

1 or 2 Dks., R.O. Dk.,  
and Pt. Awng. Dk.

# IRON OR STEEL STEAMER.

No. 2381

MON 25 JUL 1898

State of Report is also sent on the Machinery of the Vessel *Yes*

Date of completion of Report *22 July 1898*

Port of *Middlesbrough - on - Tees*

Survey held at *Thornaby-on-Tees*  
On the *Crew Steamer*

Date, First Survey, *11 February 98*  
*Clara*

Last Survey *15 July 1898*  
*Yard No. 495 Rig Schooner*

Master *J. R. Cox*

TONNAGE under  
Tonnage Deck *2240.33*

Do. of Poop *77.16*

Do. of Raised Or. *54.51*

Do. of Break. *23.26*

Do. of Bridge House *35.34*

Do. of Forecastle *2430.52*

Do. of Houses on Deck *81.99*

Do. of excess of Hatchways *2348.53*

Do. above Crown of *777.77*

Engine Room *322.80*

Gross Tonnage *322.80*

Less Crew Space *1538.56*

Less above Crown of *1538.56*

Engine Room *1538.56*

Less Navigation Spaces *1538.56*

Register Tonnage *1538.56*

as cut on Beam *1538.56*

ONE OR TWO DECKED VESSEL.

CLASS *100 A / Steel*

FEET.

Year of appointment

(1) As master in service of  
owner of present vessel: - 1898  
(2) As master of this  
vessel: - 1898

Built at *Thornaby-on-Tees*

When built *1898* Launched *23-5-98*

By whom built *Richardson Dux & Co*

Owners *Burdach & Cook*

Managers *52*

Residence *34 St Mary Axe London*

Port belonging to *London*

Depths to Length—Main Deck to top of Keel.....

*12.9*

Port belonging to *London*

Destined Voyage *Lyne to Load*

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

LENGTH on Deck as	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH—	Feet.	Inches.	No. of Decks with Flat laid	No. of Tiers of Beams
per Rule.....	<i>308</i>	<i>2 1/2</i>	Moulded.....	<i>43</i>	<i>9 3/4</i>	Top of Main Deck to top of Main Deck Beams.....	<i>20</i>	<i>4 1/2</i>	<i>One</i>	<i>Two</i>

Dimensions of Ship per Register, Length, *310.2* breadth, *44.1* depth, *20.45* Moulded Depth, *22* ft. *10 1/2* ins. Round of Beam, Actual *10 1/2* ins.

