

Spar, Awning or Part Awning Dk.

IRON OR STEEL STEAMER.

333
(Received at London Office)

SAT. 14 FEB 1891

No. 333 Survey held at *Stockton-on-Tees*

Date of completion of Report *11 February 1891*

Port of *Middlesboro-on-Tees*

On the *Screw Steamer*

Date, First Survey *August 24 1890* Last Survey *February 5 1891*

Yard 12333 Rig Schooner

TONNAGE under Tonnage Deck... *1846.24*

SPAR, AWNING OR PART AWNING-DECKED VESSEL, or a Vessel having a continuous Shade Deck.

Master *Thomas Ball*

CLASS *100 A 1 Steel Part-Awning Deck*

Year of Appointment *(1) As Master in service of owner of present vessel: 1893 (2) As Master of this vessel: 1891*

Do. of Poop *41.61*

Half Breadth (moulded) *19.89*

Built at *Stockton-on-Tees*

Do. of Raised Or. *150.16*

Depth (from upper part of keel to top of Main Deck Beams) *22.54*

When built *1890* Launched *9-11-90*

Do. of Houses on Deck *19.51*

Girth of Main Midship Frame (as per Rule) *38.64*

By whom built *Richardson, Dugdale & Co. Ltd.*

Do. of excess of Hatchways *24.92*

1st Number *81.07*

Owners *(Charles & Co. Ltd.)*

Gross Tonnage *2536.48*

Length *295.33*

Managers *82*

Less Crew Space *102.04*

2nd Number *23945*

Residence *17 Leadenhall St. London.*

TONNAGE FOR FEES... *2434.41*

Proportions—Breadths to Length *4.4*

Port belonging to *London.*

Register Tonnage as cut on Beam... *1622.74*

Destined Voyage *River Plate.*

If Surveyed while Building, Afloat, or in Dry Dock *Yes*

LENGTH on Deck as per Rule... *295.4*

BREADTH Moulded... *39.92*

DEPTH, top of Floors to Spar or Awn. Dk. Beams... *18.11*

Dimensions of Ship per Register, Length *294* breadth *40.1* depth *25.9*

FORGINGS AND CASTINGS.

KEELSONS AND STRINGERS.

KEEL, Bar or Side Plates, depth and thickness *10 x 2 1/2*

STERN POST for Rudder do. do. *10 x 2 1/2*

CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate

MAIN PIECE of Rudder, diameter at head *3 1/2*

RUDDER, how constructed *Iron forging, Plated in usual manner.*

SIDE KEELSON, Angles

FRAMING.

