

3 Decks.

IRON OR STEEL STEAMER.

FRI. 30 DEC 1898

Received at London Office

State if Report is also sent on the Machinery of the Vessel Yes No 34588

Date of completion of report 29 Dec 1898 Port of MIDDLESBROUGH ON TEES. No. 2499
Survey held at Middlesbrough Date, First Survey 20th April 98 Last Survey 21st December 1898
the ship Broadgarth Rig sr

TONNAGE under
Tonnage Deck...
between Tonnage Dk. &
and 3rd and 4th Dk. 3023.91
Tonnage under Upper Dk. 67.23
of Poop 53.46
of Bridge House 10.86
of Forecastle 36.79
of Houses on Dk. 23.49
of excess of Hatchways 222.65
of Engine Room 69.94
Gross Tonnage 3153.71
less Crew Space 1831.57
less above Crown of Engine Room 45.31
Net Tonnage 2078.83
Master Tonnage 2078.83
on Beam ...

THREE DECKED VESSEL.
CLASS 100A1
Half Breadth (moulded) 23.37
Depth from upper part of Keel to top of Upper Deck Beams 27.47
Girth of Half Midship Frame (as per Rule) 47.00
deduct 7 feet 97.84
1st Number 90.84
Length on deck from after part of stem to fore part of stern post 327.83
2nd Number 29780
Proportions—Breadth to Length 1/36
Depth to Length—Upper Deck to top of Keel 11.93
Main Deck ditto 16.79
Destined Voyage Venice

Master J. H. Rowell
Year of appointment 1877
Built at Middlesbrough
When built 1898 Launched 14 Nov
By whom built R. Craggs & Sons
Owners Clapham Steam Ship Co Ltd
Managers
Residence Newcastle-on-Tyne
Port belonging to Newcastle
If Surveyed while Building Afloat, or in Dry Dock Yes

Feet. Inches. BREADTH—Feet. Inches. DEPTH, ACTUAL—Top of Floors to top of Upper Dk. Beams 28 0 1/2
Rule 327 10 Moulded 46 9 Do. do. do. do. Main Dk. Beams 18 0 1/2
No. of Decks with flat laid one
No. of Tiers of Beams 2
Round of Upper Dk. Beam, Actual 12 ins.

