

IRON OR STEEL SHIP.

(Printed at London, (Printed) 25 MARCH 1890

Port of Middlesbrough Date, First Survey Sept 17th 89 Last Survey March 15th 1890

No. 18 Survey held at Middlesbrough Date, First Survey Sept 17th 89 Last Survey March 15th 1890
On the Steel Screw Steamer AMERICA Rig Schooner 2 masts.

TONNAGE under Tonnage Deck 773.73
Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.
Total under Upper Dk.
No. of Poop
No. of Raised Or. Dk. or Break
No. of Bridge House
No. of Houses on Deck 55.93
No. of excess of Hatchways 7.28
No. of Forecastle
Gross Tonnage 836.94
Less Crew Space 38.15
Less Engine Room Register Tonnage as out on Beam 293.27
505.52

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 13.91
Depth from upper part of Keel to top of Upper Deck Beams 14.93
Girth of Half Midship Frame (as per Rule) 25.30
1st Number 54.14
1st Number, if a 3-Decked Vessel deduct 7 feet
Length 193.87
2nd Number 104.96
Proportions— Breadths to Length... 6.9
Depths to Length— Upper Deck to Keel... 12.98
Main Deck ditto

Master Hvosfel
Year of appointment 1890
Built at Middlesbrough
When built 1889.90 Launched Dec 27th 89
By whom built Raylton Dixon & Co
Owners S. M. Kutchule
Managers Bergen
Residence Bergen
Port belonging to West India
Destined Voyage West India
X Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 193 Feet. 10 1/2 Inches. BREADTH Moulded... 27 Feet. 10 Inches. DEPTH top of Floors to Upper Deck Beams 13 Feet. 1 1/2 Inches. Do. do. Main Deck Beams 13 Feet. 7 1/2 Inches. Power of Engines 120 Horse. No. of Decks with flat laid 2 No. of Tiers of Beams 2

Dimensions of Ship per Register, length 197.0 breadth, 27.9 depth, 21.0
KEEL, depth and thickness 7 1/2 x 2 1/2
STEM, moulding and thickness 6 1/2 x 2 1/2
STERN-POST for Rudder do. do. 7 x 4 1/2
" " for Propeller 22
Distance of Frames from moulding edge to moulding edge, all fore and aft 22
FRAMES, Angle Iron, for 1/2 length amidships Do. for 1/4 at each end see back of Repl.
REVERSED FRAMES, Angle Iron
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 15 1/2
" thickness at the ends of vessel 8
" depth at 3/4 the half-bdth. as per Rule 31
" height-extended at the Bilges... 31

BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper edge Average space... 4 1/4
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space... 4 1/4
BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space... 4 1/4
BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron Single or double Angle Iron on Upper Edge Average space... 4 1/4

KEELSONS Centre line, single or double plate, box, or intercostal, plates 12 in Eng. Rbr. 10 Room 12 10
" Rider Plate 9 1/2 10 9 1/2 10
" Bulb Plate to Intercostal Keelson 4 1/2 3 7 4 1/2 3 7
" Angle Irons 4 1/2 3 7 4 1/2 3 7
" Double Angle Iron Side Keelson 7 7
" Side Intercostal Plate 3 3 8 3 3 8
" do. Angle Irons 3 3 8 3 3 8
" Attached to outside plating with angle iron 4 1/2 3 7 4 1/2 3 7
BILGE Angles Irons 6 1/2 6 6 1/2 6
" do. Bulb Iron 4 1/2 3 7 4 1/2 3 7
" do. Intercostal plates riveted to plating for length 4 1/2 3 7 4 1/2 3 7

BILGE STRINGER Angle Irons 4 1/2 3 7 4 1/2 3 7
SIDE STRINGER Angle Irons 4 1/2 3 7 4 1/2 3 7
The FRAMES extend in one length from Keel to 1/4 aft, bilge to bilge
The REVERSED ANGLE IRONS on floors and frames extend across middle line to Mid Spar dks
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? 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 1/2 ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 7/8 ins. from centre to centre.
" Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 2 1/2 thicker than the plates they connect. 1 1/2 lapped 3 1/2
" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 2 7/8 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.

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? 3 1/2 diam Breadth of laps of plating in single riveting 3 1/2 diam No. of Breasthooks, 3 Crutches, dup spar
What description of Steel is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Siemens-Martin
Manufacturer's name or trade mark, Robert Vaughan & Co. Messrs J. & C. Consett, Dorman Long & Co
The above is a correct description.
Builder's Signature, Raylton Dixon Surveyor's Signature, N. M. Williams Surveyor to Lloyd's Register of British and Foreign Shipping.

