

3 Decks.

IRON OR STEEL STEAMER.

Received at London Office

MON 1 MAY 1899

Date of completion of report *28th April 1899* State of Report is also sent on the Machinery of the Vessel *4/1* Port of *WEST HARTLEPOOL* No. *10859*

Survey held at *West Hartlepool* Date, First Survey *20th October 1898* Last Survey *25th April 1899*

On the *Steamer "Airedale"* Rig *Iron Yacht Schooner*

TONNAGE under Tonnage Deck... *2851.00* THREE DECKED VESSEL. CLASS *100A1* Master *T. Lawson*

Do. of Poop *27.84* Depth from upper part of Keel to top of Upper Deck Beams *25.79* Year of appointment *1899* (1) As Master in service of owner of present vessel. 18 *87*

Do. of Forecastle *39.92* Girth of Half Midship Frame (as per Rule) *44.41* (2) As Master of this vessel. 18 *99*

Do. of Houses on Dk. *44.59* deduct 7 feet. *7.0* Built at *West Hartlepool*

Do. of excess of Hatchways *50.58* 1st Number *86.6* When built *1899* Launched *28th Feb. 1899*

Do. of excess of Hatchways *3043.98* Length on deck from after part of stem to fore part of stern post *323.21* By whom built *W. Gray & Co. Ltd.*

Do. of excess of Hatchways *85.22* 2nd Number *27989* Owners *London & Northern S. S. Co. Ltd.*

Do. of excess of Hatchways *2958.76* Proportions—Breadth to Length *6.9* Managers *Pymon Bros.*

Do. of excess of Hatchways *974.07* Depth to Length—Upper Deck to top of Keel *12.5* Residence *London*

Do. of excess of Hatchways *35.95* Main Deck ditto *12.5* Port belonging to *London*

Register Tonnage *1948.74* Destined Voyage *Cardiff* Surveyed while Building, Afloat, or in Dry Dock *Pray's Dock*

Length on Deck *323* Feet. *2 1/2* Breadth—Moulded *46* Feet. *9 1/2* DEPTH, ACTUAL—Top of Floors to top of Upper Dk. Beams *22* Feet. *5* No. of Decks with flat laid *1*

Dimensions of Ship per Register, Length *320.4* breadth *47.15* depth *22.4* Moulded depth, ft. *24* ins. *10* To Upper Dk. Round of Upper Dk. Beam, Actual *11 1/2* ins.

FRAMING.	Inches in Ship		16ths or 20ths in Ship		Inches per Rule Or as Approved		16ths or 20ths in Ship		Inches per Rule Or as Approved	
	16ths	20ths	16ths	20ths	16ths	20ths	16ths	20ths	16ths	20ths
NAME, Angles, <i>7 1/2</i> for 1/2 length amidships	6	3 1/2	9	6	3 1/2	9				
Do. for 1/2 at each end			8			8				
Do. in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	8-7	3 1/2	3 1/2	8-7				
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24							
REVERSED FRAME, Angles	6	3 1/2	9-8	6	3 1/2	9-8				
DEEP FRAMING, depth of girder	9		9							
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	3/16	9/16	7/16	3/16	9/16	7/16				
Do. in way of Engines and Boilers										
Thickness at the ends of vessel										
Depth at 1/2 the half breadth, as per Rule										
Height extended at the Bilges										
FLOORS & BRACKETS in Cell Dble Bottom										
Distance apart	24		24							
CENTRE GIRDER, in Double bottom, depth and thickness	40		12	40		12				
Angles, Top	4	4	9	4	4	9				
Angles, Bottom	6 1/2	4	9	6 1/2	4	9				
DE GIRDERS, number on each side & thickness	One		7	One		7				
Angles	3 1/2	3 1/2	7	3 1/2	3 1/2	7				
MARGIN PLATE, depth (exclusive of flange) and thickness	3 1/2	3 1/2	8	3 1/2	3 1/2	8				
Angles to Outside Plating	3/16	5/16	9/16	3/16	5/16	9/16				
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	3/16	9/16	10/16	3/16	9/16	10/16				
Do. in Engine and Boiler space	3/16	9/16	10/16	3/16	9/16	10/16				
Remainder in Holds	3/16	9/16	10/16	3/16	9/16	10/16				
BEAMS, Upper Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3	12	8 1/2	3	12				
Angles on upper edge										
Average space	24		24							
BEAMS, Middle Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	11 1/2		10	11 1/2		10				
Angles on upper edge	3 1/2	3 1/2	8	3 1/2	3 1/2	8				
Average space	48		48							
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb										
Angles on upper edge										
Average space										
BEAMS, Hold, or Orlop, Plate or Tee Bulb										
Angles on upper edge										
Average space										
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	8 1/2		8	8 1/2		8				
Angles on upper edge	3	3	7	3	3	7				
Average space	48		48							
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb	7		3	7		3				
Angles on upper edge										
Average space	24		24							
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	9 1/2		9	9 1/2		9				
Angles on upper edge	3 1/2	3 1/2	7	3 1/2	3 1/2	7				
Average space	48		48							
PILLARS, In 'tween Deck, size and spacing	2 1/2 - 4 ft.		2 1/2 - 4 ft.							
Hold	2 1/2 - 8 ft.		2 1/2 - 8 ft.							
Quarter 'tween Dks.	4 - 8 ft.		4 - 8 ft.							
in Hold										
WEB-FRAMES, In Fore Body, No. and spacing										
brdth. & thickness										
No. of Side Stringers										
WEB-FRAMES, In E. & B. Space, No. and spacing										
brdth. & thickness										
No. of Side Stringers										
WEB-FRAMES, In After Body, No. and spacing										
brdth. & thickness										
No. of Side Stringers										
Size of Angles or Tee Bars to Web-Frames										
BRACKET PLATES to Stringers between Web Frames, depth and thickness										