FRAMING.				FORGINGS or CASTINGS.			
Inches in Ship	Inches in Ship	20ths in Ship	Inches per Rule Or as Approved	Inches in Ship	Inches in Ship	20ths in Ship	Inches per Rule Or as Approved
Angles, or L, E or T Bars for 1/2 length midships	5 1/2	3 1/2	8 1/2	KEEL, Bar or Side Plates, depth and thickness	Flat plate keel		
at each end	"	"	"	STEM, moulding and thickness	11 x 2 3/4	11 x 2 3/4	
of Double Bottoms at Solid Floors	3 1/2	3 1/2	8 1/2	STERN-POST for Rudder do. do.	11 x 6 1/2	11 x 6 1/2	
in 8 & Babcock & Wilcox at intermt. Bkts.	4	3 1/2	8 1/2	" for Propeller	50	50	
Frames from moulding edge to edge, all fore and aft	24		24	MAIN PIECE of Rudder, diameter at head	8 1/2	8 1/2	
DO FRAME, Angles	6	3 1/2	8 1/2	" do. at heel	4 1/4	4 1/4	
AMING, depth of girder	8 1/2		8 1/2	RUDDER, how constructed	Forging plated		
depth and thickness of Floor Plate mid-line for 1/2 length amidships	Double bottom			Can the Rudder be unshipped afloat?	Yes		
of Engines and Boilers	42	8 1/2	42	KEELSONS & STRINGERS.			
ness at the ends of vessel	24		24	CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercostal Plate			
at 1/2 the half breadth, as per Rule	42	11	42	" Rider Plate			
extended at the Bilges	42	11	42	" Bulb Plate to Intercostal Keelson			
BRACKETS in Cell Dble Bottoms	42	8 1/2	42	" Horizontal Plates on Floors			
Distance apart	24		24	" Angles			
GIRDER, in Double bottom, depth and thickness	42	11	42	SIDE KEELSON, Angles			
Angles, Top	4	4	9 1/4	" Bulb or Plate above floors, for lng.			
" Bottom	6 1/2	4	9 1/4	" Intercostal Plate, for length			
SIDERS, number on each side & thickness	one	8	one	" Attached to outside Plating with Angle	Double Bottom		
Angles	3 1/2	3 1/2	8 1/2	BILGE KEELSON, Angles			
PLATE, depth (exclusive of flange) and thickness	36	8	28	" Bulb or Plate above floors, for lng.			
Angles to Outside Plating	4	4	9 1/4	" Intercostal Plate for length			
BOTTOM PLATING, breadth and thickness of Middle Line Strake	36	1 1/2	36	" Attached to outside Plating with Angle			
in Engine and Boiler space	8 1/2	3	11	BILGE STRINGER Angles			
Remainder in Holds	8 1/2	3	11	" Bulb Plate for length			
Upper Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3	11	" Intercostal Plate for length			
Angles on upper edge	24		24	" Attached to outside Plating with Angle			
Average space	11 1/2	10	11 1/2	SIDE STRINGERS Angles	10	3 1/2	14
Middle Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	3 1/2	3 1/2	8 1/2	" Bulb or Intercostal Plate, for lng.	18 1/2	10	18 1/2
Angles on upper edge	48		48	" Attached to outside plating with Angle	3 1/2	3 1/2	9
Average space	11 1/2	10	11 1/2	Upper Deck Stringer Plates, br'dth & thickness	4 7/8	10	4 7/8
Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	3 1/2	3 1/2	8 1/2	" Angle on ditto	4 1/2 x 4 1/2	10	4 1/2 x 4 1/2
Angles on upper edge	48		48	" Tie Plates fore and aft, outside Hatchways	2K increased at openings		
Average space	11 1/2	10	11 1/2	" Deck, * Iron or Steel, for full lng.	exposed 7/16		7/16
Hold, or Orlop, Plate or Tee Bulb	6 1/2	3	8 1/2	" Wood Deck, Material & thickness	not exp! 7/16		7/16
Angles on upper edge	48		48	Middle Deck Stringer Plate, br'dth & thickness	59	12	59
Average space	11 1/2	10	11 1/2	" Angles on ditto, No. 2	4 x 4	9	4 x 4
Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	8 1/2	3	11	" Tie Plates outside Hatchways	4 x 4	8	4 x 4
Angles on upper edge	48		48	" Diagonal Tie Plates on Bms., No. of prs.	1		1
Average space	11 1/2	10	11 1/2	" Deck, * Iron or Steel, for lng.	1		1
Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	3 1/2	11	" Wood Deck, Material & thickness	no deck laid		
Angles on upper edge	48		48	Lower Deck Stringer Plate, br'dth & thickness			
Average space	11 1/2	10	11 1/2	" Angles on ditto, No.			
In 'tween Deck, size and spacing	2 3/4	48	2 3/4	" Tie Plates, outside Hatchways			
" Hold	4	48	4	" Deck, * Material and thickness			
" Quarter 'tween Dks.,	2 3/4	96	2 3/4	Hold, or Orlop Stringer Plate, br'dth & thckn's			
" in Hold	4	96	4	" Angles on ditto, No.			
MES, In Fore Body, No. and spacing				" Tie Plates outside Hatchways			
" No. of Side Stringers	4	4	5	" Deck, Material and thickness	26	6	26
" br'dth. & thickness	18	8	18	Poop Deck Stringer Plate, breadth & thickness	3 1/2 x 3 1/2	8	3 1/2 x 3 1/2
WEB-FRAMES, In E. & B. Space, No. & spacing	4	4	5	" Angle on ditto	13	6	13
" br'dth. & thickness	18	8	18	" Tie Plates	3		3
WEB-FRAMES, In After Body, No. and spacing	4	4	5	" Deck, Material and thickness	pp		
" br'dth. & thickness	18	8	18	Bridge Deck Stringer Plate, br'dth & thickness	55	8	35
" No. of Side Stringers	2	18	8	" Angle on ditto	3 1/2 x 3 1/2	9	3 1/2 x 3 1/2
" Size of Angles or Tee Bars to Web-Frames	4	3 1/2	8	" Tie Plates	26	6	26
BRACKET PLATES to Stringers between Web Frames, depth and thickness	24	8	24	" Deck, Material and thickness	5/16		5/16
				Forecastle Deck Stringer Plate, br'dth & th'kns	26	6	26
				" Angle on ditto	3 1/2 x 3 1/2	8	3 1/2 x 3 1/2
				" Tie Plates	13	6	13
				" Deck, Material and thickness	pp		
				BULKHEADS.			
				Number. Thickness. In Vessel. Per Rule.			
				W. T. BULKHEADS	5	5	7-6
				" PARTITION	5	5	7-6
				" LONGITUDINAL	5	5	7-6
				Are the outside Plates doubled two spaces of Frames in length?	joggled plating		
				Are the Stance Valves and Watertight Doors in efficient working order?	Yes		

