

With or Without  
Disconnected Erections.

STEEL STEAMER.

Received at London Office 24 MAY 1911

State if Report is also sent on the Machinery of the Vessel *Yes (See Rep)*

Date of completion of report 23.5.1911  
Survey held at *Newcastle*  
On the *S.S. Helvetia*

Port of *NEWCASTLE ON TYNE* No. *60354*  
Date, First Survey *4th July 1910* Last Survey *19th May 1911*  
Rig *Schooner*

TONNAGE under  
Tonnage Deck... *4520.05*  
Do. between Tonnage Dk. and 3rd and 4th Dk.  
Total under Upper Dk.  
Do. of Poop *26.33*  
Do. of R.Q. Dk. *65.05*  
Do. of Bridge House *53.46*  
Do. of Forecastle *83.58*  
Do. of Houses on Dk. *149.12*  
Do. of excess of Hatchways *77.08*  
Do. above Crown of Engine Room  
Gross Tonnage *4974.67*  
Less Crew Space *100.67*  
Less above Crown of Engine Room *77.08*  
TONNAGE FOR FEES.. *4796.92*  
Less Engine Room *1591.89*  
Less Navigation Spaces *537.14*

CLASS *100 A.1.* FEET.  
Breadth (greatest moulded) *51.75*  
Depth, at middle of length from top of keel to top of upper deck beams at side *30.75*  
Transverse Number *82.50*  
Length on deck from fore part of stem to after part of stern post *375*  
Longitudinal Number *30927*  
Depth "d," at middle of length (See Secs. 2 & 13) *27.3*  
Proportions—Depths to Length—Upper Deck Beam at side to top of keel *12.2*  
" " Long Bridge Deck Beam at side to top of keel *9.8*

Master *Connell*  
Year of appointment *(1) As Master in service of owner of present vessel—1916 (2) As Master of this vessel 191*  
Built at *Newcastle (Walker)*  
When built *1911* Launched *28 March 1911*  
By whom built *Sir W.G. Armstrong Whitworth & Co. Ltd*  
Owners *W. Lowden & Co*  
Managers *50*  
Residence *Water St. Liverpool*  
Port belonging to *Liverpool*

Register Tonnage as cut on Beam *2744.97*

Destined Voyage *Sydney Cape Breton* If Surveyed while Building, Afloat, or in Dry Dock *Yes.*

LENGTH on Deck as per Rule	Feet.	Inches.	BREADTH—Moulded	Feet.	Inches.	DEPTH, ACTUAL—Top of Floors to top of Upper Dk. Beams	Feet.	Inches.	No. of Decks with flat laid	No. of Tiers of Beams
	375	0		51	9		28	3 1/2	1	1

Dimensions of Ship per Register, Length *375.1* breadth *52.05* depth *28.25* Moulded depth, ft. *38* ins. *3* To Bridge Dk. Round of Upper Dk. Beam, Actual *12 1/2* ins.

