

MUN 19 SEP 1898

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

## IRON OR STEEL STEAMER.

No. 2414

State if Report is also sent on the Machinery of the Vessel Yes. Date 1903

Received at London Office.

Date of completion of Report 16th Sept 1898

Port of MIDDLESBROUGH-ON-TEES.

Survey held at Middlesbro  
On the

Date, First Survey 28th April

Last Survey 16th Sept 1898

Silurian

Rig 5r

Master Wm Evans

ONE OR TWO DECKED VESSEL.

CLASS 100A1

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

Built at Middlesbro

When built 1898 Launched 4th Aug 98

By whom built R. Craggs &amp; Sons

Owners Owen &amp; Nathan Williams &amp; Co

Managers (Where necessary to be entered in Reg. Book).

Residence Cardiff

Port belonging to Cardiff

Destined Voyage Rlyth

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

TONNAGE under Tonnage Deck	791.57
Do. of Poop	30.69
Do. of Raised Or. Dk. or Break	
Do. of Bridge House	
Do. of Forecastle	27.18
Do. of Houses on Deck	13.65
Do. of excess of Hatchways	30.58
Do. above Crown of Engine Room	45.87
Gross Tonnage	939.54
Less Crew Space	43.38
Less above Crown of Engine Room	45.87
TONNAGE FOR FEES	850.32
Less Engine Room	429.66
Less Navigation Spaces	16.06
Register Tonnage as cut on Beam	450.47

Half Breadth (moulded)	16.16
Depth from upper part of Keel to top of Main Deck Bms. (with the normal round up of beam)	16.79
Girth of Half Midship Frame (as per Rule)	30.33
1st Number	63.28
Length on deck from after part of stem to fore part of stern post	218
2nd Number	13795
Proportions—Breadths to Length	6.74
Depths to Length—Main Deck to top of Keel	12.98

LENGTH on Deck as per Rule	218	Feet.	Inches.	BREADTH—Moulded	32	Feet.	Inches.	DEPTH, ACTUAL—Top of Floors to top of Main Deck Beams	15	Feet.	Inches.	No. of Decks with Flat laid	one	No. of Tiers of Beams	Deck framing
Dimensions of Ship per Register, Length, 220 breadth, 32.5 depth, 15.25. Moulded Depth, 16 ft. 1 1/2 ins. Round of Beam, Actual 8 ins.															