	Inches in Ship	Inches in Ship	Inches per Rule	Inches per Rule	Inches per Rule	Inches per Rule
Flat Keel Plates, breadth and thickness	32	9	32	9		
PLATES in Garboard Strakes, br'dth & thickness		8		8		
From Garboard to upper part of Bilges		9		9		
" Of <u>bilge</u> at Bilge, increased thickness, and length applied <u>1/2</u> length		8		8		
" From up. prt of Bilge to lr. edge of Sh'rstrake	34	10	34	10		
" Main Sheerstrake, breadth and thickness						
" Of d'bling at Sh'stk. & Ing. applied						
" From M'n. to Upper Spar Dk. Sh'rstrake						
" Upper Spar Dk Sh'rstrake, br'dth & thic'k'ns	36	9	36	9		
Butt Straps to outside plating, breadth & thickness						
Lengths of Plating <u>7</u> spaces of frames						
Shifts of Plating, and Stringers						
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	32	7	32	7		
Angle Iron on ditto	32	7	32	7		
Tie Plates fore and aft, outside Hatchways	9	7	9	7		
Diagonal Tie Plates on Beams No. of Pairs						
Flat of Upper, Spar, or Awning Dk. <u>P. Pine</u>	32		32			
How fastened to Beams <u>bolted</u>						
Stringer Plate on ends of Main or Middle Deck	36	8	36	8		
Beams, breadth and thickness						
Is the Stringer Plate attached to the outside plating?	<u>No</u>					
Angle Irons on ditto, No. <u>2</u>	32	7	32	7		
Tie Plates, outside Hatchways	9	8	9	8		
Diagonal Tie Plates on Beams, No. of pairs						
Flat of <u>Main</u> Deck do. do. <u>P. Pine</u>	32		32			
How fastened to Beams <u>bolted</u>						
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams						
Is the Stringer Plate attached to the outside plating?						
Angle Irons on ditto, No.						
Stringer or Tie Plates, outside Hatchways						
Flat of Lower Deck						

Ceiling betwixt Decks, thickness and material double inch brant's hoop
" in hold do. do. 2 1/2 in flat 2 1/2 in iron
Main piece of Rudder, diameter at head 4 1/2 4 1/4
do. at heel 32x3 2 1/4
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 4 No. per Rule 4
" Thickness of 6 to 20
" Height up spar dks
" How secured to sides of ship double frame
" Size of Vertical Angle Irons 3 1/2 x 3 1/2 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? No
The FRAMES extend in one length from Keel to 1/4 aft, bilge to bilge
The REVERSED ANGLE IRONS on floors and frames extend across middle line to Mid Spar dks
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes
PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.
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" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
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" 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.
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? 3 1/2 diam Breadth of laps of plating in single riveting 3 1/2 diam No. of Breasthooks, 3 Crutches, dup spar
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State clearly where plating is of alternate thicknesses—as distinguished from distinguished thickness at ends of vessel.
If Iron Deck, state if whole or part, and if wood deck is laid thereon.

Form No. 1 for Iron or Steel Ships—250

Do the edges of the carvel work and o. 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*
 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*
 Do the edges of the carvel work and o. the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*
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Masts, Bowsprit, Yards, &c., are *P. Pine* in *Iron* 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

Fore Mast 61' x 16 1/2"
Main " 54' x 9"

Number for Equipment	Letter for do.	CABLES, &c.			Test per Certificate Tons	Fathoms & Inches per Rule	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS.		Test per Certificate	Wght req'd per Rate.	Machine where Tested and Superintendent, also Name of Anchor Maker.	
		Number of Certificate	Fathoms	Inches				Number of Certificate	Weight Ex. Stock				
13404	2	5922	90	1 1/16	34	240	Low Walker	19868	20.3.14	21.10.1.7	16 3/4	Riv. Iron Cone	
		5938	150	"	"	1 1/16	R Bunell	19869	20.3.22	21.12.2.0		J. Hartness	
		<i>I. about 1/2 Co. Sm. ? Makers</i>							19867	18.3.10	19.17.2.0		Supt
		Iron Stream Caain	60	3/8	13 3/4	60 1/2	do	Smiths Pat	Stockless	CA	47.3.0	Drop to Cert	
		Steel Wire ..						J. Spencer	Low Walker	25%	11.3.21	produced	
		TOWLINE—						Collective Weights	59.2.24		59.2.21		
		Hemp or Steel Wire	90	3/4	22	90.9'hemp		Stream	5.2.14	7.18.1.21	5.2.0	Low Walker	
		Hawser	90	7		7		Kedge	2.3.21	5.10.0.0	2.3.0	R Bunell	
		Warp	90	5		5		2nd Kedge	1.2.7	4.1.2.7	1.2.0	Supt	