FRAMING.						PILLARS.					
FRAME, Angles, or Bars amidships						PILLARS, In 'tween Deck, size and spacing					
Do. in peaks						" " Hold					
Do. in way of Double Bottoms at Solid Floors						" " Quarter 'tween Dks.,					
" " at intermdt. Bkts.						" " in Hold					
Spacing of Frames from centre to centre amidships						KEELSONS & STRINGERS.					
" " length to Collision bulkhead						CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercostal Plate					
" " in peaks						" " Rider Plate					
REVERSED FRAME, Angles						" " Flat Plate Keel Angles					
Do. in way of Double Bottoms at Solid Floors						" " Horizontal Plates on Floors					
" " at intermdt. Bkts.						" " Angles or Bulb Angles					
FRAMING, depth of girder						SIDE KEELSONS, Number					
FLOORS, depth and thickness of Floor Plate						" " Angles or Bulb Angles					
" " in way of Engine and Boiler Spaces						" " Plate above floors, for length					
" " thickness at the ends of vessel						" " Intercostal Plate, for length					
" " depth at 1/2 the half breadth, as per Rule						" " Attached to outside Plating with Angle					
" " height extended at the Bilges						BILGE KEELSON, Angles					
FLOORS & BRACKETS in Cell Dble Bottoms						" " Intercostal Plate for length					
" " state if flanged (top & bottom)						" " Attached to outside Plating with Angle					
" " Spacing						SIDE STRINGERS, Number					
CENTRE GIRDER, in Dbl. bottom, dpth. & thicknss.						" " Angle					
" " Angles, Top						" " Intercostal Plate, for length					
" " Bottom						" " Attached to outside plating with Angle					
" " to Floors						Upper Deck Stringer Plate, br'dth & thickness					
SIDE GIRDERS, number on each side & thickness						" " (clear of Bridge)					
" " state if flanged (top and bottom)						" " br'dth & thickness (in way of Bridge)					
" " Angles (top and bottom)						" " Angle (clear of Bridge)					
" " to Floors						" " Tie Plate at sides of Hatchways					
MARGIN PLATE, depth (exclusive of flange) and thickness						" " Deck. * Iron or Steel, for full lng.					
" " Angles to Outside Plating						" " Thickness (clear of Bridge)					
" " Floors						" " (in way of Bridge)					
" " Height of Brackets above at bilge						" " Wood Deck. Material & thcknss					
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake						Second Deck Stringer Plate, br'dth & thickness					
" " in Engine and Boiler space						" " Angles on ditto, No.					
" " Remainder in Holds						" " Tie Plates outside Hatchways					
BEAMS, Upper Deck, Single Angle, Bulb, Angle, Plate, Tee Bulb, or Channel						" " Deck. * Iron or Steel, for lng.					
" " Angles on upper edge						" " Wood Deck. Material & thickness					
" " In way of Long Bridge						Third Deck Stringer Plate, br'dth & thickness					
" " Spacing						" " Angles on ditto, No.					
BEAMS, Second Deck, Single Angle, Bulb, Angle, Plate, Tee Bulb, or Channel						" " Tie Plates outside Hatchways					
" " Angles on upper edge						" " Deck. Material & thickness					
" " Spacing						Fourth and Fifth Deck Stringer Plate, breadth & thickness					
BEAMS, Third and Fourth Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel						" " Angles on ditto, No.					
" " Angles on upper edge						" " Tie Plates outside Hatchways					
" " Spacing						" " Deck. Material & thickness					
BEAMS, Poop Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel						Poop Deck Stringer Plate, breadth & thickness					
" " Angles on upper edge						" " Angle on ditto					
" " Spacing						" " Tie Plates					
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel						" " Deck. Material and thickness <i>Steel</i>					
" " Angles on upper edge						Bridge Deck Stringer Plate, br'dth & thickness					
" " Spacing						" " Angle on ditto					
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel						" " Tie Plates					
" " Angles on upper edge						" " Deck. Material and thickness					
" " Spacing						Forecastle Deck Stringer Plate, b'dth & th'kns					
						" " Angle on ditto					
						" " Tie Plates					
						" " Deck. Material and thickness <i>3" P.P. Steel</i>					

\* If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.