FRAMING.						FORGINGS AND CASTINGS.					
	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or a	Inches per Rule Or a		Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or a	Inches per Rule Or a
FRAME, Angles, <i>2</i> or <i>3</i> Bars, for $\frac{1}{2}$ length amidships.....	<i>5 1/2</i>	<i>3 1/2</i>	<i>8</i>	<i>5 1/2</i>	<i>3 1/2</i>	KEEL, Bar or Side Plates depth and thickness.....	<i>10 1/2</i>	<i>2 3/4</i>	<i>10 1/2</i>	<i>2 3/4</i>	
Do. for $\frac{1}{2}$ at each end.....	<i>5 1/2</i>	<i>3 1/2</i>	<i>7</i>	<i>5 1/2</i>	<i>3 1/2</i>	STEM, moulding and thickness.....	<i>11</i>	<i>6</i>	<i>11</i>	<i>6</i>	
Do. in way of Double Bottoms at Solid Floors.....	<i>3 1/2</i>	<i>3 1/2</i>	<i>8</i>	<i>3 1/2</i>	<i>3 1/2</i>	STERN-POST for Rudder do. do.....	<i>11</i>	<i>6</i>	<i>11</i>	<i>6</i>	
Distance of Frames from moulding edge to moulding edge, all fore and aft.....	<i>24</i>			<i>24</i>		for Propeller.....	<i>8</i>		<i>8</i>		
REVERSED FRAME, Angles.....	<i>4</i>	<i>3 1/2</i>	<i>8</i>	<i>4</i>	<i>3 1/2</i>	MAIN PIECE of Rudder, diameter at head.....	<i>4</i>		<i>4</i>		
DEEP FRAMING, depth of girder.....						do. at heel.....					
FLOORS, depth and thickness of Floor Plate at mid-line for $\frac{1}{2}$ length amidships.....						RUDDER, how constructed <i>Iron, forging. Plated in usual way</i>					
Do. in way of Engines and Boilers.....						Can the Rudder be unshipped afloat? <i>Yes</i>					
thickness at the ends of vessel.....						KEELSONS AND STRINGERS.					
depth at $\frac{1}{2}$ the half breadth, as per Rule..						CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate.....					
height extended at the Bilges.....						do. Rider Plate.....					
FLOORS & BRACKETS, in Cell Dble Bottoms.....	<i>40</i>		<i>4</i>	<i>40</i>	<i>4</i>	do. Bulb Plate to Intercoastal Keelson.....					
Distance apart.....	<i>24</i>			<i>24</i>		do. Horizontal Plates on Floors.....					
CENTRE GIRDER, in Double Bottom, depth and thickness.....	<i>40</i>		<i>10</i>	<i>40</i>	<i>10</i>	do. Angles.....					
Angles, Top.....	<i>4</i>	<i>4</i>	<i>9</i>	<i>4</i>	<i>9</i>	SIDE KEELSON, Angles.....					
Bottom.....	<i>6 1/2</i>	<i>4</i>	<i>9</i>	<i>6 1/2</i>	<i>4</i>	do. Bulb or Plate above floors for.....					
SIDE GIRDERS, number on each side & thickness.....	<i>one</i>		<i>4</i>		<i>4</i>	do. Intercoastal Plate for.....					
Angles.....	<i>3 1/2</i>	<i>3 1/2</i>	<i>4</i>	<i>3 1/2</i>	<i>3 1/2</i>	do. Attached to outside plating with Angle..					
MARGIN PLATE, depth (exclusive of flange) and thickness.....	<i>32</i>		<i>8</i>	<i>32</i>	<i>8</i>	BILGE KEELSON, Angles.....					
Angles to Outside Plating.....	<i>3 1/2</i>	<i>3 1/2</i>	<i>8</i>	<i>3 1/2</i>	<i>3 1/2</i>	do. Bulb or Plate above floors for.....					
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake.....	<i>53</i>		<i>9</i>	<i>53</i>	<i>9</i>	do. Intercoastal Plate for.....					
thickness in Engine and Boiler space.....			<i>7 1/2</i>		<i>7 1/2</i>	do. Attached to outside plating with Angle..					
Remainder in Holds.....			<i>7</i>		<i>7</i>	BILGE STRINGER Angles.....	<i>6 1/2</i>	<i>4</i>	<i>9</i>	<i>6 1/2</i>	<i>4</i>
BEAMS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate or Tee Bulb.....	<i>8</i>	<i>3</i>	<i>11</i>	<i>8</i>	<i>3</i>	do. Bulb Plate for.....	<i>10 1/2</i>		<i>10</i>	<i>10 1/2</i>	<i>10</i>
Angles on Upper Edge.....						do. Intercoastal Plate for.....	<i>3 1/2</i>	<i>3 1/2</i>	<i>8</i>	<i>3 1/2</i>	<i>3 1/2</i>
Average space.....	<i>24</i>			<i>24</i>		do. Attached to outside plating with Angle..	<i>6 1/2</i>	<i>4</i>	<i>9</i>	<i>6 1/2</i>	<i>4</i>