Standing and Running Rigging *Kriehemp* sufficient in size and *Iron* in quality. She has *2* Life Boats and *one other*.
 The Windlass is *Iron* Capstan and Rudder *Iron* Pumps *Iron*

Engine Room Skylights.—How constructed? *Leak coming in top* How secured in ordinary weather? *Thick thick top + strong glass lights*
 What arrangements for deadlights in bad weather?

Coal Bunker Openings.—How constructed? *Plate casing in house* How are lids secured? *bleat + battens* Height above deck? *7' 1"*
 Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *open rails, scuppers in sheer strake*

Cargo Hatchways.—How formed? *Plate casing 26" high*
 State size *Main Hatch 7' 4" x 5' 10"* *No 2 Hatch 14' 6" x 10' 0"*
 If of extraordinary size, state how framed and secured... *No 1. 1 fore + after. No 2. 1 beam + 1 fore + after. No 3. 1 web beam + 1 fore + after.*
 Hatches, If strong and efficient? *3 solid iron*

Order for Special Survey No. *14574* Date *Jan 15th 1890*
 Order for Ordinary Survey No. Date
 No. *312* in builder's yard.
 State dates of letters respecting this case *Sept 5th, 7th, 19th, 26th Dec 16th 89 M. Dec 16th 89 P. Dec 17th, 21st, 27th, 31st 89 Jan 25th 90*
 1st. On the several parts of the frame, when in place, and before the plating was wrought
 2nd. On the plating during the process of riveting
 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 or cemented...
 5th. After the ship was launched and equipped
 Built under *Special Survey*
 1st visit *Sept 19th 1889*
 last visit *March 15th 1890* Total No. of Visits *40*

General Remarks (State quality of workmanship, &c.) *Built under special survey, in accordance with the plans approved, the rules applicable to the vessel, and the letters named above. The frames reverse bars being 1/2" under the required thickness, compensation has been given by web frames, as shown on the midship section and elevation, and approved. Spar deck steel in way of engine + boiler openings, covered with iron. Large iron deck cargo ports, constructed to approved plans. The freeboard has been marked on the vessel side, in accordance with Secy's letter dated Jan 30th 1890 as follows. Top of wooden spar deck Summer 8' 3 1/2" Winter 8' 6" allowance for fresh water 3 1/2 inches. The freeboard to be recorded on the certificate of classification and in the Register Book.*

How are the surfaces preserved from oxidation? Inside *Portland Cement + Paint* Outside *Paint*

Particulars for Record in R.B.—Length of Poop ft., R.Q.D. ft., Bridge Dk., ft., F'castle ft.; No. of Dks. (excluding spar, awn., &c.) *1*
 Material of dks. *P. Pine* If spar, awn. dk., &c. *Spar dk* Material of spar, awn. dk., &c. *P. Pine*; No. of tiers of beams (with and without dks. laid) *2*
 Official No. ; Signal Letters

I am of opinion this Vessel should be Classed *+ 100 A 1 Spar dk Steel* (see above re freeboard)

The amount of the Extra Fee£ 3 : : is received by me, *RHB*

Special£ 39 : 19 : : *24 3rd 1890*

(to be sent as per margin). Certificate ...

(Travelling Expenses, if any, £) Committee's Minute *FRIDAY 28 MARCH 1890*

Character assigned *100A1 Steel Spar dk*
+ Lmb 3/90
LA exp
subject to freeboard 8' 3 1/2"
15k + Spar dk 8' 6"
web frames 8' 9 1/2"

N. M. Williams
 Surveyor to Lloyd's Register of British and Foreign Shipping.
 It is submitted that this vessel appears eligible to be classed 100A1 (Steel) Spar dk as recommended. The freeboard of 8' 3 1/2" as approved by the Committee and now marked on the vessel side to be entered in the Classification Certificate and recorded in the Register Book and further the Vessel is a full tonnage of 8' 9 1/2" to be marked in the Classification Certificate.

Certificate to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)