WEB FRAMES.				Inches in Ship.	Inches in Ship.	Inches per Rule. Or as Approved.	FORGINGS or CASTINGS.				Inches in Ship.	Inches per Rule. Or as Approved.	
<b>WEB-FRAMES, In Fore Body,</b> No. and spacing													
" " " brdth. & thickness													
" No. of Side Stringers " "													
<b>WEB-FRAMES, In E. &amp; B. Space,</b> No. & spacing													
" " " brdth. & thickness													
<b>WEB-FRAMES, In After Body,</b> No. and spacing													
" " " brdth. & thickness													
" No. of Side Stringers " "													
Sign of Face Angles to Web-Frames.....													
<b>BRACKET PLATES to Stringers between)</b>													
<b>Web Frames, depth and thickness.....)</b>													
<b>BULKHEADS.</b>				Number.	Thickness.		<b>STIFFENERS.</b>				Single or Double Frames.	Height up.	
Vessel.		Per Rule.	Inches.		Horizontal.		Vertical.		Size.		Spacing.		
Inches.		Inches.		Inches.		Inches.		Inches.		Inches.			
<b>W.T.BULKHEADS</b>				6	6 1/2	34 x 7 1/2	30 x 4 1/2	21 x 5 1/2	32 x 4 1/2	Sgl.	6 ft.	Dk.	
				6 1/2	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
				6 3/4	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
				6 3/4	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
<b>COLLISION "</b>				6 3/4	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
<b>PARTITION "</b>				6 3/4	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
<b>LONGITUDINAL,,</b>				6 3/4	36 x 5 1/2	30 x 4 1/2	27 x 4 1/2	36 x 4 1/2	"	"	"		
Are the outside Plates doubled two spaces of Frames in length? Long framing													
Are the Stairs Valves and Watertight Doors in efficient working order? Yes													
<b>RIVETING.</b>													
<b>PLATING.</b>													
<b>AS IN SHIP.</b>													
<b>PER RULE OR AS APPROVED.</b>													
<b>EDGES.</b>													
<b>BUTTS.</b>													
<b>STRAKES.</b>													
<b>AMIDSHIP.</b>													
<b>DOUBLE OR TREBLE AND FOR WHAT LENGTH.</b>													
<b>RIVETS.</b>													
<b>STRAPS.</b>													
<b>IF LAPPED.</b>													
<b>FLAT PLATE KEEL.....</b>													
<b>GARBOARD OF A STRAKE</b>													
<b>State actual thickness in way of Double Bottom.</b>													
<b>THICKNESS OF SHEERSTRAKE CLEAR OF LONG BRIDGE DO. OF STRAKE BELOW DBLG. OF Flat Plate Keel Sheerstrakes Length and thickness.</b>													
<b>POOP SIDES.....</b>													
<b>SHORT BRIDGE SIDES.....</b>													
<b>FORECASTLE SIDES.....</b>													
*Where a long bridge is fitted the thickness of Upper Deck Sheerstrake and Strake below should also be stated clear of same.													
<b>Upper Deck Butts, riveted for half length amidship.</b>													
<b>Stringer Plate Straps, single, double or overlapped for full length amidship.</b>													
<b>Second Deck Butts, riveted for half length amidship.</b>													
<b>Stringer Plate Straps, single or overlapped for full length amidship.</b>													
<b>Butts of Side Stringers riveted.</b>													
<b>Tie Plates riveted.</b>													
<b>Inner Bottom Plating, riveting of Edges Sgl. Butts Tbl. Dk. Btg.</b>													
<b>Centre Girder Butts, Tbl. riveted Keelson Butts, riveted.</b>													
<b>Frames, riveted through Plates with 7/8 in. Rivets, about 1/2 bds apart.</b>													
<b>Rivets, state whether Iron or Steel. Iron.</b>													
<b>FRAMES extend in one length from Longitudinal framing State if ordinary or joggled Ordinary</b>													
<b>REVERSED FRAMES on floors and frames extend from inner-keels from center girder to margin plate State if ordinary or joggled joggled</b>													
<b>MASTS, SPARS, &amp;c.</b>													
<b>DIAMETER AND THICKNESS.</b>													
<b>No. of Plates in round.</b>													
<b>ANGLES.</b>													
<b>RIVETING.</b>													
<b>Material.</b>													
<b>Total Length.</b>													
<b>At Partners.</b>													
<b>Heel.</b>													
<b>Hounds.</b>													
<b>Head.</b>													
<b>Fore .....</b>													
<b>Main .....</b>													
<b>Mizen.....</b>													
<b>Lower Masts.....</b>													
<b>Bowspit.....</b>													
<b>Topmasts, Yards and Remainder of Spars Telescopic. Pitch Pine</b>													
<b>Rigging, Material and Size, Shrouds 3/4 G.S. Wire</b>													
<b>Sails, One Suit of fore &amp; aft Sails, and the following spare sails None.</b>													

EQUIPMENT No. 31726						LETTER X		ANCHORS.		TONNAGE U.DK. OR PLATING No. FOR TRAWLERS							
Number of Certificate.		Anchors.		WEIGHT, EX STOCK		WEIGHT OF STOCK		TEST, PER CERTIFICATE		WEIGHT REQUIRED BY TABLE 31.		Description of Anchor.	Makers.	Where and when tested and Superintendent.			
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.						
13458	1st Bower	56	1	0	Lockless			46	3	0	14	56	1	0	Bayer stock	W & A York	LPHB 13/8/10 A.G. Green
13460	2nd "	56	0	21	"			46	3	0	14	56	1	0	"	"	" 16/8/10 "
13449	3rd "	48	0	0	"			41	2	2	0	47	2	0	"	"	" 12/8/10 "
	4th "																Hammer Drop Bend Tel
	Collective weight	160	1	21								160	0	0			
36746	Stream	18	0	14	4	0	0	16	12	0	21	15	0	0	Iron stock	Earl of Dudley	LPHM 19/9/10 C.S. Perrins
36747	Kedge	6	3	7	1	2	21	8	15	0	0	6	2	0	"	Round Oak Works	" 19/9/10 "