FRAME Angles, on 7 Bars for 1/2 length amidships

BULB OR PLATE ABOVE FLOORS, for length

DOORS, depth and thickness of Floor Plate

DOORS & BRACKETS, in Cell Dble Bottoms

INTERCOASTAL PLATE, for length

ENTRE GIRDER, in Double bottom, depth and thickness

ENTRE GIRDER, number and thickness

INTERCOASTAL PLATE, for length

SIDE GIRDER, number and thickness

MARGIN PLATE, depth (exclusive of flange) and thickness

INTERCOASTAL PLATE, for length

INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake

INNER BOTTOM PLATING, thickness in Engine and Boiler space

INTERCOASTAL PLATE, for length

TRANS. Spar or Awning Deck, Single Angle, Plate or Tee Bulb

TRANS. Spar or Awning Deck, Single Angle, Plate or Tee Bulb

INTERCOASTAL PLATE, for length

TRANS. Main Deck, Single Angle, Bulb

TRANS. Main Deck, Single Angle, Bulb

INTERCOASTAL PLATE, for length

TRANS. Lower Deck, Single Angle, Bulb

TRANS. Lower Deck, Single Angle, Bulb

INTERCOASTAL PLATE, for length

TRANS. Hold, or Orlop, Plate or Tee Bulb

TRANS. Hold, or Orlop, Plate or Tee Bulb

INTERCOASTAL PLATE, for length

TRANS. Bridge Deck, Angle, Bulb Angle, Plate, or Tee Bulb

TRANS. Bridge Deck, Angle, Bulb Angle, Plate, or Tee Bulb

INTERCOASTAL PLATE, for length

TRANS. Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb

TRANS. Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb

INTERCOASTAL PLATE, for length

TRANS. In 'tween Decks, Size and Spacing

TRANS. In 'tween Decks, Size and Spacing

INTERCOASTAL PLATE, for length

TRANS. FRAMES, In Fore Body, No. and spacing

TRANS. FRAMES, In Fore Body, No. and spacing

INTERCOASTAL PLATE, for length

TRANS. FRAMES, In After Body, No. and spacing

TRANS. FRAMES, In After Body, No. and spacing

INTERCOASTAL PLATE, for length

TRANS. KEEL PLATES to Stringers between

TRANS. KEEL PLATES to Stringers between

INTERCOASTAL PLATE, for length

TRANS. FRAMES, depth and thickness

TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

TRANS. FRAMES, depth and thickness

TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

TRANS. FRAMES, depth and thickness

TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

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INTERCOASTAL PLATE, for length

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TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

TRANS. FRAMES, depth and thickness

TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

TRANS. FRAMES, depth and thickness

TRANS. FRAMES, depth and thickness

INTERCOASTAL PLATE, for length

Ceiling betwixt Decks, thickness and material <i>2 Pine</i>	BULKHEADS.	No. in Vessel <i>Five</i>	No. Reqd. by Rule <i>Five</i>	
" in hold do. do. <i>2 Pine</i>		Thickness	Angles.	Spacing.
Number of Breasthooks <i>Seven</i>	W. T. BULKHEADS	<i>4-6</i>	Vrtel. <i>5 1/2 x 3 1/2 x 5/8</i>	<i>30</i>
" Crutches <i>Three</i>	PARTITIONS		Hrztl. <i>5 1/2 x 3 1/2 x 5/8</i>	<i>48</i>
	LONGITUDINAL		Vrtel.	
			Hrztl.	

Are the outside Plates doubled two spaces of Frames in length? *Yes*

The FRAMES extend in one length from *Flange plate to flange plate & hence to keelsons* Riveted through Plates with *5/8* in. Rivets, about *6 1/2* apart.

The REVERSED ANGLE on floors and frames extend from *Middle line to main deck in way of 1st & 2nd dck. to above upper stringer and to Raised Quarter Deck alternately and at ends of vessel as per Rule.*

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.

Garboard, double riveted to Bar Keel or Flat Plate Keel, with rivets *1 1/8* in. diameter, averaging *5 1/2* ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clench, and double riveted; with rivets *5/8* in. diameter, averaging *3 1/2* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, treble or double riveted; treble for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.

" of C. & S. & Strakes, overlapped for *near double length*, treble riveted for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.

Butts of *all* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *3/16* thicker than the plates they connect, *accepting as stated above*

Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets *5/8* in. diameter, averaging *3 1/2* ins. from centre to centre.

Butts from Bilge to Main Sheerstrake, worked carvel, treble or double riveted; treble for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.

" " " " overlapped for *1/2* length, treble riveted for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. *Spar or Awning Sheerstrake, double or single riveted.*

Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. Butts of *Spar or Awning Sheerstrake*, treble riveted *1/2* length amidships.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of *Spar or Awning Stringer Plate*, treble riveted for *1/2* length.

" " " " Single or Double Straps for *1/2* length amidships. " " " " Single or Double Straps for *1/2* length.

Butts of Inner Bottom Plating *double* riveted for *1/2* length. Butts of Centre Girder *double overlap* riveted.

Breadth of edge laps of Shell Plating in double riveting *5 1/2*. Breadth of edge laps of Shell Plating in single riveting *9*.

Butt Straps of Shell Plating, breadth and thickness *19-16-9 1/2 x 18-15-14-9*. Butts, If Lapped, breadth of laps *9*.

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double, riveted *treble & double*.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *High plates, Corbett Iron Co. & Iron Steel & Iron Co. Steel angles & bulbs. Sorman Long & Co. Iron plates, Stockton Iron Co. & Steel Stockton Iron Co. Iron angles, South Stockton Co. & Stockton Iron Co.*

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

Is the riveted work properly closed? *Yes*

Are the liners between the frames and plates solid single pieces? *Yes*

to plate, &c., conform well to each other? *Yes*

from the faying surfaces? *Yes*

Do any rivets break into or through the seams or butts of plating? *A few at the butts only*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

MASTS, SPARS, &c.