MD8761-0019

PLATING.										RIVETING.																																																																																																									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		Lower Edges.				BUTTS.																																																																																																								
	AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		Single or Double.		RIVETS.		STRAPS.		IF LAPPED.																																																																																																				
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.																																																																																																			
FLAT PLATE KEEL.....	36	19	14	14	36	19	Double	6	1	4	T.R. all	1	3 1/2	19	12	all																																																																																																			
GARBOARD OF A STRAKE.....	54	15	12	12-13	36	15	"	"	"	"	"	"	"	"	"	10 1/2																																																																																																			
B "	11	9	9-14	11	"	"	"	"	"	"	"	"	"	"	"	9																																																																																																			
C "	11	9	9-14	11	"	"	"	"	"	"	"	"	"	"	"	"																																																																																																			
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Sheer N "	44	15	11	10	44	15	"	6	1	4	4 fold	1	3 1/2	-	-	14																																																																																																			
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DOUBLING OF PLATE KEEL.....	Keel increased 3/20, Garboard strakes 3/20, Centre girder 1/20 for 1/20 in lieu of keel doubling																																																																																																																		
Length of Bilges.....	Doubled at Bridge ends for about 20ft x 20 - Bridge side plating increased -																																																																																																																		
Thickness of Strake below.....	8																																																																																																																		
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<p>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. ? <i>Siemens process</i></p> <p><i>Bolchaw, Consett, Palmers, W. Hartlepool.</i></p> <p><i>Iron plates - J. Hill & Co.</i></p> <p>Has the Steel been tested as required by the Rules? <i>Yes</i></p>																																																																																																																			
<p>FRAMES extend in one length from <i>tank margin</i> to upper, poop, bridge, & forecastle decks.</p> <p>REVERSED FRAMES on floors and frames extend from <i>tank margin</i> to upper & middle dks alternately, all to upper dk in way of the unframed hatchways & in after peak, & to upper & forecastle dks alternately. - <i>5/8 in E & B space.</i></p>																																																																																																																			
<p>MASTS, SPARS, &c.</p> <table border="1"> <thead> <tr> <th rowspan="2">Fore</th> <th rowspan="2">Main</th> <th rowspan="2">Mizen</th> <th rowspan="2">Material.</th> <th rowspan="2">Total Length.</th> <th colspan="4">DIAMETER AND THICKNESS.</th> <th rowspan="2">No. of Plates in round.</th> <th colspan="2">ANGLES.</th> <th colspan="2">RIVETING.</th> </tr> <tr> <th>At Partners.</th> <th>Heel.</th> <th>Hounds.</th> <th>Head.</th> <th>Number.</th> <th>Size.</th> <th>Seams.</th> <th>Butts.</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>Steel</td> <td>71-10</td> <td>18 1/2 x 7/16</td> <td>15 x 5/16</td> <td>15 1/4 x 5/16</td> <td>2</td> <td>✓</td> <td>✓</td> <td>Single</td> <td>Double & 1/2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>2</td> <td>✓</td> <td>✓</td> <td>"</td> <td>"</td> </tr> </tbody> </table> <p>Boomsprit.....