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb.....						SIDE STRINGER Angles.....	<i>6 1/2</i>	<i>4</i>	<i>9</i>	<i>6 1/2</i>	<i>4</i>
Angles on Upper Edge.....						do. Bulb or Intercoastal Plate for.....	<i>10 1/2</i>		<i>10</i>	<i>10 1/2</i>	<i>10</i>
Average space.....						do. Attached to outside plating with Angle..					
BEAMS, Hold, Plate or Tee Bulb.....	<i>11 1/2</i>		<i>11</i>	<i>11 1/2</i>	<i>11</i>	Main and Raised Quarter Deck Stringer Plate, breadth and thickness.....	<i>4 1/2</i>	<i>12</i>	<i>4 1/2</i>	<i>12</i>	
Angles on Upper Edge.....	<i>5</i>	<i>4</i>	<i>9</i>	<i>5</i>	<i>4</i>	do. Angle on ditto.....	<i>4 1/2</i>	<i>9</i>	<i>4 1/2</i>	<i>9</i>	
Average space.....						do. Tie Plates fore & aft, outside Hatchways.....	<i>5 1/2</i>	<i>10</i>	<i>5 1/2</i>	<i>10</i>	
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb.....	<i>7</i>	<i>3</i>	<i>9</i>	<i>7</i>	<i>3</i>	do. Diagonal Tie Plates on Bms., No. of Pairs.....	<i>7 1/2</i>	<i>7</i>	<i>7 1/2</i>	<i>7</i>	
Angles on Upper Edge.....						do. Main Dk* Iron & Steel for.....	<i>7 1/2</i>	<i>7</i>	<i>7 1/2</i>	<i>7</i>	
Average space.....	<i>48</i>			<i>48</i>		do. R. Q. Dk* Iron or Steel for.....					
BEAMS, Bridge or Pt. Awng. Deck, Angle, Bulb Angle Plate, or Tee Bulb.....	<i>6</i>	<i>3</i>	<i>8</i>	<i>6</i>	<i>3</i>	do. Wood Deck, Material & thickness.....	<i>None</i>				
Angles on Upper Edge.....						Lower Deck Stringer Plate, breadth and thickness.....					
Average Space.....	<i>24</i>			<i>24</i>		do. Angles on ditto, No.....					
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb.....	<i>8 1/2</i>		<i>8</i>	<i>8 1/2</i>	<i>8</i>	do. Tie Plates, outside Hatchways.....					
Angles on Upper Edge.....	<i>3</i>	<i>3</i>	<i>6</i>	<i>3</i>	<i>3</i>	do. Deck* Material and thickness.....					
Average space.....	<i>48</i>			<i>48</i>		Hold Stringer Plate.....	<i>4 1/2</i>	<i>9</i>	<i>4 1/2</i>	<i>9</i>	
PILLARS, In 'tween Decks, Size and Spacing.....						do. Angles on ditto, No.....	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	
do. Hold.....						do. Tie Plates.....	<i>3</i>		<i>3</i>		
do. Quarter, 'tween Dks.,.....	<i>2 3/4</i>		<i>2 3/4</i>		<i>2 3/4</i>	do. Deck, Material and thickness.....	<i>24</i>		<i>24</i>		
do. in Hold.....	<i>3 1/2</i>		<i>3 1/2</i>		<i>3 1/2</i>	Forecastle Deck Stringer Plate, breadth & thickness.....	<i>3 1/2</i>	<i>7</i>	<i>3 1/2</i>	<i>7</i>	
WEB FRAMES, In Fore Body, No. and Spacing.....						do. Angle on ditto.....	<i>3 1/2</i>		<i>3 1/2</i>		
do. Brdth. & Thickness.....						do. Tie Plates.....	<i>3</i>		<i>3</i>		
No. of Side Stringers.....						do. Deck, Material and thickness.....	<i>24</i>		<i>24</i>		
WEB FRAMES, In E. & B. Space, No. & Spacing.....						Bridge Deck Stringer Plate, breadth & thickness.....	<i>40</i>	<i>8</i>	<i>40</i>	<i>8</i>	
do. Brdth. & Thickness.....	<i>18</i>		<i>8</i>	<i>18</i>	<i>8</i>	do. Angle on ditto.....	<i>3 1/2</i>	<i>8</i>	<i>3 1/2</i>	<i>8</i>	
WEB FRAMES, In After Body, No. and Spacing.....						do. Tie Plates.....	<i>24</i>		<i>24</i>		
do. Brdth. & Thickness.....						do. Deck, Material and thickness.....	<i>24</i>		<i>24</i>		
No. of Side Stringers.....						Forecastle Deck Stringer Plate, breadth & thickness.....	<i>3 1/2</i>	<i>7</i>	<i>3 1/2</i>	<i>7</i>	
Size of Angles or Tee Bars to Web Frames.....						do. Angle on ditto.....	<i>3 1/2</i>		<i>3 1/2</i>		
BRACKET PLATES to Stringers between Web Frames, Depth and Thickness.....						do. Tie Plates.....	<i>3</i>		<i>3</i>		
						do. Deck, Material and thickness.....	<i>24</i>		<i>24</i>		