	Material.	Total length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hoards.	Head.		Number.	Size.	Seams.	Butts.
LOWER MASTS....											
Fore	<i>Iron</i>	<i>69-0</i>	<i>20 x 5/8</i>	<i>18 1/2 x 5/8</i>	<i>16 x 5/8</i>	<i>14 1/2 x 5/8</i>	<i>Two</i>			<i>Single</i>	<i>Double as per Rule</i>
Main	<i>Iron</i>	<i>69-0</i>	<i>20 x 5/8</i>	<i>18 1/2 x 5/8</i>	<i>16 x 5/8</i>	<i>14 1/2 x 5/8</i>	<i>Two</i>				
Mizen											

Bowsprit

Topmasts, Yards and Remainder of Spars *With Pine*

Rigging, Material and Size, Shrouds *Wire & Manila*

Sails. *One complete* Suit of *Chords 3 1/2, Stays 4 1/2, Backstay 5 1/2*

Sails and the following spare sails

EQUIPMENT No. 26938

LETTER 8

ANCHORS.

Number of Certificate.		WEIGHT, EX STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE				WEIGHT REQ. P. R. RULE			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.			
29084	1st Bower ..	40	1	25	36			36	0	2	14	40	0	0	Hartshornes Patent	Hartshornes	14-12-90
29088	2nd " ..	40	0	25	36	18	3	36	18	3	0	40	0	0	52	52	14-12-90
29029	3rd " ..	35	1	21	32	15	0	32	15	0	0	34	0	0	52	52	14-12-90
	4th " ..																
	Collective weight	115	3	25								114	0	0			
28828	Stream ...	10	2	26	12	3	4	12	13	0	14	10	2	0	Common	Hartshornes	15-11-90
28829	Kedge	5	1	13	1	0	14	7	16	1	0	5	1	0	52	52	15-11-90
12882	2nd Kedge ..	2	2	0	3	0	5	5	0	0	0	2	2	0	52	52	15-11-90

If Patent state Name of Patent.

L.P. & al

Gutherton

W. P. Leith

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate Tons.	Weight of Chain Cable.	Fathoms & Size. Per Rule.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Fathoms.	Size.	Fathoms & Size. Per Rule.
<i>11539</i>	<i>135</i>	<i>1 1/2</i>	<i>82 1/2</i>	<i>21-3-12</i>	<i>240-1 1/2</i>	<i>Steel wire</i>	<i>Hartshornes</i>	<i>2-11-90 by</i>	<i>Towline</i>			
<i>11540</i>	<i>135</i>	<i>1 1/2</i>	<i>82 1/2</i>	<i>21-3-12</i>	<i>240-1 1/2</i>	<i>Steel wire</i>	<i>52</i>	<i>12-11-90 by</i>	<i>Hawser</i>	<i>Steel</i>	<i>90</i>	<i>3 1/2</i>
										<i>52</i>	<i>90</i>	<i>2 1/2</i>
										<i>52</i>	<i>90</i>	<i>2 1/2</i>
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										<i>52</i>	<i>90</i>	<i>2 1/2</i>
										<i>52</i>	<i>90</i>	<i>2 1/2</i>

Boats *Two life boats (25 feet), cutter (16 feet), and gig (20 feet)*

Pumps, Number *Four hand pumps* Diameter of Barrel and Tail Pipe *Barrel 6 Tail pipe 5*

The Windlass is *Emerson Walker & Co. (Steam)* Capstan *Four Steam Winches*

Engine Room Skylights.—How constructed? *Iron on iron coamings*

What arrangements for deadlights in bad weather? *Iron shutters with bulls eyes*

Coal Bunker Openings.—How constructed? *Iron plates & angles* How are lids secured? *Hatch bars* Height above deck? *12, 48 & 66*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *Four freeing ports on each side on Raised Quarter Deck 38 x 18 in addition to a sufficient number of scuppers. Forward rails & stanchions on 1st & 2nd dck.*

Cargo Hatchways.—How formed? *Iron plates and angles in the usual manner* Hatches.—If strong and efficient? *Yes* For Coiled

State size No. 1 Hatch (Forward) *16-0 x 12-0* No. 2 Hatch *26-0 x 16-0* No. 3 Hatch *26-0 x 14-0* No. 4 Hatch *22-0 x 14-0*

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *Four web plate beams in No. 1 & two web plate beams in No. 2, 3 & 4.*

Three iron fore and afters in each.