</p> <p>Topmasts, Yards and Remainder of Spars <i>p.p. telescope topmasts</i></p> <p>Rigging, Material and Size, Shrouds <i>gib. wire 3/2</i></p> <p>Sails, <i>one</i> Suit of <i>fore & aft</i> Sails, and the following spare sails <i>✓</i></p>																	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.				Steel	71-10	18 1/2 x 7/16	15 x 5/16	15 1/4 x 5/16	2	✓	✓	Single	Double & 1/2				"	"	"	"	"	2	✓	✓	"	"																																																			
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<p>EQUIPMENT No. <i>33725</i> LETTER <i>V</i> ANCHORS.</p> <table border="1"> <thead> <tr> <th rowspan="2">Number of Certificate.</th> <th rowspan="2">Anchors.</th> <th colspan="2">WEIGHT, EX. STOCK.</th> <th colspan="2">WEIGHT OF STOCK.</th> <th colspan="2">TEST, PER CERTIFICATE.</th> <th colspan="2">WEIGHT REQUIRED BY TABLE 22.</th> <th rowspan="2">Description of Anchor.</th> <th rowspan="2">Makers.</th> <th rowspan="2">Where and when tested and Superintendent.</th> </tr> <tr> <th>Cwts.</th> <th>qrs.</th> <th>Cwts.</th> <th>qrs.</th> <th>Tons.</th> <th>cwts.</th> <th>qrs.</th> <th>lbs.</th> </tr> </thead> <tbody> <tr> <td>16143</td> <td>1st Bower</td> <td>47</td> <td>3</td> <td>Stockless</td> <td>40</td> <td>19</td> <td>14</td> <td>47</td> <td>2</td> <td><i>Lion Stockless</i></td> <td><i>Abbot & Co.</i></td> <td><i>10/11/98</i></td> </tr> <tr> <td>16215</td> <td>2nd "</td> <td>47</td> <td>2</td> <td>Do</td> <td>40</td> <td>17</td> <td>3</td> <td>47</td> <td>2</td> <td>Do</td> <td>Do</td> <td><i>17/9/98</i></td> </tr> <tr> <td>16355</td> <td>3rd "</td> <td>40</td> <td>1</td> <td>Do</td> <td>35</td> <td>18</td> <td>3</td> <td>40</td> <td>2</td> <td>Do</td> <td>Do</td> <td><i>10/12/98</i></td> </tr> <tr> <td></td> <td>4th "</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3rd Bower approved. See letter 11.15/12/98</td> <td></td> <td></td> </tr> <tr> <td>16316</td> <td>Stream</td> <td>11</td> <td>3</td> <td>3</td> <td>1</td> <td>13</td> <td>12</td> <td>11</td> <td>2</td> <td><i>Common</i></td> <td>Do</td> <td><i>18/11/98</i></td> </tr> <tr> <td>16302</td> <td>Kedge</td> <td>6</td> <td>1</td> <td>2</td> <td>8</td> <td>5</td> <td>5</td> <td>5</td> <td>3</td> <td>Do</td> <td>Do</td> <td><i>11/11/98</i></td> </tr> </tbody> </table> <p>Certificates for cast steel heads produced.</p>																	Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		WEIGHT REQUIRED BY TABLE 22.		Description of Anchor.	Makers.	Where and when tested and Superintendent.	Cwts.	qrs.	Cwts.	qrs.	Tons.	cwts.	qrs.	lbs.	16143	1st Bower	47	3	Stockless	40	19	14	47	2	<i>Lion Stockless</i>	<i>Abbot & Co.</i>	<i>10/11/98</i>	16215	2nd "	47	2	Do	40	17	3	47	2	Do	Do	<i>17/9/98</i>	16355	3rd "	40	1	Do	35	18	3	40	2	Do	Do	<i>10/12/98</i>		4th "									3rd Bower approved. See letter 11.15/12/98			16316	Stream	11	3	3	1	13	12	11	2	<i>Common</i>	Do	<i>18/11/98</i>	16302	Kedge	6	1	2	8	5	5	5	3	Do	Do	<i>11/11/98</i>
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<p>CHAIN CABLES.</p> <table border="1"> <thead> <tr> <th rowspan="2">Number of Certificate.</th> <th rowspan="2">Fathoms.</th> <th rowspan="2">Size.</th> <th colspan="2">TEST, PER CERTIFICATE.</th> <th colspan="2">WEIGHT OF CHAIN CABLE.</th> <th rowspan="2">Fathoms and Size per Table 22.</th> <th rowspan="2">Description.</th> <th rowspan="2">Makers of Cables.</th> <th rowspan="2">When and where tested, and Superintendent.</th> <th rowspan="2">Material.</th> <th rowspan="2">Fathoms.</th> <th rowspan="2">Size.</th> <th rowspan="2">Breaking Test of Steel Wire Twine.</th> <th rowspan="2">Fathoms and Size per Table 22.</th> </tr> <tr> <th>Tons.</th> <th>Supplied.