

# IRON SHIPS.

No. 9521 Survey held at Newcastle Date 25 September 1865  
 on the Steamer "Sandfield" Master John Brownlee  
 Tonnage Gross 459.30 Engine Room 172.13 Register 17.17 Built at Newcastle  
 When Built 1864 Launched 14 Decr By whom built Palmer & Co  
 Owners John Brownlee Port belonging to Newcastle Destined Voyage Newcastle  
 Surveyed Afloat or in Dry Dock and while running

Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Horse.	
Length aloft	<u>102</u>	Extreme Breadth	<u>28</u>	Depth from top of Upper Deck	<u>17</u>	Beam to top of Floor	<u>17</u>	Power of Engines	<u>95</u>
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	<u>21</u>	Inches in Ships.	<u>21</u>	Inches required per Rule.	<u>21</u>	Stem, if bar iron, moulding and thickness	<u>4</u>	<u>2 3/4</u>	<u>1 1/2</u>
Size of Angle Iron, and No. at bottom of Floor Plate	<u>4</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Stern-post, if bar iron, moulding and thickness	<u>8</u>	<u>5</u>	<u>1 1/2</u>
Depth and thickness of Floor Plate at mid line	<u>17 1/2</u>	<u>7</u>	<u>15</u>	<u>3</u>	<u>11</u>	Keel, if bar iron, moulding and thickness	<u>4</u>	<u>2 3/4</u>	<u>1 1/2</u>
Depth and thickness of Floor Plate at Bilge Keelson	<u>8</u>	<u>7</u>	<u>15</u>	<u>4 1/2</u>	<u>11</u>	Garboard Plates, Breadth and thickness	<u>4</u>	<u>2</u>	<u>30</u>
Size of Reversed Angle Iron, and No. at top of Floor Plate	<u>3</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	From Garboard to upper part of Bilge	<u>4</u>	<u>2</u>	<u>30</u>
Size of Angle Iron, single or double	<u>4</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	From upper part of Bilge to Sheerstrakes	<u>4</u>	<u>2</u>	<u>30</u>
Reversed Iron, 1 to every frame	<u>3</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Sheerstrakes, Breadth and thickness	<u>4</u>	<u>2</u>	<u>30</u>
Hold or every beam	<u>3</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Butt Straps to outside plating, Breadth and thickness	<u>4</u>	<u>2</u>	<u>30</u>
Decks, Deck (No. 1) double Angle Iron	<u>4</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Planksheers	<u>4</u>	<u>2</u>	<u>30</u>
Plate or Bulb Iron	<u>4</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Gunwale Plate or Stringer on ends of Up. Dk Beams	<u>4</u>	<u>2</u>	<u>30</u>
double or single Angle Iron on top edge	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>11</u>	<u>2 1/2</u>	Angle Iron on ditto	<u>4 1/2</u>	<u>3 1/2</u>	<u>11</u>
average space between	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Diagonal Tie Plates on Beams	<u>12</u>	<u>4</u>	<u>10 1/2</u>
if wood (No. ) sided & moulded	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Waterway	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Hold, or Lower Deck (No. 1) double Angle Iron, Plate or Bulb Iron	<u>4</u>	<u>3</u>	<u>7</u>	<u>15</u>	<u>3</u>	Deck	<u>12</u>	<u>4</u>	<u>10 1/2</u>
double or single Angle Iron on top edge	<u>2 1/2</u>	<u>2 1/2</u>	<u>5</u>	<u>11</u>	<u>2 1/2</u>	Ceiling in Hold	<u>12</u>	<u>4</u>	<u>10 1/2</u>
average space between	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Ceiling betwixt Decks	<u>12</u>	<u>4</u>	<u>10 1/2</u>
if wood (No. ) sided & moulded	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Beam Clamps or Spirketting	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Paddle, wood, sided and moulded, or if Iron, size of Plate	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Shelf	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Engine	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Stringer Plates on ends of Hold or Lower Dk Beams	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Keelson, single plate, or intercostal	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Ceiling between Decks	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Size of Plates	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Stringer or Tie Plates outside Hatchways	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Size of Angle Irons	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Deck Beam Clamps or Spirketting	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Ditto Bilge (No. 1) Rule 2	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Shelf	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Transoms, material	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Stringers in Hold	<u>12</u>	<u>4</u>	<u>10 1/2</u>
or, if none, in what manner compensated for	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Deck, Lower	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Knight-heads, and Hawse Timbers	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Deck, Upper, how fastened to Beams	<u>12</u>	<u>4</u>	<u>10 1/2</u>
The Frames or Ribs extend in one length from	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	Bulkheads, No. 1	<u>12</u>	<u>4</u>	<u>10 1/2</u>
The reverse angle irons on the floors extend in one length across the middle line from	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	how secured to the sides of the ship	<u>12</u>	<u>4</u>	<u>10 1/2</u>
on the frames	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	size of vertical angle iron and their distance apart	<u>12</u>	<u>4</u>	<u>10 1/2</u>
Keelson, how are the various lengths of plates or angle irons connected?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Edges from Garboards to upper part of bilge, worked carvel with a lining piece	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
diameter, averaging	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Butts from Keel to turn of bilge, worked carvel with a lining piece	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
averaging	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Edges from bilge to sheerstrake, worked carvel with a lining piece	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
averaging	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Edge of Sheerstrake, double or single rivetted?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Butts from bilge to planksheers, worked carvel with a lining piece	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
averaging	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Planksheer, how secured to the plating of the sides	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Waterway	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Deck Beams, how secured to the side?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Hold or Lower Deck	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Paddle	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
No. of breasthooks	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
crutches	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
how are pointers compensated?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
What description of iron is used for the angle iron and plate iron in the vessel?	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Builder's Signature	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
for	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>
Wm. C. Leland	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>		<u>12</u>	<u>4</u>	<u>10 1/2</u>