  

CHAIN CABLES.										HAWSEERS AND WARPS.										
Number of Certificate.		Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE		Length and Size per Table 31.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.		Length and Size supplied.		Breaking Test of Steel Wire		Length and Size per Table 31.	
		Fathoms.	Diam.	Ins.	Tons.	Cwts.	qrs.	lbs.	Fathoms.	Diam.					Fathoms.	Ins.	Tons.	Fathoms.	Ins.	
37810		270	2 1/8	8 1/2	11 3/4	615	1	14	615	2	14	270	2 1/8	Steel	Earl of Dudley	LPHM 27/19/10				
37811		90	1 1/8	25 1/8	28	65	3	8	65	0	16	90	1 1/8	"	Round Oak Works	G.S. Perrins				

  

**Boats** 2 Life cutters 1 Gig 1 Dinghy      **Steering Gear, Steam** Good      **Steering Gear, Hand** Good

**Pumps, Number** 1, 5, Downton & 1, 5, Life      **Diameter of Barrel** State whether they are in efficient working order Yes

**Windlass is** Iron patent      **Capstan**

**Engine Room Skylights.**—How constructed? Steel coamings      What arrangements for deadlights in bad weather? Steel shutter & lights

**Coal Bunker Openings.**—How constructed? Steel coamings      How are lids secured? Bolted      Height above deck? 12 in bridged

**Number of Scuppers,** and numbers and dimensions of **Freeing Ports, &c.** 9 Scuppers 9 Freeing ports 36 x 21 each side

**Ceiling in Holds,** thickness and material 2 1/2 W.P.      **Cargo Batten,** thickness and material None fitted

**Cargo Hatchways.**—How formed? Steel coamings 3.7.8.9.9      **Hatches,** If strong and efficient? Steel lined up

**State size No. 1 Hatch (Forward)** 18.3 x 32.3      **No. 2 Hatch** 16.6 x 33.10      **No. 3 Hatch** 15.10 x 33.10      **No. 4 Hatch** 17.10 x 33.10

**Number of Web Plates, Shifting Beams and Fore and Afters** to each Hatch Hinged steel covers plate 34 stiffeners 1 11 x 63 x 5.0 as app

**No. of Breasthooks** 16      **No. of Crutches** 8

**Bulwarks,** height above deck and description 18 Steel plates .30      **Main Rail, material and size** Steel 8 x 3 x 3.4

The foregoing is a correct description.      Surveyor's Signature E. J. Milton

Builder's Signature (here only) R. G. Smith      Surveyor to Lloyd's Register of British and Foreign Shipping.

**Correspondence.**—State dates and initials of letters respecting this case Reference should be made in any correspondence connected with the case.  
M 13.5.10 30.5.10 9.6.10 5.7.10 5.9.10 17.10.10 21.11.10 5.12.10

**Workmanship.** Are the butts of plating planed or otherwise fitted? Lapped & 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 faying surfaces? Yes

Do any rivets break into or through the seams or butts of the plating? Very 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. 26, par. 20)? Yes

State results of tests Good

Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? Yes

State results of tests Good

**General Remarks** (State quality of workmanship, &c.)  
This vessel has been built in accordance with the Rules, the Approved Plans and the Secretary's Letters quoted above.  
The workmanship and materials are good throughout.  
No spar ceiling has been fitted, as she is intended for carrying coal cargo only and the Class recommended below is subject to the vessel being engaged exclusively in carrying coal, ore or wood while without cargo battens.  
The approved plans of Midship Section & Profile are forwarded herewith which please return for dealing with sister vessel.

The Builder no 830 is a duplicate vessel, now building.  
The Surveyor should state the Number of Report and Name of any Sister Vessel.