</th> <th>Tons.</th> <th>Per Table 22.</th> </tr> </thead> <tbody> <tr> <td>8368</td> <td>135</td> <td>2</td> <td>100-8 1/2 x 2-0</td> <td>538-3-0</td> <td>270-2</td> <td>Shd</td> <td>Abbot</td> <td><i>Lion Walker 8/11/98</i></td> <td>TOWLINE Steel</td> <td>120</td> <td>4</td> <td>33</td> <td>120-4</td> </tr> <tr> <td>13983</td> <td>135</td> <td>2</td> <td>72 1/2 x 1-0</td> <td>549-3-0</td> <td></td> <td>Shd</td> <td>Do</td> <td><i>10/11/98</i></td> <td>HAWSER Manila</td> <td>90</td> <td>7</td> <td>-</td> <td>90-7</td> </tr> <tr> <td></td> <td>90</td> <td>4 1/2</td> <td>39</td> <td>✓</td> <td>90-4 1/2</td> <td>Shd</td> <td><i>Good Haggie</i></td> <td><i>Helford</i></td> <td>WARP</td> <td>90</td> <td>7</td> <td>-</td> <td>90-7</td> </tr> </tbody> </table>																	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 Twine.	Fathoms and Size per Table 22.	Tons.	Supplied.	Tons.	Per Table 22.	8368	135	2	100-8 1/2 x 2-0	538-3-0	270-2	Shd	Abbot	<i>Lion Walker 8/11/98</i>	TOWLINE Steel	120	4	33	120-4	13983	135	2	72 1/2 x 1-0	549-3-0		Shd	Do	<i>10/11/98</i>	HAWSER Manila	90	7	-	90-7		90	4 1/2	39	✓	90-4 1/2	Shd	<i>Good Haggie</i>	<i>Helford</i>	WARP	90	7	-	90-7																																					
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 Twine.	Fathoms and Size per Table 22.																																																																																																				
			Tons.	Supplied.	Tons.	Per Table 22.																																																																																																													
8368	135	2	100-8 1/2 x 2-0	538-3-0	270-2	Shd	Abbot	<i>Lion Walker 8/11/98</i>	TOWLINE Steel	120	4	33	120-4																																																																																																						
13983	135	2	72 1/2 x 1-0	549-3-0		Shd	Do	<i>10/11/98</i>	HAWSER Manila	90	7	-	90-7																																																																																																						
	90	4 1/2	39	✓	90-4 1/2	Shd	<i>Good Haggie</i>	<i>Helford</i>	WARP	90	7	-	90-7																																																																																																						
<p>Boats <i>2 life, one jolly boat</i></p> <p>Pumps, Number <i>Seven</i></p> <p>Windlass is <i>Steam</i> Emerson Walker Diameter of Barrel <i>5</i> State whether they are in efficient working order <i>Yes</i></p> <p>Engine Room Skylights. - How constructed? <i>Steel with teak shutters</i></p> <p>What arrangements for deadlights in bad weather? <i>Bulls eyes</i></p> <p>Coal Bunker Openings. - How constructed? <i>Bull angles</i> How are lids secured? <i>Buttressed</i> Height above deck? <i>7 1/2"</i></p> <p>Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. <i>Scuppers 10 pr. - 3 Ports 8 pr. 30 x 18"</i></p> <p>Ceiling in Holds, thickness and material <i>2 1/2" W.P.</i> Ceiling 'tween Decks, thickness and material <i>2" W.P.</i></p> <p>Cargo Hatchways. - How formed? <i>Plates & angles</i> 38" Coamings Hatches, If strong and efficient? <i>2 3/4 Solid</i></p> <p>State size No. 1 Hatch (Forward) <i>24 x 16'</i> No. 2 Hatch <i>28 x 16'</i> No. 3 Hatch <i>26 x 16'</i> No. 4 Hatch <i>26 x 16'</i></p> <p>Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch <i>2 Webs & 3 fore & afters</i></p> <p>No. of Breasthooks <i>5</i> No. of Crutches <i>2 from & flat</i></p> <p>Bulwarks, height above deck and description <i>3-6" Bull plate stays</i> Main Rail, material and size <i>Bull angle 6 x 3 x 7/20</i></p> <p>The above is a correct description <i>R. CRAIG & SONS</i> Surveyor's Signature <i>W.H. Cooper</i> Surveyor to Lloyd's Register of British and Foreign Shipping.</p> <p>Builder's Signature (here only) <i>J. Hill & Co.</i></p>																																																																																																																			