Deep framing throughout

Two web frames each side of machinery space.

FORGINGS OR CASTINGS.	Inches in Ship.		Inches per Rule.	
	16ths	20ths	16ths	20ths
KEEL, Upper Side Plate, depth and thickness	10 1/2	2 3/4	10 1/2	2 3/4
STEM, moulding and thickness	11	6	11	6
STERN-POST for Rudder do. do.	11	6	11	6
for Propeller	8 1/2		8 1/2	
MAIN PIECE of Rudder, diameter at head	4 1/2		4 1/2	
do. at heel				
RUDDER, how constructed				
Can the Rudder be unshipped afloat?				
KEELSONS & STRINGERS. <th colspan="2">Inches in Ship.</th> <th colspan="2">Inches per Rule.</th>	Inches in Ship.		Inches per Rule.	
	16ths	20ths	16ths	20ths
CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate				
Rider Plate				
Bulb Plate to Intercoastal Keelson				
Horizontal Plates on Floors				
Angles				
SIDE KEELSON, Angles				
Bulb or Plate above floors, for length				
Intercoastal Plate, for length				
Attached to outside Plating with Angle				
BILGE KEELSON, Angles				
Bulb or Plate above floors, for length				
Intercoastal Plate for length				
Attached to outside Plating with Angle				
BILGE STRINGER Angles				
Bulb Plate for length				
Intercoastal Plate for length				
Attached to outside Plating with Angle				
2 SIDE STRINGERS Angles				
Bulb or Intercoastal Plate, for length				
Attached to outside plating with Angle				
Upper Deck Stringer Plates, br'dth & thickness	4 1/2	13	4 1/2	13
Angle on ditto	4 1/2	10	4 1/2	10
Tie Plates fore and aft outside Hatchways				
Deck * Iron or Steel, for length	2 1/6		2 1/6	
Wood Deck, Material & thickness				
Middle Deck Stringer Plate, br'dth & thickness	7 1/2	10	7 1/2	10
Angles on ditto	4 1/2	9	4 1/2	9
Tie Plates outside Hatchways	4 1/2	9	4 1/2	9
Diagonal Tie Plates on Rms, No. of p's.				
Deck * Iron or Steel, for length				
Wood Deck, Material & thickness				
Lower Deck Stringer Plate, br'dth & thickness				
Angles on ditto				
Tie Plates outside Hatchways				
Deck * Material and thickness				
Hold or Orlop Stringer Plate, br'dth & thickness				
Angles on ditto				
Tie Plates outside Hatchways				
Deck * Material and thickness				
Poop Deck Stringer Plate, breadth & thickness	36	7	36	7
Angle on ditto	3 1/2	3	3 1/2	3
Tie Plates	9	7	9	7
Deck, Material and thickness	3 1/2	9	3 1/2	9
Bridge Deck Stringer Plate, br'dth & thickness	36	7	36	7
Angle on ditto	3 1/2	3	3 1/2	3
Tie Plates	9	7	9	7
Deck, Material and thickness	3 1/2	9	3 1/2	9
Forecastle Deck Stringer Plate, br'dth & th'kns	36	7	36	7
Angle on ditto	3 1/2	3	3 1/2	3
Tie Plates	9	7	9	7
Deck, Material and thickness	3 1/2	9	3 1/2	9

STIFFENERS.