The amount of Entry Fee ..... £ 5 : 0 : 0      Fees applied for, MAY 23 1911  
Special Survey Fee.... £ 14 : 18 : 6      Received by me, [Signature]  
Travelling Expenses, if any : : :      Certificate to be sent to NEWCASTLE ON TYNE Date of issue

State whether the Vessel has been built under Special Survey Yes

I am of opinion this Vessel should be Classed 100 A.I. Steel Longitudinal framing      E. J. Milton

With or without Freeboard, as condition of Class Without      Subject etc      Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute      TUE. 30 MAY 1911  
Character assigned      100A.I.      Subject  
D Lloyd at CP + Home 4.11  
W



## PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.				AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.						
				In Ship.			In Ship.			Per Rule or as approved.			Per Rule or as approved.			Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads.		Rivets in Brackets to Bulkheads.		
				Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Diam.	Speng.	Inches.	Number.	Diameter.			
Framing of $\perp, \angle$ or $\equiv$ .....				<i>Bulkheads</i>																		
Frames in Bridge 'tween Decks ...				7	3 1/2	38	7	3 1/2	34	7	3 1/2	38	7	3 1/2	34	7/8	5 1/4	5 1/4	5	7/8		
Frames from Uppermost Continuous Deck No. 1				7	3 1/2	40	7	3 1/2	36	7	3 1/2	40	7	3 1/2	36	7/8	4 3/8	4 3/8	6	7/8		
" 2				7 1/2	3 1/2	40	7 1/2	3 1/2	38	7 1/2	3 1/2	40	7 1/2	3 1/2	38	7/8	4 3/8	4 3/8	6	7/8		
" 3				8	3 1/2	42	7 1/2	3 1/2	40	8	3 1/2	42	7 1/2	3 1/2	40	7/8	4 3/8	4 3/8	6	7/8		
" 4				7 1/2 3 1/2 40			<i>in Beams</i>			7 1/2	3 1/2	40	7/8	5 1/4	4 3/8 for 10 rivets	6	7/8					
" 5				8	3 1/2	44	8	3 1/2	40	8 1/2	3 1/2	44	8	3 1/2	40	7/8	5 1/4	4 3/8 for 10 rivets	6	7/8		
" 6				8 1/2	3 1/2	44	8	3 1/2	42	8 1/2	3 1/2	42	8	3 1/2	42	7/8	4 3/8	4 3/8	7	7/8		
" 7				9	3 1/2	44	8 1/2	3 1/2	44	9	3 1/2	44	8 1/2	3 1/2	44	7/8	4 3/8	3 1/2 for 10 rivets	7	7/8		
" 8				10	3 1/2	46	9 1/2	3 1/2	46	10	3 1/2	46	9 1/2	3 1/2	46	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8		
" 9				10	3 1/2	50	10	3 1/2	46	10	3 1/2	50	10	3 1/2	46	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8		
" 10				10	3 1/2	56	10	3 1/2	52	10	3 1/2	56	10	3 1/2	52	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8		
" 11				7 1/2	3 1/2	40	7 1/2	3 1/2	36	7 1/2	3 1/2	40	7 1/2	3 1/2	36	7/8	5 1/4	3 1/2 for 4 rivets	6	7/8		
" 12				7 1/2	3 1/2	40	7 1/2	3 1/2	36	7 1/2	3 1/2	40	7 1/2	3 1/2	36	7/8	5 1/4	3 1/2 for 4 rivets	6	7/8		
" 13																						
" 14																						
" 15																						
" 16																						
Spacing of Longitudinal Frames				Amidships ..... 30						30												
				At Ends ..... 27						27												
Double Bottoms				Tank Top Longitudinals			8 3 40			7 1/2 3 40			8 3 40			7/8 5 1/4			4 3/8 for 4 rivets.			
$\perp, \angle$ or $\equiv$				Bottom			8 3 1/2 44			7 1/2 3 1/2 44			8 3 1/2 44			7 1/2 3 1/2 44			7/8 5 1/4		3 1/2 for 4 rivets.	
Spacing of Longitudinals				Amidships			30			30												
				At Ends...			24			24												
Transverses.																						
In Bridge				Depth and Thickness			15 38			15 38												
'tween Decks				Face Angles			6 3 1/2 44			6 3 1/2 44												
				Lugs to Shell			3 1/2 3 1/2 38			3 1/2 3 1/2 38						7/8 4 3/8						
In Awning, Shelter or Upper 'tween Decks.				Depth and Thickness			25 46 29 46			25 46 29 46												
				Face Angles			9 3 1/2 64			9 3 1/2 64			9 3 1/2 64									
				Lugs to Shell			5 5 46 5 5 44			5 5 46 5 5 46			5 5 46 5 5 46			7/8 4 3/8						
In Hold.				Depth and Thickness			25 46 29 46			25 46 29 46												
				Face Angles			9 3 1/2 64			9 3 1/2 64			9 3 1/2 64									
				Lugs to Shell			5 5 46 5 5 44			5 5 46 5 5 46			5 5 46 5 5 46			7/8 4 3/8						
Brackets				Supports			8 3 40 6 3 1/2 44			8 3 40 6 3 1/2 44												
Spacing of Transverse Frames				12 ft 1 in 8 ft 1 in			as approved on Profile plan															
Longitudinal Beams of $\perp, \angle$ or $\equiv$				Bridge Deck ...			6 3 38 6 3 34			6 3 38 6 3 34			Spacing. 40"									
				Awg. or Shl. Dr. Dk.																		
				Upper			7 3 36 7 3 36			7 3 36 7 3 36			40"			Transverse Beams.		22 40		22 40		
				Second			7 3 38			7 3 38								8 1/2 x 3 1/2 60		8 1/2 x 3 1/2 60		
				Third																		

The particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

NOTE:—This skin to be used in the same manner as the Report Form.

## PARTICUI

NOTE:—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, etc., on the first page, (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<sup>st</sup> Deck (Steel)

Official No. .... : Signal Letters

State if Machinery is fitted aft

How are the surfaces preserved from oxidation? Inside *Portland Cement, Bitums & Paint*

Outside *Paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors. *Cell. D/B*

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	126	328	Fore peak tank,	25	215
Double bottom, under Engines and Boilers,	42	167	After peak tank,	23	240
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	159	529	Other tanks, if fitted, Wing side tanks Port 506 tons Star 518 tons		
Total capacity of double bottom		1018	(If necessary, furnish further information by sketch.)	Length 326 ft.	

\* 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

Order for Special Survey No. 4200

Date 9.8.1910

No. 829 in builder's yard.

DATE of Survey held while building

1910  
Jul. 4. 8. 11. 15. 19. 21. 25. 28. Aug. 2. 5. 9. 10. 11. 12. 15. 16. 17. 19. 23. 25. 30. Sep. 2. 8. 13. 16. 19. 22. 26. 28.  
30. Oct. 4. 6. 12. 13. 14. 18. 20. 25. 28. Nov. 1. 4. 8. 10. 14. 22. 24. 29. Dec. 5. 7. 9. 14. 21. 1911  
Jan. 4. 6. 16. 25. 27. 31  
Feb. 2. 6. 7. 9. 14. 15. 16. 17. 20. 23. 27. Mar. 1. 3. 6. 8. 9. 10. 13. 14. 17. 20. 21. 23. 24. 27. Apr. 18. 21. 25. 27. 28. May. 1.