PLATING.

STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.		BUTTS.		IF LAPPED.
	AMIDSHIP.	FORWARD.	AFT.	AMIDSHIP.	FORWARD.	AFT.	Single or Double.	Breadth of Lap.	RIVETS.	Double or Treble and for what length.	
FLAT PLATE KEEL	36	18	12	12	36	18	Double	6	1	4	10 1/2
GARBOARD OR A Strake	54	13	11	13	54	13	5/8	5 1/4	3 1/2	3 1/2	10 1/2
B "	63	10	9	13	63	10	5/8	5 1/4	3 1/2	3 1/2	10 1/2
C "	57	11	9	10	57	11	5/8	5 1/4	3 1/2	3 1/2	10 1/2
D "	63	12	10	14	63	12	5/8	5 1/4	3 1/2	3 1/2	10 1/2
E "	55	13	10	14	55	13	5/8	5 1/4	3 1/2	3 1/2	10 1/2
F "	51	13	10	13	51	13	5/8	5 1/4	3 1/2	3 1/2	10 1/2
G "	56	11	9	9	56	11	5/8	5 1/4	3 1/2	3 1/2	10 1/2
H "	52	12	9	9	52	12	5/8	5 1/4	3 1/2	3 1/2	10 1/2
J "	54	13	9	9	54	13	5/8	5 1/4	3 1/2	3 1/2	10 1/2
K (Rear)	44	15	10	10	44	15	5/8	5 1/4	3 1/2	3 1/2	10 1/2
L Bridge	8				8		Single	2 1/2	3/4	3	5
M Sides	9				9		5/8	5 1/4	3 1/2	3 1/2	10 1/2
N "											
O "											
P "											

DOUBLING OF Flat Plate Keel

Length and thickness of Bilges

Length and thickness of Sheerstrakes

Length and thickness of Strake below

POOP SIDES

RAISED QUARTER DECK SIDES

BRIDGE SIDES

FORECASTLE SIDES

LENGTHS OF PLATING

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, outside Plating, &c.?

Steel plates, Iron Steel & Iron Co

Steel angles, Brown Bros & Co

Iron plates, Hull & Co

Has the Steel been tested as required by the Rules?

FRAMES extend in one length from

REVERSED FRAMES on floors and frames extend from

MASTS, SPARS, &c.

LOWER MASTS.	Fore	Main	Mizen	Material.	Total length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.	
						At Partners.	Heel.	Hounds.	Head.		Number.	Size.	Seams.	Butts.
Fore	Steel	66-9	21 x 3/8	2 1/2 x 5/8	16 1/2 x 5/8	14 x 5/8	2	2	2	2	2	2	2	
Main	Steel	74-8	21 x 3/8	19 x 3/8	16 1/2 x 5/8	14 x 5/8	2	2	2	2	2	2	2	
Mizen	Steel													

Bowsprit

Topmasts, Yards and Remainder of Spars

Rigging, Material and Size, Shrouds

Sails, One complete

EQUIPMENT No. 28359, LETTER E

TONNAGE FOR TRAWLERS

ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX STOCK.			WEIGHT REQUIRED BY TABLE 22.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.			
19008	1st Bower	42	3	14	34	15	2	14	2	1
19007	2nd "	40	0	21	35	13	3	0	2	0
19006	3rd "	39	3	4	35	13	1	21	36	1
	Collective weight	122	3	14	121	1	0			
18999	Stream	11	0	0	12	14	2	0	10	3
18998	Kedge	5	2	0	7	16	1	0	5	2