BULKHEADS.	Number.		Thickness.	Horizontal and Vertical.		Single or Double Frames.	Height up.
	In Vessel.	Per Rule.		Size.	Spacing.		
W. T. BULKHEADS	5	5	7-6	Prosser	Bulk heads	48	Brth up. Dk.
LONGITUDINAL							

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

Are the Union Vales and Watertight Doors in efficient working order? *Yes*

	PLATING.						PER RULE OR AS APPROVED.		EDGES.			RIVETING.							
	AS IN SHIP.			AMIDSHIP.								BUTTS.							
STRAKES.	AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		Single or Double.	Breath of Lap.	RIVETS.		Double or Treble and for what Length.	RIVETS.		STRAPS.		IF LAPPED.	
	Breadth. Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.	Breadth. Inches.	Thickness. Inches.	Breadth. Inches.	Thickness. Inches.			Diam. Inches.	Spacing or to cr. Inches.		Diam. Inches.	Spacing or to cr. Inches.	Breadth. Inches.	Thick- ness Inches.	Breadth. Inches.	For what Length. Feet.
FLAT PLATE KEEL.....	36	19	12	12	36	19	North	6	1	4	4 R	1	3½	—	—	12	7 ft		
(State actual thickness in way of Double Bottom.)	40	13	11	11	10	13	—	5¼	7/8	3½	2 R	7/8	3½	—	—	9	—		
A B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
C "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
D "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
E "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
F "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
G "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
H "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
I "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
J "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
K "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
L "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
M "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
N "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
O "	44	17	10	10	44	17	—	6	1	4	—	—	—	—	—	10½	¾"		
SHEER STRAKE.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
DOUBLING OF FLAT PLATE KEEL.....	Compensated for as approved																		
Length and thickness of Sheerstrake of Strake below POOP SIDES.....	Boatd below stringer at ends of bridge																		
BRIDGE SIDES.....	7																		
FORECASTLE SIDES.....	7																		
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, Plating, &c.? Wild Steel - Norman Long Co.; Corbett; Iron; Walspool.									Upper Deck Butts treble riveted whole length amidship.										
Middle Deck Butts treble riveted whole length amidship.									Stringer Plate Straps single double overlapped for whole length amidship.										
Butts of Bilge & Side Stringers and Tie Plates treble or double riveted?									Inner Bottom Plating riveting of Edges made by plates 2 R from 1/2 L.										
Centre Girder Butts, riveted Keelson Butts, riveted.									Frames riveted through Plates with 7/8 in Rivets about 6" apart.										
Has the Steel been tested as required by the Rules? Yes									Rivets, state whether Iron or Steel Iron										
FRAMES extend in one length from Middle line to Tank side, & thence to gunwale.																			
REVERSED FRAMES on floors and frames extend from middle line to tank side, & thence to upper deck, ally. to hatch deck; double in tank in machinery space.																			
MASTS, SPARS, &c.																			
Material Total Length Diameter and Thickness No. of Plates in round ANGLES RIVETING																			
Fore Main Lower Mast... Steel 19.3 20 x 7/2 16 x 7/2 Head 2x2 2x2 Seams Single Butts Double																			
Topmasts, Yards and Booms under spars Wood topmasts telescopic Rigging material size Shrouds 35 fms iron wire Stays 4 fms iron wire Sails One Suit of fore topsails Sails, and the following spec sails																			
EQUIPMENT NO. 31861 LETTER U ANCHORS.																			
Number of Certificate Anchors Weight Ex Stock Test per Certificate Weight Required by Description of Anchor Makers Where and when tested and Superintendent																			
35398 1st Bower ... Cws. qrs lbs. Tons cwt. lbs. 39 14 1 14 45 2 0 Taylors J. Taylor 7.3.99 Sunderland																			
35397 2nd " ... Cws. qrs lbs. 39 8 0 14 45 2 0 patent H.T. Weyford																			
35396 3rd " ... Cws. qrs lbs. 35 2 2 0 39 0 0 Stressless Wrought iron heads 7.3.99																			
Collective weight 130 0 0 130 0 0 If Patent state name of Patentee																			
35158 Stream ... 11 1 7 2 3 14 13 5 0 0 Rodgers J. Taylor 11.1.99 Sunderland																			
35177 Kedge ... 5 2 0 1 1 14 7 16 1 0 5 2 0 H.T. Weyford																			
CHAIN CABLES.																			
Number of Certificate Fathoms Size Test per Certificate Weight of Chain Cable Fatoms and Size per Description Makers of Cables When and where tested, and Superintendent Material Fathoms Size Breaking Test of Steel Wire Towline Fatoms and Size per																			
14236 270 1 5/8 945-675 515-327 511-114 270-1 5/8 Steel J. Taylor 28.2.99 Sunderland H.T. Weyford																			
South Atlantic Ocean Steel Wire ... 90 4 1/2 35 - - 90-4 1/2 Steel Wires Wabster & Co. 22.3.99 Certificates by Wabster & Co. 22.3.99																			
HAWSERS AND WARFS.																			
TOWLINE 100 4 13 100-4 HAUSER 90 3 1/2 22 90-3 1/2 WARP 90 3 18 90-3																			
Boats Two life boats, and two others connected to engine hold State whether they are in efficient working order Yes																			
Pumps Number One fly wheel hand pump on deck, driven by engine in hold Computer Emerson Walker & Thompson Bros.</																			

