

IRON SHIP.

No. 11536 Survey held at Sunderland Date, First Survey December 20/15 Last Survey November 15/16

On the Barge "Beech Holm" Master G. A. Sorensen

TONNAGE under Tonnage Deck } <u>739.69</u>	ONE OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third, Spar, or Awaiting Deck. } <u>28.24</u>	HALF BREADTH (moulded)... <u>15.32</u>
Ditto of Upper Raised Qr. Dk. } <u>10.15</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>20.50</u>
Ditto of House on Deck } <u>25.27</u>	GIRTH of Half Midship Frame (as per Rule) <u>32.15</u>
Gross Tonnage <u>803.35</u>	1st NUMBER <u>67.97</u>
as Gross Space <u>40.16</u>	1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet
less Engine Room	LENGTH <u>185. -</u>
Register Tonnage } <u>763.19</u>	2nd NUMBER <u>125.74</u>
as cut on Beam }	PROPORTIONS —Breathths to Length <u>6</u>
	Depths to Length—Upper Deck to Keel <u>9</u>
	Main Deck ditto <u>1</u>

Built at Sunderland
 When built 1876 Launched Oct. 11
 By whom built James Laing & Co.
 Owners R. H. Gayner, West
 Port belonging to Sunderland
 Destined Voyage Ceylon
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule... <u>185</u>	BREADTH Moulded... <u>30</u>	DEPTH top of Floors to Upper Deck Beams... <u>18</u>	Power of Engines ... <u>11</u>	Horse. ... <u>1</u>	Nº. of Decks with flat laid <u>One</u>	Nº. of Tiers of Beams <u>Two</u>
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	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL , depth and thickness	8x23/8	8x23/8	8x23/8	8x23/8	8x23/8	8x23/8
STEM , moulding and thickness... ..	7x23/8	7x23/8	7x23/8	7x23/8	7x23/8	7x23/8
TERN-POST for Rudder do. do.	7x23/8	7x23/8	7x23/8	7x23/8	7x23/8	7x23/8
for Propeller	22 ins	22 ins	22 ins	22 ins	22 ins	22 ins
Distance of Frames from moulding edge to moulding edge, all fore and aft	22 ins	22 ins	22 ins	22 ins	22 ins	22 ins
FRAMES , Angle Iron, for 1/2 length amidships Do. for 1/2 at each end	4x3	4x3	4x3	4x3	4x3	4x3
REVERSED FRAMES , Angle Iron	4x3	4x3	4x3	4x3	4x3	4x3
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2
thickness at the ends of vessel	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4
depth at 3/4 the half-bdth. as per Rule	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4
height extended at the Bilges... ..	a fair taper	a fair taper	a fair taper	a fair taper	a fair taper	a fair taper
IRMS , Upper, Spar, or Awaiting Deck }	7	7	7	7	7	7
do. for 1/2 length amidships }	3	3	3	3	3	3
do. for 1/2 at each end }	3	3	3	3	3	3
BEAMS , Main, or Middle Deck	—	—	—	—	—	—
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron }	—	—	—	—	—	—
do. or double Angle Iron, on Upper Edge }	—	—	—	—	—	—
Average space... ..	alternate frames	alternate frames	alternate frames	alternate frames	alternate frames	alternate frames
IRMS , Lower Deck, Hold, or Orlop }	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2
do. for 1/2 length amidships }	4	4	4	4	4	4
do. for 1/2 at each end }	4	4	4	4	4	4
Average space... ..	every eighth frame	every eighth frame	every eighth frame	every eighth frame	every eighth frame	every eighth frame
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	13	13	13	13	13	13
" Rider Plate	9 3/4	9 3/4	9 3/4	9 3/4	9 3/4	9 3/4
" Bulb Plate to Intercoastal Keelson	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
" Angle Irons	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
" Double Angle Iron Side Keelson	—	—	—	—	—	—
" Side Intercoastal Plate	—	—	—	—	—	—
" do. Angle Irons	—	—	—	—	—	—
" Attached to outside plating with angle iron	—	—	—	—	—	—
BILGE Angle Irons	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
" do. Bulb Iron... ..	—	—	—	—	—	—
" do. Intercoastal plates riveted to plating for length	—	—	—	—	—	—
BILGE STRINGER Angle Irons	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
Intercoastal plates riveted to plating for length.	—	—	—	—	—	—
SIDE STRINGER Angle Irons	—	—	—	—	—	—

