

IRON SHIPS.

3303

Rev 22/9/63

Surveyed at Newcastle Date 13 Dec 1863
 Name of Ship "The Vulcan" Master William Douglas
 Tonnage Gross 45 Engine Room 14 Register 9411 Built at Newcastle
 When Built 1863 By whom built Wm. Fairclough & Co Owners Wm. & J. H. Brown
 Port belonging to Newcastle Destined Voyage London
 Surveyed Afloat or in Dry Dock and while building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
226			32.05			16.9						100	
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.				Stem, if bar iron, moulding and thickness							
	18	18				if plate iron, breadth and thickness							
Floors, Size of Angle Iron, and No. at bottom of Floor Plate	Inches in Ship.	Inches required per Rule.				Stern-post, if bar iron, moulding and thickness							
depth and thickness of Floor Plate at mid line	17	17				if plate iron, breadth and thickness							
depth and thickness of Floor Plate at Bilge Keelson	9	9				Keel, if bar iron, depth and thickness							
Size of Reversed Angle Iron, and No. at top of Floor Plate	3	3				if plate iron, breadth and thickness							
Size of Angle Iron, single or double	5	5				Garboard Plates, thickness							
Reversed Iron, if to every frame	3	3				From Garboard to upper part of Bilge							
every	3	3				From upper part of Bilge to Sheerstrakes							
Beams, Deck (No. of double Angle Iron)	3	3				Sheerstrakes							
Bulb Iron with double Angle Iron on top	3	3				Breadth & thickness of Butt Straps to outside plating							
depth & thickness of plate amidships	8	8				Planksheers							
double or single Angle Iron, on lower edge	8	8				Gunwale Plate or Stringer on ends of Up. Dk Beams							
average space between	3	3				Angle Iron on ditto							
if wood (No. sided & moulded	3	3				Waterway							
old, or Lower Deck (No. of double Angle Iron)	3	3				Deck							
with double Angle Iron on top	3	3				Ceiling in Hold							
depth & thickness of plate amidships	8	8				Ceiling between Decks							
double or single Angle Iron, on lower edge	8	8				Beam Clamps							
average space between	3	3				Stringer Plates on ends of Hold or Lower Dk Beams							
if wood (No. sided & moulded	3	3				Ceiling between Decks							
Paddle, wood, sided and moulded	3	3				Stringer or Tie Plates outside Hatchways							
or if Iron, size of Plate	3	3				Deck Beam Clamps							
Engine	3	3				Stringers in Hold							
Keelson, wood, sided & moulded, iron size of plate, if Box give sketch & dimensions	3	3				Deck, Lower							
Side of Bilge	3	3				Deck, Upper, how fastened to Beams							
Number	3	3											

Transoms, material Iron or, if none, in what manner compensated for.
 Knight-heads Plank Bulkheads, No. Three Thickness of 1/4 - 1/2
 Hawse Timbers Plank are they free from defects? Yes how secured to the sides of the ship by clamps & painted
 The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with 3/4 in. rivets, about 6 apart.
 The reverse angle irons on the floors extend in one length across the middle line from Keel to Gunwale
 Keelson, how are the various lengths of plates or angle irons connected? alternately to Gunwale
 Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets 1/2 in. diameter averaging 3 in. from centre to centre of rivet.
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece 1/2 in. thick or clencher, double or single rivetted; rivets 3/4 in. diameter, averaging 3 ins. from centre to centre of rivets.
 Butts from Keel to turn of bilge, worked carvel with a lining piece 1/2 in. thick, double or single rivetted; rivets 3/4 in. diameter, averaging 3 ins. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No
 Edges from bilge to planksheers, worked carvel with a lining piece 1/2 in. thick, double or single rivetted; rivets 3/4 in. diameter, averaging 3 in. from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No
 Butts from bilge to planksheers, worked carvel with a lining piece 1/2 in. thick, or clencher, double or single rivetted; rivets 3/4 in. diameter averaging 3 ins. from centre to centre of rivets. Breadth of laps in double rivetting 4 Breadth of laps in single rivetting 2 1/2
 Planksheer, how secured to the plating of the sides Keel 5 3/4
 Waterway Plank planksheer and to the Beams if necessary
 Side trussing Plank breadth and thickness of plates 12 x 9 1/4 how secured? by clamps & painted
 Deck trussing Plank
 Deck Beams, how secured to the side? Keelson rivetted to Beams
 Hold or Lower Deck Plank
 Paddle Plank
 No. of breasthooks 5 crutches 1 how are pointers compensated? by clamps & painted
 What description of iron is used for the angle iron and plate iron in the vessel? For Valuer's use
 Builder's Signature Wm. C. Leland

IRON 436-0049

Iron 3303

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 rivet 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 pieces*
 Do the holes for rivetting plate to frames, lining pieces, 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? *Again*

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

She has SAILS.

CABLES, &c.

ANCHORS, and their weights.

N ^o .			Fathoms.	Inches.		N ^o .	Weight.
<i>One</i>	Fore Sails,	Chain	<i>240</i>	<i>1 1/2</i>	Bower, <i>Delais</i>	<i>2</i>	<i>23</i>
<i>Complete</i>	Fore Top Sails,	Hempen Stream Cable	<i>90</i>	<i>7/8</i>	<i>Common</i>	<i>1</i>	<i>23</i>
<i>Five</i>	Fore Topmast Stay Sails,	Hawser	<i>90</i>	<i>9</i>	Stream, <i>Common</i>	<i>1</i>	<i>9</i>
<i>and</i>	Main Sails,	Towlines	<i>90</i>	<i>4</i>	Kedge, <i>etc.</i>	<i>2</i>	<i>4</i>
	Main Top Sails,	Warp	<i>90</i>	<i>5</i>			
		All <i>sheer</i> quality.					

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

She has *the life* Long Boat and *22 foot* Cutter *20 foot* & *10 foot* boat *11 foot*

The present state of the Windlass is *good* Capstan *2 wheel* and Rudder *Complete* Pumps *2 Hand Pumps*

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

- DATES of Surveys held while building, as per Section 17.
- 1st. On the several parts of the frame, when in place, and before the plating was wrought
 - 2nd. On the plating during the progress of rivetting
 - 3rd. When the beams were in and fastened, and before the decks were laid
 - 4th. When the ship was complete, and before the plating was finally coated
 - 5th. After the ship was launched

The sheer stake of this hull has been clamped for 3/4 its length as sanctioned by your letter of the 27 September 60 but the increase width of stringer therein referred to, have resulted and a double angle iron stringer to cracks wrought all fore and aft in line thereof, which received the Committee's approval, as per your letter of the 20th June last.

The watertight bulkhead has been cut by an aperture, as shown in enclosed drawing, this it appears from Mr. Fremont's memo of the 1st March has been done to facilitate the stowage of the cargo, thereby reducing the number of watertight bulkheads to three, as the after peak is not plated on top.

The anchors are of increased weights for which I have referred to your letter to Bureau of the 15th April 1863. and which I understand was intended for Patent anchors, whereas the common anchor has been put on board. In consequence of the arrangement of bulkhead

In what manner are the surfaces preserved from oxidation? *Red lead* which appears to be *inside bottom* *sufficient to meet* *the* *rules* *see 12* *they* *to leave the class for* *Committee's consideration*

I am of opinion this Vessel should be classed

The amount of the Fee£ 5 - - is received by me,

John W. Mc Special£ 49 5 -

Certificate (if required)£ - - -

Committee's Minute *25th September 1863*

Character assigned *A* *for 6 years*

John W. Mc

I am of opinion *the vessel is* *in the 6th class* *1863* *Lloyd's* *Found*