FRAMING.						FORGINGS AND CASTINGS.					
	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.		Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.
FRAME, Angles, 7-E or 7-Bars, for 1/2 length amidships	4	3	7	4	3	7	KEEL, Bar or Side Plates depth and thickness	Flat plate keel			
Do. for 1/2 at each end	4	3	6	4	3	6	STEM, moulding and thickness	7 x 2 1/2	7 x 2 1/2		
Do. in way of Double Bottoms at Solid Floors							STERN-POST for Rudder do. do.	7 1/2 x 4 1/2	7 1/2 x 4 1/2		
Reverses in 20 ft. space	3	3	6	3	3	6	for Propeller	5 1/2	5 1/2		
Distance of Frames from moulding edge to moulding edge, all fore and aft		23			23		MAIN PIECE of Rudder, diameter at head	3" pulley	3		
REVERSED FRAME, Angles	5	3	7-6	5	3	7-6	do. at heel				
DEEP FRAMING, depth of girder in holds		6			6		RUDDER, how constructed	Forging plated			
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	18 1/2		8	18 1/2		8	Can the Rudder be unshipped afloat?	Yes			
in way of Engines and Boilers		9-10			9-10		KEELSONS AND STRINGERS.				
thickness at the ends of vessel	12		7		9 1/2	7	CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate	8 1/2	9	8 1/2	9
height extended at the Bilges	37				37		Rider Plate	10 1/2	9	10 1/2	9
BRACKETS, in Cell Dble Bottoms		6			6		Bulb Plate to Intercoastal Keelson plates				
Distance apart	23				23		Horizontal Plates on Floors Keelson angles	5	8 1/2	7	5
CENTRE GIRDER, in Double Bottom, depth and thickness	15		8	15		8	Angles	5	3 1/2	7	5
Angles, Top	3 1/2	3 1/2	7	3 1/2	3 1/2	7	SIDE KEELSON, Angles, in 2 ft. space	5	3 1/2	7	5
Angles, Bottom	3 1/2	3 1/2	7	3 1/2	3 1/2	7	Bulb or Plate above floors for Eng.				
IDE GIRDERS, number on each side & thickness	3		6	3	3	6	Intercoastal Plate for E & B length		5		5
Angles	3		7	3	3	7	Attached to outside plating with Angle				
MARGIN PLATE, depth (exclusive of flange) and thickness	28		7	20		7	BILGE KEELSON, Angles, in 2 ft. space	5	3 1/2	7	5
Angles to Outside Plating	3 1/2	3 1/2	7	3 1/2	3 1/2	7	Bulb Plate above floors for 8 ft. len.	7 1/2	7	7 1/2	7
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	54		8	34		8	Intercoastal Plate for length	scraped into double bottom for 2 ft. aft.			
thickness in Engine and Boiler space							Attached to outside plating with Angle				
Remainder in Holds	Iron	6/16		6/16			BILGE STRINGER Angles (freight)	2	5	3 1/2	7
BEAMS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	5 1/2	3	8	5 1/2	3	8	Bulb Plate for length				
Angles on Upper Edge							Intercoastal Plate for length				
Average space	23			23			Attached to outside plating with Angle				
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb							SIDE STRINGER Angles Bulb angles 2 ft.	8	3	10	8
Angles on Upper Edge							Bulb Intercoastal Plate for holds Eng.	14	9	14	9
Average space							Attached to outside plating with Angle	3	3	7	3
BEAMS, Hold, Plate or Tee Bulb							Main and Raised Quarter Deck Stringer Plate, breadth and thickness	31	10	31	10
Angles on Upper Edge							Angle on ditto	4 x 4	8	4 x 4	8
Average space							Tie Plates fore & aft, outside Hatchways				
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	5 1/2	3	7	5 1/2	3	7	Diagonal Tie Plates on Bms., No. of Pairs				
Angles on Upper Edge							Main Dk* Iron & Steel for full Eng.	6/16	6	6/16	6
Average space	46			46			R.Q.Dk* Iron or Steel for Eng.				
BEAMS, Bridge or Pt. Awng. Deck, Angle, Bulb Angle, Plate, or Tee Bulb	4 1/2	3	6	4 1/2	3	6	Wood Deck, Material & thickness				
Angles on Upper Edge							Lower Deck Stringer Plate, breadth and thickness				
Average Space	23			23			Angles on ditto, No.	18	6	18	6
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	7	3	9	7	3	9	Tie Plates, outside Hatchways	3 x 3	6	3 x 3	6
Angles on Upper Edge							Deck, Material and thickness	7 1/2	6	7 1/2	6
Average space	46			46			Bridge Deck Stringer Plate, brdth & thickness	2 1/2	8	2 1/2	8
LARS, In 'tween Decks, Size and Spacing	2 1/2	46		2 1/2	46		Angle on ditto	3 x 3	6	3 x 3	6
Hold	3 1/4	46		3 1/4	46		Tie Plates				
Quarter, 'tween Dks.,							Deck, Material and thickness	Iron	5/16		5/16
In Hold							Forecastle Deck Stringer Plate, brdth & thickness	18	6	18	6
FRAMES, In Fore Body, No. and Spacing							Angle on ditto	3 x 3	6	3 x 3	6
No. of Side Stringers	3		7	15		7	Tie Plates	7 1/2	6	7 1/2	6
FRAMES, In E. & B. Space, No. & Spacing	15		7	15		7	Deck, Material and thickness	3		3	
Brdth. & Thickness							Are the outside Plates doubled two spaces of Frames in length?	forged plating			
FRAMES, In After Body, No. and Spacing							Are the Stance Valves and Watertight Doors in efficient working order?	Yes			
Brdth. & Thickness											
No. of Side Stringers	one	15	7	15		7					
Size of Angles or Tee Bars to Web Frames	3	3	6	3	3	6					
NET PLATES to Stringers between Frames, Depth and Thickness											