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	40	10	32	10
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	9x8	9x8	9x8	9x8
fin up. part of Bilge to lr. edge of Sh'rstrake 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 & thckns	36	11	36	10
Butt Straps to outside plating, breadth & thickness	9 1/2	7 1/2	9 1/2	7 1/2
Lengths of Plating	9x2	9x2	9x2	9x2
Shifts of Plating, and Stringers... ..	2 spaces	2 spaces	2 spaces	2 spaces
Gunwale Plate on ends of Awaiting Spar, or Upper Deck Beams, breadth and thickness... ..	36	8	36	8
Angle Iron on ditto	4 1/2	3 1/2	4 1/2	3 1/2
Tie Plates fore and aft, outside Hatchways	10	8	10	8
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling	—	—	—	—
Waterways do. do.	3 1/2	3 1/2	3 1/2	3 1/2
Flat of Upper Deck do. do.	—	—	—	—
How fastened to Beams <u>galvanised iron</u>	—	—	—	—
Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness	—	—	—	—
Is the Stringer Plate attached to the outside plating? <u>Yes</u>	—	—	—	—
Angle Irons on ditto, No.	—	—	—	—
Tie Plates, outside Hatchways	—	—	—	—
Diagonal Tie Plates on Beams, No. of pairs	—	—	—	—
Waterways materials and scantlings	—	—	—	—
Flat of Middle Deck do. do.	—	—	—	—
How fastened to Beams	—	—	—	—
Stringer Plates on ends of <u>Lower Deck, Hold</u> } Beams	27	7	27	7
Is the Stringer Plate attached to the outside plating? <u>Yes</u>	—	—	—	—
Angle Irons on ditto, No. <u>3</u>	3 1/2	3 1/2	3 1/2	3 1/2
Stringer or Tie Plates, outside Hatchways <u>4 1/2</u> x <u>3 1/2</u> x <u>7</u>	4 1/2	3 1/2	4 1/2	3 1/2
Flat of Lower Deck	—	—	—	—
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2	2 1/2	2 1/2	2 1/2
Main piece of Rudder, diameter at head do. at heel	4 3/4	4 3/4	4 3/4	4 3/4
Can the Rudder be unshipped afloat? <u>Yes</u>	—	—	—	—
Bulkheads No. <u>1</u> Thickness of <u>6/16</u>	—	—	—	—
Height up <u>Upper deck</u>	—	—	—	—
How secured to sides of ship <u>Between double frames</u>	—	—	—	—
Size of Vertical Angle Irons <u>3x3x9/16</u> and distance apart <u>30</u> ins.	—	—	—	—
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>	—	—	—	—

Transoms, material. Knightsheads. Hawse Timbers. Iron
 Windlass Emmerson & Walker Pall Bitt Iron

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 1/4 in. Rivets, about 6 apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend near middle line to Hold B'w' Angles A.I. and to Gunwale 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 1/4 ins. from centre to centre.
 Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 5/16 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 amidships.
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 4 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? Turned down ends and riveted to frames & plating
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Plates by Conssett Iron Co. & Co.
 Manufacturer's name or trade mark Angles & Bulbs by J. Dyack & Co.

The above is a correct description.
 Master's Signature, James Laing Surveyor's Signature, James Laing
 Surveyor to Lloyd's Register of British and Foreign Shipping.

manship.