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

M. 15/2/98, 17/2/98, 1/4/98, 5/4/98, 7/4/98, 9/12/98, 15/12/98, 19/12/98. *E. 11/7/98*

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 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. The fore peak Bk. and the tunnel have been tested as required & found in order. This vessel is built to the 3 Dk Rule, without the wood middle deck, an addition being made to the freeboard. All the reverse frames extend to the upper deck in way of the unframed hatchways. The frames & reverse frames in way of the 28ft hatchway are increased 1/20 in thickness, and the reverse frames are increased 1/20 in thickness in way of the two 20ft hatchways. The outside brackets are connected to the margin plates with double lugs, in way of the unframed hatchways, & for 20ft aft of the collision bulkhead.

5 plans. 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 *27* ft., R.Q.D. or Break *✓* ft., Bridge Dk. *76* ft., F'castle *34-6* 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) *1 Bk. (st iron, ft slc) 2 to B. & deep framing. 3 D.R.*

Official No. *110322*; 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 *cellular*

Where fitted.	Length.	Water Capacity.		Where fitted.	Length.	Water Capacity.	
		Feet.	Tons.			Feet.	Tons.
Double bottom, aft,	<i>108</i>	<i>254</i>		Fore peak tank,	<i>✓</i>	<i>✓</i>	
Double bottom, under Engines and Boilers,	<i>36</i>	<i>109</i>		After peak tank,	<i>✓</i>	<i>24</i>	
Double bottom, if under Engines only,	<i>✓</i>	<i>✓</i>		Midship deep tank,	<i>✓</i>	<i>✓</i>	
Double bottom, if under Boilers only,	<i>✓</i>	<i>✓</i>		Other tanks, if fitted,	<i>✓</i>	<i>✓</i>	
Double bottom, forward,	<i>134</i>	<i>352</i>		(If necessary, furnish further information by sketch.)	<i>✓</i>	<i>✓</i>	

* 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. *391*

Date *4 April 1898*

No. *148* in builder's yard.

DATES OF SURVEYS held while building

1898 Apr 20 28 May 3 9 13 17 20 27 June 6 17 24 28 July 12 16 18 21 26 28 Aug 3 9 12 22 24 30 Sept 3 14 18 19 20 23 24 27 28 29 30 Oct 4 6 11 14 25 26 28 Nov 3 5 8 14 Dec 1 6 9 12 14 15 16 17 19 20 21

Total No. of Visits *60*

The amount of Entry Fee..... £ *5 : 0 : 0* Fees applied for, *28 x 12.1898*

Special Survey Fee..... £ *103 : 17 : 0* Received by me, *R.H.*

Travelling Expenses, if any £ *108 : 17 : 0* *24 x 12.1898*

State whether the Vessel has been built under Special Survey *Yes*

I am of opinion this Vessel should be Classed *100AT Steel "3 DR"*

With, or without Freeboard, as condition of Class *with freeboard*

Committee's Minute *TUES. 3 JAN 1899*

Character assigned *100AT Steel with freeboard p. 5.5*

2 A & C + 2 M & 12, 98

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