Bulwarks, height above deck and description *on R. & S. 38 Iron plate & stanchions* Main Rail, material and size *Bull angle 5 x 5 1/2 x 7/8*

The above is a correct description.

Builder's Signature (here only) *Richardson & Duck* Surveyor's Signature *Jesse Williams & Robert Haig*

Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1 C.

Order for Sp...
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Order for Special Survey No. 24

Date 24th Sept. 1890

Order for Ordinary Survey No. 383

Date 383 in builder's yard

DATES of Surveys held while building as per Section 18.

- 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

First Survey 24th August 1890

Last Survey 5th February 1891

Total No. of Visits 57

State dates and initials of letters respecting this case July 29th M. + November 14th (P) 1890.

General Remarks (State quality of workmanship, &c.) This Steel Screw Steamer (which is a sister ship to the S.S. Etona, M.B.R. Report No. 135) has been built in accordance with the approved plans of Midship Section and Profile as amended, the Secretary's letters of the above-mentioned dates bearing upon the case, and in other respects as required by the Rules for the class contemplated. The workmanship is good throughout.

The steel used in her construction has been tested at the Steel works by the Society's Surveyors in conformity with the requirements of the Rules; and iron rivets have been used throughout.

The bow anchors are Hartsornes Patent Steel ones and the cast-steel parts of them have been subjected to drop and mechanical tests at Rochester by Mr. S. G. Lewis.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 28¹/₂ ft., R.Q.D. or Break 92 ft., Bridge Deck 14¹/₂ ft., F'castle 14 ft., (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated Raised Quarter + Port-awning Deck joined.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 Dk. Steel + iron + pt. iron dk. 1 tier of beams + pt. and wlk frames.

Official No. 98890; Signal Letters MBTC

PARTICULARS OF WATER BALLAST—

Double bottom, aft, length ✓ and water capacity in tons ✓. Double bottom, forward, length ✓ and water capacity in tons ✓.
Double bottom, under engines and boilers, length ✓ and water capacity in tons ✓. If under Engines only, or Boilers only, state which ✓.
Double bottom, constructed on the cellular system, length 248 feet and water capacity in tons 539.
Fore peak tank, water capacity in tons ✓. After peak tank, water capacity in tons ✓.
Midship deep tank, length ✓ and water capacity in tons ✓. Other tanks, if fitted, length ✓ and water capacity in tons ✓.

The above have all been tested as required by the Rules.

(If necessary, furnish further information by sketch.)

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

FREEBOARD assigned by the Committee, as per Secretary's Letter, dated 2nd January 1891

State if marked on Vessel's sides in accordance with Notice No. Yes

In Summer	1	ft. 8 ¹ / ₂ ins.
In Winter	2	ft. 0 ins.
For Winter in North Atlantic	2	ft. 4 ¹ / ₂ ins.
Fresh Water above the centre of disc	5	ins.

To top of Wood, Iron or Steel Upper, Spar-
Awning, or Part-Awning Deck.

Statutory Deck Line at 1st of
the Vessel's Form dated 24-1-91.

The amount of Entry Fee £ 5 : 0 : 0 is received by me, W.H.
Special ... £ 85 : 14 : 0 12. 2. 1891
Certificate* £ : :
Travelling Expenses, if any £ : :

* Certificate to be sent to

I am of opinion this Vessel should be Classed 100A 1 Steel + pt. awng dk.

James Williams, Robert Haig
Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

TUES. 17 FEB 1891

Character assigned

+ L.M.B. 1/91 100A 1 Steel
L.A. + C.D. pt awng dk,
subject to freeboard of
5' 8' 1¹/₂"
1 Dk. (pt. Sll + pt. Iron) wlk frames,
+ pt. awng dk (Iron)

It is submitted that this vessel appears eligible to be classed 100A1 (Steel) + pt. awng dk. as recommended. The freeboard of 8.5¹/₂ from the centre of the disc to the top of the Statutory deck line at the foremast is approved by the Committee and now brought up to the vessel's sides by the insertion in the certificate of classification of the words "subject to the Statutory freeboard" and the insertion in the certificate of classification of the words "subject to the Statutory freeboard" and the insertion in the certificate of classification of the words "subject to the Statutory freeboard".



Lloyd's Register Foundation