Total No. of Visits 99

Surveyor's Signature

E. J. Milton



GENERAL RE

## PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.		AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.																																			
		In Ship.			In Ship.			Per Rule or as approved.			Per Rule or as approved.			Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads.		Rivets in Brackets to Bulkheads.																															
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Diam.	Speng.	Inches.	Number.	Diameter.																															
																		Inches.																															
Framing of $\perp$ , $\angle$ & $\text{E}$ .....		<i>Built angles</i>																																															
Frames in Bridge 'tween Decks ...		7	3 1/2	38	7	3 1/2	34	7	3 1/2	38	7	3 1/2	34	7/8	5 1/4	5 1/4	5	7/8																															
Frames from Uppermost Continuous Deck		7	3 1/2	40	7	3 1/2	36	7	3 1/2	40	7	3 1/2	36	7/8	4 3/8	4 3/8	6	7/8																															
" 2		7 1/2	3 1/2	40	7	3 1/2	38	7 1/2	3 1/2	40	7	3 1/2	38	7/8	4 3/8	4 3/8	6	7/8																															
" 3		8	3 1/2	42	7	3 1/2	40	8	3 1/2	42	7	3 1/2	40	7/8	4 3/8	4 3/8	6	7/8																															
" 4					7 1/2	3 1/2	40	<i>m Peaks</i>			7 1/2	3 1/2	40	7/8	5 1/4	4 3/8 for 10 rivets	6	7/8																															
" 5		8	3 1/2	44	8	3 1/2	40	8 1/2	3 1/2	44	8	3 1/2	40	7/8	5 1/4	4 3/8 for 10 rivets	6	7/8																															
" 6		8 1/2	3 1/2	42	8	3 1/2	42	8 1/2	3 1/2	42	8	3 1/2	42	7/8	4 3/8	4 3/8	7	7/8																															
" 7		9	3 1/2	44	8 1/2	3 1/2	44	9	3 1/2	44	8 1/2	3 1/2	44	7/8	4 3/8	3 1/2 for 10 rivets	7	7/8																															
" 8		10	3 1/2	46	9 1/2	3 1/2	46	10	3 1/2	46	9 1/2	3 1/2	46	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8																															
" 9		10	3 1/2	50	10	3 1/2	46	10	3 1/2	50	10	3 1/2	46	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8																															
" 10		10	3 1/2	56	10	3 1/2	52	10	3 1/2	56	10	3 1/2	52	7/8	4 3/8	3 1/2 for 10 rivets	8	7/8																															
" 11		7 1/2	3 1/2	40	7 1/2	3 1/2	36	7 1/2	3 1/2	40	7 1/2	3 1/2	36	7/8	5 1/4	3 1/2 for 4 rivets	6	7/8																															
" 12		7 1/2	3 1/2	40	7 1/2	3 1/2	36	7 1/2	3 1/2	40	7 1/2	3 1/2	36	7/8	5 1/4	3 1/2 for 4 rivets	6	7/8																															
" 13																																																	
" 14																																																	
" 15																																																	
" 16																																																	
Spacing of Longitudinal Frames		Amidships						30																																									
		At Ends						27																																									
Double Bottoms		Tank Top Longitudinals			8			3			40			7 1/2			3			40			8			3			40			7 1/2			3			40			7/8			5 1/4			4 3/8 for 4 rivets.		
$\perp$ , $\angle$ & $\text{E}$		Bottom			8			3 1/2			44			7 1/2			3 1/2			44			8			3 1/2			44			7 1/2			3 1/2			44			7/8			5 1/4			3 1/2 for 4 rivets.		
Spacing of Longitudinals		Amidships			30						30																																						
		At Ends			24						24																																						
Transverses.																			Rivets in Lugs to Shell																														
In Bridge		Depth and Thickness			15						38			15			38																																
'tween Decks		Face Angles			6			3 1/2			44			6			3 1/2			44																													
		Lugs to Shell			3 1/2			3 1/2			38			3 1/2			3 1/2			38																													
In Awning, Shelter or Upper 'tween Decks.		Depth and Thickness																																															
		Face Angles																																															
		Lugs to Shell																																															
In Hold.		Depth and Thickness			25			46			29			46			25			46			29			46																							
		Face Angles			9			3 1/2			64			9			3 1/2			64			9			3 1/2			64			9			3 1/2			64											
		Lugs to Shell			5			5			46			5			5			46			5			5			46			7/8			4 3/8														

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 29.0 ft., R.Q.D. *not joined* ft., Bridge 99.75 ft., Forecastle 36.33 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 DE (Steel)*

Official No. ....; Signal Letters .....

State if Machinery is fitted aft *No.*

How are the surfaces preserved from oxidation? Inside *Portland Cement, Bitums & Paint*

Outside *Paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors. *Cell. D/B.*

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	126	328	Fore peak tank,	25	215
Double bottom, under Engines and Boilers,	42	167	After peak tank,	23	240
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	159	529	Other tanks, if fitted, <i>Wing side tanks Port 506 tons Star 518 tons</i>		
Total capacity of double bottom	1018		(If necessary, furnish further information by sketch.) <i>Length 326 ft.</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. *4200*

Date *9.8.1910*

No. *829* in builder's yard.

DATES OF SURVEYS held while building

*1910*  
Jul. 4. 8. 11. 15. 19. 21. 25. 28. Aug. 2. 5. 9. 10. 11. 12. 15. 16. 17. 19. 23. 25. 30. Sep. 2. 5. 13. 16. 19. 22. 26. 28.  
30 Oct. 4. 6. 12. 13. 14. 18. 20. 25. 28. Nov. 1. 4. 8. 10. 14. 22. 24. 29. Dec. 5. 7. 9. 14. 21. *1911*  
31. 2. 6. 7. 9. 14. 15. 16. 17. 20. 23. 27. Mar. 1. 3. 6. 8. 9. 10. 13. 14. 17. 20. 21. 23. 24. 27. Apr. 18. 21. 25. 27. 28. May 1.  
2. 3. 5. 8. 10. 11. 12. 15. 18. 19

Total No. of Visits *99*

Surveyor's Signature

*E. J. Milton*

Register Foundation