IRON 438-0111



**Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three 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? *Long lengths*

Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Generally so and are the holes well and sufficiently countersunk in the outer plate? Generally so

Are there any rivets which either break into or have been put through the seams or butts of the plating? yes

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length.

She has ~~SAILS~~.

CABLES, &c.

**ANCHORS**, and their weights.

Ex. 50c

N <sup>o</sup> .		Fathoms.	Inches.	N <sup>o</sup> .	Weight
	Fore Sails,				
	Fore Top Sails,				
	Fore Topmast Stay Sails,				
	Main Sails,				
	Main Top Sails,				
	and				

Her Standing and Running Rigging Complete sufficient in size and good in quality.

She has a Life Boat <sup>40</sup> Long Boat and Cutter 20 feet - 4.5 in 18 feet

The present state of the Windlass is Clapnet Capstan One and Rudder Clapnet Pumps 2 Hand pumps  
and one Pump

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets

<b>DATES of Surveys</b> held while building, as per Section 17.	1st.	On the several parts of the frame, when in place, and before the plating was wrought	} <i>2 Bill-una</i>
	2nd.	On the plating during the progress of rivetting	
	3rd.	When the beams were in and fastened, and before the decks were laid	} <i>Special Sur</i> } <i>per Order No 47</i>
	4th.	When the ship was complete, and before the plating was finally coated	
	5th.	After the ship was launched	

The double bottom in this vessel extends for about  $\frac{1}{2}$  feet; and is similar in every respect, to some other vessels built by the same firm, and classed A.

In what manner are the surfaces preserved from oxidation? *Next lacquer and asphaltum in bottles*

I am of opinion this Vessel should be classed \_\_\_\_\_

The amount of the Fee .....£ 5: 0: 0 is received by me.

Special ..... £37: 19: "

Certificate (if required) .....£    :    :    :

Committee's Minute 3<sup>d</sup> January 1855

Character assigned

The Soundings of this Screen Strim has  
been compared by Dr. Luke with the  
Old O A grade, and it will be seen they  
are rather less than those requirements.  
The appears to be similar to the "Medo"  
in all respects, and by same Soundings  
for same Owners. Which vessel is class  
as this is recommended.