Are the butts of plating planed or otherwise fitted? *Planed*

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

the fillings between the ribs and plates solid single pieces? *Yes*

the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes very well*

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 Iron &* 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 *Please see sketch attached; the seams of*

the Bowsprit are single riveted, but compensated by layer angles

are 3 1/2 x 3 x 8/16

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
13200		270	1 5/8	47 1/2	270-1 1/16	47 5/10	Bowers	1	26.20	26.0.0.0	25.2.0	25 3/20
SAILS.												
No.												
2	Fore Sails,	Cables, &c.	270	1 5/8	47 1/2	270-1 1/16		1	26.0.24	25.16.1.0	25.2.0	25 3/20
2	Fore Top Sails,	Chain						1	19.0.14	19.2.31	21.3.0	22 3/20
2	Fore Topmast Stay Sails	Braking strain applied to 3 links										
2	Main Sails,	Each 15 fathoms 6 1/4 tons, tested at R.W.C.										
2	Main Top Sails,	R.T. and driven by J. Hartness Augt 16/76										
		Chain										
		Hemp Strm Cbl	90	1								
		Hawser	90	10								
		Towlines	90	7 1/2								
		Warp	90	4 1/2								
		quality	90	4 1/2								
		and others as usual										

Standing and Running Rigging *of Iron & Rope* sufficient in size and *good* in quality. She has *one* Long Boat and *two* others

The Windlass is *Hummerson & Walker's Patent* Capstan *of 2 kind* and Rudder *good* Pumps *2 Main good.*

Engine Room Skylights. How constructed? *How secured in ordinary weather?*

What arrangements for deadlights in bad weather? *How are lids secured?*

Coal Bunker Openings. How constructed? *Height above deck?*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *4 Ports and 3 Scuppers on each side.*

Cargo Hatchways. How formed? *Iron plate Comings & Headledges*

State size Main Hatch *11' 0" x 7' 0"* Fore hatch *5' 6" x 4' 6"* Quarter hatch *7' 4" x 4' 6"*

If of extraordinary size, state how framed and secured? *How are lids secured?*

What arrangement for shifting beams? *Oil*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>2605</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>Built under J.P. and surveyed 1845 Dec 20 7/6 Iron 15 18 24 26 31 36</i>
Date <i>16 Decr. 1845</i>	2nd. On the plating during the process of riveting	<i>31 36 22 24 28 March 1846 10 14 16 20 22 23 24 April 3 11 20 24 27 May 12 30 12 14 19 20</i>
Order for Ordinary Survey No. <i>2605</i>	3rd. When the beams were in and fastened, and before the decks were laid	<i>24 29 June 24 29 13 15 19 22 24 25 July 4 10 22 August 11 17 22 26 31 Sept 5 11 16</i>
Date <i>16 Decr. 1845</i>	4th. When the ship was complete, and before the plating was finally coated or cemented	<i>26 24 Oct 11 14 19 22 26 27 30 Nov 9 14 25 29</i>
No. <i>214</i> in builder's yard.	5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This vessel is constructed with a raised Quarter deck about 37 feet in length; Top-gallant fore-castle about 26 feet in length, and a House on deck 19' 6" x 12' 0"; is fitted with Hummerson & Walker's Patent Windlass, and diagonal tie-plates are fitted to the Fore and Main mast partners upon the upper deck, where the masts are to be wedged; She is built in accordance with the rules and the tracing of Midships Section attached. The workmanship is of good quality and the Iron of which the masts are constructed has been submitted to both hot & cold tests and proved satisfactory*

State if one, two, ~~or three~~ decked vessel, or if open, or covering decked; and the lengths of ~~poop~~, fore-castle, or raised quarter deck, and the length of double, or part deck

How are the surfaces preserved from oxidation? Inside *Portland Cement to upper turn* Outside *3 Coats of paint*

I am of opinion this Vessel should be Classed **100 A, 1, of Rules & Paint above*

The amount of the Entry Fee ... £ 5 : - : - is received by me, *HW*

Special ... £ 38 : 3 : - *1st Decr. 1876*

Certificate ... - : - : -

(Travelling Expenses, if any, £ - - -)

Committee's Minute *5th December 1876*

Character assigned *100 A 1*

J. Keen for Jan
Equipment
Lloyd's Register
Foundation