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Fathoms and Size Per Table 22.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towing.	Fathoms and Size Per Table 22.
				Supplied.	Per Table 22.									
14552	120	1 1/2	885	60	213	114	26-2-98	John Green	26-2-98	Steel	100	4	33	100-4
14403	120	1 1/2	885	60	213	114	26-2-98	John Green	26-2-98	Steel	90	3 1/2	22	90-3 1/2
										WARP	90	8		90-8

Boats

Pumps, Number

Windlass is

Engine Room Skylights.

Coal Bunker Openings.

Number of Scuppers, and number and dimensions of Freeing Ports, &c.

Ceiling in Holds, thickness and material

Cargo Hatchways.

State size No. 1 Hatch (Forward)

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch

Bulwarks, height above deck and description

The above is a correct description.

Builder's Signature

Surveyor's Signature

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case)

26<sup>th</sup> August (N) 3<sup>rd</sup> September (N) 7<sup>th</sup> October (N) 15<sup>th</sup> November 1894 (N) 23<sup>rd</sup> December 1894 (N)

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.

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 facing surfaces? Yes.

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

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

Have all the upper and weather decks been tested as required by the Rules (Sec. 23, par 24)? Yes.

State results of tests Satisfactory.

Have all the gutterways been tested as required by the Rules (Sec. 23, par. 25)? Yes.

State results of tests

General Remarks (State quality of workmanship, &c.) This steel vessel has been built in accordance with the approved plans of Midships 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 and Circulars for the class contemplated.

The workmanship is good throughout.

The Bower anchors are Hartshorn's Patent No. 1000 and the heads of same have been subjected to drop and mechanical tests at Dorton by C. E. Perrins.

She has a Bilge Keel formed of bulb 9 x 3/8 and angles 3 1/2 x 3 1/2 x 3/8 fitted for a length of about one hundred and two feet.

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 33' ft., R.Q.D. or Break 1 ft., Bridge Dk. 62' ft., F'castle 33' 5" 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.

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 d.k. (iron) 2 tiers of Beams.

Official No. 108388; Signal Letters.

How are the surfaces preserved from oxidation? Inside Portland cement & paint. Outside Paint.

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors. Yes.

Where fitted.	Length.	Water Capacity.	Where fitted.	Length.	Water Capacity.
Double bottom, aft,	108	251	Fore peak tank,		
Double bottom, under Engines and Boilers,	24	70	After peak tank,		
Double bottom, if under Engines only,			Midship deep tank,		
Double bottom, if under Boilers only,			Other tanks, if fitted,		
Double bottom, forward,	126	343			

\* The wells are not to be included in the lengths of the tanks.

State whether the above have been tested as required by the Rules. Yes.

Order for Special Survey No. 362

Date 11<sup>th</sup> Oct. 1894

No. 495 in builder's yard

1898 Feb. 11-16-21-24-28 Mar. 2-5-8-14-15-17-19-23-25-28-29 Apr. 6-7-13-15-18-19 21-22-25-27-29 May 3-5-8-9-11-12-17-20-23-25-27 June 2-3-6-8-10-13-15-20-22 23-24-29 July 1-4-7-12-14-15

DATES OF SURVEYS held while building

Total No. of Visits 59

The amount of Entry Fee £ 5 : 0 : 0.

Special £ 83 : 14 : 6

Certificate £ - - -

Fees applied for, 22.7.1898

Received by me, 22.7.1898

Travelling Expenses, if any £ - - -

State whether the Vessel has been built under Special Survey Yes

I am of opinion this Vessel should be Classed 100A Steel L.A.C.P.

With, or without Freeboard, as condition of Class

Committee's Minute TUES. 26 JUL 1898

Character assigned 100A Steel

24 x 4 x 1/2

1 d.k. (iron) 2 tiers of Beams

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