PLATING.										RIVETING.													
AS IN SHIP.					PER RULE OR AS APPROVED.					Lower EDGES.					BUTTS.								
STRAKES.		AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		Single or Double.		Breadth of Lap.		RIVETS.		Double or Treble and for what Length.		RIVETS.		STRAPS.		IF LAPPED.	
Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Inches.	Inches.	Diam.	Spacing cr. to cr.	Diam.	Spacing cr. to cr.	Breadth.	Thick-ness.	Breadth.	For what Length.				
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.				
FLAT PLATE KEEL.....	34	13	11	11	34	13				Double	5 1/2	7/8	3 5/8	2 R. all	7/8	3 1/2	16 3/4	14	-	-			
GARBOARD OR A STRAKE... (If Bar Keel, state Riveting)	34	10	9	9	34	10				"	4 1/2	3/4	3 1/4	"	3/4	2 5/8	-	-	9	Full			
State actual thickness in way of Double Bottom.										"	"	"	"	"	"	"	-	-	7 1/2	"			
B "		9	8	8-10	9					"	"	"	"	"	"	"	-	-	"	"			
C "		9	8	8	9					"	"	"	"	"	"	"	-	-	"	"			
D "		10	8	8-10	10					"	5 1/2	7/8	3 5/8	"	7/8	3 1/2	-	-	9	"			
E "		10	8	8	10					"	4 1/2	3/4	3 1/4	"	3/4	2 5/8	-	-	7 1/2	"			
F "		9	8	8	9					"	"	"	"	"	"	"	-	-	"	"			
G "		9	8	8	9					"	"	"	"	"	"	"	-	-	"	"			
H "		10	8	8	10					"	5 1/2	7/8	3 5/8	"	7/8	3 1/2	-	-	9	"			
Sheer J "	36	13	10	9	36	13				"	"	"	"	"	"	"	-	-	"	"			
K "																							
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DOUBLING OF FLAT PLATE KEEL																							
Length and thickness of Bilges .....																							
of Sheerstrakes .....																							
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.?										Main Stringer Plate { Butts, treble riveted for half length amidship. Straps, single, double													

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

M. 21/2/98, 1/3/98, 26/8/98

E. 23/3/98

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?

joggled plating

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

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)?

✓

State results of tests.

✓

General Remarks (State quality of workmanship, &c.)

Workmanship good -

This vessel has been built in accordance with the approved plans, the Secretary's letters of the above dates, & in general conformity to the Rules for the class contemplated. Tunnel tested as required.

Plans. Midship Section, Profile & deck plan, Fore peak B.H., Aft peak B.H., Pumping plan -  
1 Forging Report.

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

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 16.66 ft., R.Q.D. or Break ✓ ft., Bridge Dk. 44.83 ft., F'castle 25 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 Dk (pt iron) (pt stl) & deep framing

Official No. ; Signal Letters

How are the surfaces preserved from oxidation? Inside Cement & paint

Outside paint

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

Where fitted.	*Length. Feet.	Water Capacity. Tons.	Where fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	69	115	Fore peak tank,	✓	33
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	✓	16
Double bottom, if under Engines only,	✓	✓	Midship deep tank,	✓	✓
Double bottom, if under Boilers only,	✓	✓	Other tanks, if fitted,	✓	✓
Double bottom, forward,	72.10	106	(If necessary, furnish further information by sketch.)	✓	✓

\* 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. 384  
Date 2nd March 1898  
No. 145 in builder's yard  
DATES of Surveys held while building  
1898 April 28. May 2. 9. 13. 14. 25. June 6. 6. 14. 28. July 2. 6. 12. 13. 18. 21. 26. 28.  
August 2. 4. 12. Sept 2. 8. 14. 15. 16.  
Total No. of Visits 26

The amount of Entry Fee .....£ 3 : - : -  
Special.....£ 42 : 10 : 0  
Certificate\* £ 45 : 10 : 0  
Fees applied for,  
17.9 1898  
Received by me,  
17.9 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 100A1 Steel

With, or without Freeboard, as condition of Class ✓

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

Committee's Minute  
Character assigned  
2 A & C  
+ 2 W & C 9.98  
TUES. 20 SEP 1898

100A1 Steel

1 Dk (pt. iron + pt. stl.) + deep framing

Shell Certificate  
Written.