Correspondence.—State dates and initials of persons respecting this case (Reference should be made to any correspondence connected with this case)
 1898—Sep. 21 (M), 22 (M), Oct. 24 (M), 1899—Jan 27 (E) April 11 (M).

Workmanship. Are the butts of plating planed or otherwise fitted? Planed
 Is the riveted work properly closed? Yes
 Are the lifers 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 faying surfaces? Yes Do any rivets break into or through the seams or butts of 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 Good
 Have all the gutterways been tested as required by the Rules (Sec. 23, par. 25)? Yes State results of tests Good

General Remarks (State quality of workmanship, &c.) The workmanship is good, and the vessel has been constructed in accordance with the approved plans (S in No.), which together with one Forgings Report are attached hereto.
The fore peak has been filled with water to height of load line, and collision bulkhead found tight. The tunnel has been tested by water and found tight.
Vessel placed in dry dock previous to completion, bottom cleaned and recoated.
Drawings: Midship section, Profile, Deck plating in way of E.T.B. space, Plating on strong beams amidships, Pumping plan.
This is a sister vessel to the S.S. "Ran" West Hartlepool Report No. 10761.

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

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 27 ft., R.Q.D. or Break ☒ ft., Bridge Dk. 82 ft., F'castle 30 ft. (in feet and tenths). When the Poop 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) One deck (iron), 2 tiers beams, & deep framing.
 Official No. 110105; 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 Cellular

Where fitted.	*Length. Feet.	Water Capacity. Tons.	Where fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	106	281	Fore-peak tank,		
Double bottom, under Engines and Boilers,	40	118½	After peak tank,	✓	72
Double bottom, if under Engines only,			Midship deep tank,		
Double bottom, if under Boilers only,			Other tanks, if fitted,		
Double bottom, forward,	136	369½	(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. 1743
 Date 22nd Sept. 1899
 No. 578 in builder's yard.
 Dates of Surveys held while building
1898. Oct. 20, 22, 26, 29. Nov. 1, 3, 7, 11, 14, 18, 22, 24, 28, 30. Dec. 3, 6, 9, 20, 23, 30. 1899. Jan. 5, 10, 13, 17. 20, 24, 27, 31. Feb. 2, 3, 9, 16, 20, 22, 24, 25, 27. Mar. 2, 3, 8, 10, 11, 17, 20, 27, 29. Apr. 11, 13, 14, 20, 21, 25.
 Total No. of Visits 59

The amount of Entry Fee £ 8 : : Fees applied for, 28-4-1899
 Special Survey Fee £ 88 : 19 : 6 Received by me, 29-4-1899
 Travelling Expenses, if any £ : : 29-4-1899
 State whether the Vessel has been built under Special Survey Yes
 I am of opinion this Vessel should be Classed 100A1 3 dx-rule
 With or without Freeboard, as condition of Class.

Committee's Minute TUES. 2 MAY 1899
 Character assigned 100A1 (steel)
as b.p. + L 1264 99
Chas. Fowling.
 Surveyor to Lloyd's Register of British and Foreign Shipping.