
Flat of Upper Deck do. do. ... ..	<u>3 1/2 in</u>	<u>3</u>		
How fastened to Beams ... ..	<u>Iron screw bolts and nuts</u>			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... ..	<u>48</u>	<u>9 1/2</u>	<u>48</u>	<u>9 1/2</u>
Is the Stringer Plate attached to the outside plating? <u>Yes</u>				
Angle Irons on ditto, No. <u>2</u> ... ..	<u>4 1/2 x 3 x 7</u>	<u>4 1/2 x 3 x 7</u>		
Tie Plates, outside Hatchways ... ..	<u>10</u>	<u>8</u>	<u>10</u>	<u>8</u>
Diagonal Tie Plates on Beams, No. of pairs ... ..	<u>Nil</u>			
Waterways materials and scantlings ... ..	<u>Cement</u>			
Flat of Middle Deck do. do. ... ..	<u>3 1/2 in</u>	<u>3 1/2</u>		
How fastened to Beams ... ..	<u>Iron screw bolts and nuts</u>			
Stringer Plates on ends of Lower Deck, Hold or Outlet Beams ... ..	<u>23</u>	<u>7</u>	<u>23</u>	<u>7</u>
Is the Stringer Plate attached to the outside plating? <u>Yes</u>				
Angle Irons on ditto, No. <u>3</u> ... ..	<u>3 1/2 x 3 1/2 x 7</u>	<u>3 1/2 x 3 1/2 x 7</u>		
Stringer or Tie Plates, outside Hatchways ... ..	<u>4 x 4 x 6</u>	<u>4 1/2 x 3 x 5</u>		
Flat of Lower Deck ... ..	<u>2 in Baltic fir</u>			
Ceiling betwixt Decks, thickness and material in hold do. do. ... ..	<u>2 1/2 in</u>	<u>do.</u>	<u>do.</u>	<u>do.</u>
Main piece of Rudder, diameter at head do. at heel ... ..	<u>4 3/4</u>	<u>3</u>	<u>4 3/4</u>	<u>3</u>
Can the Rudder be unshipped afloat? <u>Yes</u>				
Bulkheads No. <u>4</u> Thickness of <u>5/16</u>				

Transoms, material. Iron heads Name of Timbers. Iron  
 Windlass Iron Patent Pall Bitt Iron  
 The **FRAMES** extend in one length from Keel to gunwale

The **REVERSED ANGLE IRONS** on floors and frames extend near middle line to Hold Beams and to Main 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 1/4 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 3 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 1/4 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 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 1/2 length amidships.  
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for 1/2 length.  
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? double & treble throughout  
 Waterway, how secured to Beams Gutter gunwale (Explain by Sketch, if necessary.)  
 Beams of the various Decks, how secured to the sides? Lapped down ends, and No. of Breasthooks, 4 Crutches, 2 or 2 transoms  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs by Stockton  
 Manufacturer's name or trade mark, Malleable Iron Co.; Plates by Skerne Iron Co. and Bolckow, Vaughan & Co.

The above is a correct description.  
 Builder's Signature, Shourne Graham & Co. Surveyor's Signature, James Gibson

Lloyd's Register Foundation

**Workmanship.** Are the butts of plating planed or otherwise fitted? Planed 11867 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  
 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 generally  
 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 of 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

The certificates signed by Saml. Szegenna

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
			244	1 1/16	37 1/20	1 1/16	37 20	Bowers	1	19.2.7	20.8.1.21	18.0.0	19
	Fore Sails,	Chain	One sample in each length tested to breaking strain of 50 1/2 tons marked L.P.H.T. 5.73 and signed by Saml. Szegenna										
	Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)	L.P.H.T. 5.73 and signed by Saml. Szegenna										
	Fore Topmast Stay Sails	Hempen Stream Cable	80	5 1/2				Stream	1	9.0 1/2		8.0.0	
	Main Sails,	Hawser Chain	90	1 5/16						4.3.24		4.0.0	
	Main Top Sails,	Towlines	80	10									
		Warp	80	6				Kedges	1	2.0.4		2.0.0	

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has 2 Long Boats and 2 others  
 The Windlass is good Capstan — and Rudder good Pumps 2 Metal & good

Engine Room Skylights.—How constructed? Wood framing upon How secured in ordinary weather? Rods & Screws  
 What arrangements for deadlights in bad weather? Iron wood shutters with circular glass

Coal Bunker Openings.—How constructed? Metal Castings How are lids secured? Studs Height above deck? 5 1/2 ins

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? No Bulwarks

Cargo Hatchways.—How formed? Iron plate coverings and headledges

State size Main Hatch 18ft x 9ft x 21ins above Forehatch 7'2" x 6'4" x 21ins above Quarterhatch 14'6" x 6'8" x 21ins above

If of extraordinary size, state how framed and secured? —

What arrangement for shifting beams? Chie

Hatches, If strong and efficient? Yes

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.
2381	10th Sept/72			9		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

**General Remarks,** The main deck stringer plates are not cut in the way of Boilers as proposed by the Builders (please see principal Surveyors remarks dated 12th Oct. 1872), the hold stringer plates have been reduced to 15ins in way of the Boilers, & strengthened with double angle Irons 3 1/2 x 3 1/2 x 7/16 and face plate on S<sup>e</sup> 9 x 9/16 and well rivetted.

A Ballast-tank is fitted in the fore hold, extending from the Collision bulkhead, aft about 35 feet, and one in the after hold extending from the after bulkhead of engine-room, aft about 59 feet.

This is a sister vessel to the Steamer, "Lancelot", report 10651

35  
59  
94

State if ~~one, two or three decked vessel, or if spar or running decked, and length of poop, forecabin or raised quarter deck, or of double or part double bottom~~

How are the surfaces preserved from oxidation? Inside Portland Cement to upper trim Outside 3 Coats of paint  
 I am of opinion this Vessel should be Classed \*100 A.I. of Bilges and Paint above

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,  
 Special ... £ 45 : 12 : 0  
 Certificate ... : : :  
 (Travelling Expenses) (if any) £

Committee's Minute 30th Sept 1873

Character assigned 100 A I A & C P  
Spar Decked etc IRBW

This vessel appears eligible to be classed as recommended by "Spar deck" J.H. 30/9/73

35  
59  
94  
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