

IRON SHIPS.

3211 Iron
 7851 Survey held at Sunderland Date 17th February to 1st July 1863
 the Steamer Ocean King Master G. Harg
 Tonnage Gross 650 Engine Room 44 Register 554. 13 Built at Sunderland
 Then Built 1863 By whom built W. & A. R. & Co. Owners Bill & Mrs
 Port belonging to Sunderland Destined Voyage St. Battie
 Surveyed Afloat or in Dry Dock Shit Building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
195	-		29	25		16	78			
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	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	Inches in Ship	Inches required per Rule
Floors, Size of Angle Iron, and No. 1 at bottom of Floor Plate	4	3	7	4	3	7				
depth and thickness of Floor Plate at mid line	1 1/2		0	16 1/2	0					
depth and thickness of Floor Plate at Bilge Keelson	1 1/2		0	16	0					
Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	3	8	6	3	2 1/2	6				
Frames, Size of Angle Iron, single or double	4	3	7	4	3	7				
Reversed Iron, 1 to every frame	4	3	7	4	3	7				
every alternate frame to Deck Stringer	4	3	7	4	3	7				
Beams, Deck (No. 64) double Angle Iron	4	3	7	4	3	7				
Bulb Iron with double Angle Iron on top	4	3	7	4	3	7				
depth & thickness of plate amidships	1 1/2		0	16 1/2	0					
double or single Angle Iron	4	3	7	4	3	7				
on lower edge	4	3	7	4	3	7				
average space between	3		3		3					
if wood (No.) sided & moulded	3		3		3					
Hold, or Lower Deck (No. 29) double Angle Iron or Bulb Iron with double Angle Iron on top	3	3	6	2 1/2	2 1/2	6				
depth & thickness of plate amidships	1 1/2		0	16 1/2	0					
double or single Angle Iron	4	3	7	4	3	7				
on lower edge	4	3	7	4	3	7				
average space between	3		3		3					
if wood (No.) sided & moulded	3		3		3					
Paddle, wood, sided and moulded or if Iron, size of Plate	3		3		3					
Engine	30 1/2		0	12 1/2	0					
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	4	4	7	4 1/2	3 1/2	7				
Side or Bilge Double Iron	6	3	7	4 1/2	3 1/2	7				
Number 2	6 1/2		7	6 1/2	7					
Midway between Bilge & Keelson 4 x 4 x 7/16, and bulb iron 6 1/2 x 7/16 from foremast to aft side of engine room										
Transoms, material										

Knight-heads Iron Bulkheads, No. four Thickness of 6/16
 Hawse Timbers Checks are they free from defects? yes how secured to the sides of the ship Double frames
 size of vertical angle iron and their distance apart 3 x 3 x 7/16 2.6

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (5 in.) apart.
 The reverse angle irons on the floors extend in one length across the middle line from a top of bilges and Deck alternately except
 here cut by Ballast tank across the middle line

Keelson, how are the various lengths of plates or angle irons connected? butt straps

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/2 ins.) diameter averaging (2 1/2 in.) from centre to centre of rivet.
 Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (1/2 in.) diameter, averaging (4 ins.) from centre to centre of rivets.
 Butts from Keel to turn of bilge, worked carvel with a lining piece (2 3/16 in.) thick, double or single rivetted; rivets (5/4 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 in alternate strakes.
 Edges from bilge to planksheer, worked carvel with a lining piece (1 in.) thick, double or single rivetted; rivets (3/2 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 in alternate strakes.
 Butts from bilge to planksheers, worked carvel with a lining piece (2 1/2 in.) thick, or clencher, double or single rivetted; rivets (1/2 in.) diameter averaging (3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (1 1/2 in.) Breadth of laps in single rivetting (2 1/2 in.)

Planksheer, how secured to the plating of the sides { Explain by sketch, } Gutter Waterway
 Waterway " " planksheer and to the Beams { if necessary. }

Side trussing breadth and thickness of plates how secured?

Deck trussing Diagonal 12 x 9/16 " " "

Deck Beams, how secured to the side? Bracket Plates rivetted to Beams & frames

Hold or Lower Deck " no

Paddle " " "

No. of breasthooks 6 crutches 2 how are pointers compensated? Iron Transoms

What description of iron is used for the angle iron and plate iron in the vessel? W. & A. R. & Co. Builders Builder's Signature W. & A. R. & Co.

3211 Iron

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? They are

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They do

Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Solid pieces

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

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

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

She has SAILS.

No.		CABLES, &c.		ANCHORS, and their weights.	
		Fathoms.	Inches.	No.	Weight.
1	Fore Sails,	Chain	2 1/2	1 1/2	23.0
1	Fore Top Sails,	Hamper Stream Cable	4 1/2	2 1/2	22.5
1	Fore Topmast Stay Sails,	Hawser	90	1 1/2	19.0
1	Main Sails,	Towlines	1	1 1/2	19.0
1	Main Top Sails,	Warp	1	1 1/2	19.0
and the rest of a suit		All of <u>Good</u> quality.			

Her Standing and Running Rigging Very Strong sufficient in size and good in quality.

She has one Long Boat and four others.

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good

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 Built under

2nd. On the plating during the progress of rivetting Special Survey between

3rd. When the beams were in and fastened, and before the decks were laid the 17th February

4th. When the ship was complete, and before the plating was finally coated and

5th. After the ship was launched 8th July 1863

The dimensions of this vessel (as submitted by the builders & the committee in their letter of the 4th January) were admitted with the compensation for deficient depth by increasing the thickness of the sheerstrake to 1 inch and the breadth of the deck stringer six inches. The length of the vessel is five feet in excess of that named in the letter of the above date, for which it will be seen that there is further compensation.

In the upper and lower large keelsons of this vessel, the short pieces of reversed angle iron have been omitted, with the sanction of the Committee to adopt, in view thereof either of the plans submitted in my letter of the 2nd December '62 the lower large keelson being formed of double angle iron 6 x 3 x 7/16 with a bulb iron between 6 1/2 x 6/16 and the upper, with angle irons of the same size with a plate between 3 1/2 x 7/16 and extending all fore & aft and forming the heartstocks and crutches. A tank for water ballast is fitted from the after bulkhead to aft beam of 4 iron 4 x 5 x 7/16 the reversed L irons of frames being cut off in the way of the flat and a plate 7/16 fitted on the inside of the frame to make up the deficiency. The beams are connected to the keelson in the middle line and the top plates with 5 plates.

In what manner are the surfaces preserved from oxidation? Asphalte inside in bottom

I am of opinion this Vessel should be classed Q A 1

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

Order No. 1320 Special £ 34 : 18 : :

Certificate (if required) £ : : : :

Committee's Minute 10th July 1863

Character assigned A 1 for 9 Years

A. S. Munro

This Son of Don appears eligible for Classing as recommended
July 9/63

Lloyd's Register Foundation