

With or Without
Disconnected Erections.

STEEL STEAMER.

Received at London Office MON. MAY 18. 1914

State if Report is also sent on the Machinery of the Vessel

To follow

Date of completion of report 15th May 1914

Port of

NEWCASTLE-ON-TYNE

No.

66083

Survey held at Wellington Quay

Date, First Survey 11th Aug. 1913

Last Survey 13th May 1914

1914

On the (State if Single, Twin, or Triple Screw)

Single Screw Steamer ORLA

Rig Schooner

TONNAGE under

CLASS 100A1

FEET.

Master C. M. Nielsen Moe

Tonnage Deck

Do. between Tonnage Dk. and 3rd and 4th Dk.

Total under Upper Dk.

Do. of Poop

Do. of 2nd Dk. Chartroom 16.85

Do. of Bridge House 89.14

Do. of Forecastle 47.44

Do. of Houses on Dk.

Do. of excess of Hatchways 45.39

Do. above Crown of Engine Room

Gross Tonnage 4032.58

Less Crew Space 118.90

Less above Crown of Engine Room

Net Tonnage 3913.68

Less Engine Room 1290.43

Less Navigation Spaces 161.66

After Peak Tank 44.16

Register Tonnage 2536.33

As cut on Beam

Breadth (greatest moulded) 50.55

Depth, at middle of length from top of keel to top of upper deck beams at side 27.33

Transverse Number 77.88

Length on deck from fore part of stem to after part of stern post 355.0

Longitudinal Number 2764.4

Depth "d," at middle of length (See Secs. 2 & 13) under 22 1/2

Proportions—Depths to Length—Upper Deck Beam at side to top of keel 12.98

" " Long Bridge Deck Beam at side to top of keel 10.34

Destined Voyage Delagoa Bay

If Surveyed while Building, Afloat, or in Dry Dock, Special Survey

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
355 0	355	0	50 6 1/2	50	6 1/2	Do. do. do. do. Second Dk. Beams	24 1 1/2	24 1 1/2	One

Dimensions of Ship per Register, Length 355.35 breadth 50.5 depth 24.9.	Moulded depth, ft. 34 ins. 4	To Bridge Dk. Round of Upper Dk. Beam, Actual 12 1/4 ins.
	Moulded depth, ft. 27 ins. 4	To Upper Dk.

FRAMING.				PILLARS.			
FRAME, Angles, or E or L Bars amidships	Inches in Ship.	Inches in Ship.	Inches in Ship.	PILLARS, In 'tween Deck, size and spacing	Inches in Ship.	Inches in Ship.	Inches in Ship.
Do. in peaks	10 3 1/2	5 6	10 3 1/2	" " Hold	2 7/8	50	2 7/8
Do. in way of Double Bottoms at Solid Floors	6 1/2	3 1/2	4 2	" " Quarter 'tween Dks.,	Center line 13th in per		
" " at intermdt. Bkts.	3 1/2	3 1/2	3 1/2	" " in Hold	next page		
Spacing of Frames from centre to centre amidships	2 5		2 5	KEELSONS & STRINGERS.			
" " length to Collision bulkhead	2 5		2 5	CENTRE LINE KEELSON, Vertical Plate above			
" " " in peaks	2 4		2 4	floors, Through Plate, or Intercoastal Plate			
REVERSED FRAME, Angles	Bulk Angle framing			Rider Plate			
Do. in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	3 1/2	Flat Plate Keel Angles			
" " at intermdt. Bkts.	3 1/2	3 1/2	3 1/2	Horizontal Plates on Floors			
FRAMING, depth of girder	10		10	Angles or Bulb Angles			
FLOORS, depth and thickness of Floor Plate				SIDE KEELSONS, Number			
at mid-line for 1/2 length amidships				Angles or Bulb Angles			
" in way of Engine and Boiler Spaces				Plate above floors, for length			
" thickness at the ends of vessel				Intercoastal 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 in Cell. Double Bottoms	38-36		38-36	Intercoastal Plate for length			
" state if flanged (top & bottom)	Not flanged			Attached to outside Plating with Angle			
" Spacing of Solid floors	On alternate frames			SIDE STRINGERS, Number			
CENTRE GIRDER, in Dbl. bottom, dpth. & thickness	4 1/2	5 0	4 1/2	" Angle			
" Angles, Top	4 1/2	4 1/2	5 8	Intercoastal Plate, for length			
" Bottom	4 1/2	4 1/2	5 8	Attached to outside plating with Angle			
" to Floors	3 1/2	3 1/2	3 1/2	Upper Deck Stringer Plate, br'dth & thickness	55 x 58		55 x 58
" Brackets at intermdt. frmg., wdth & thkns	1-6	3 8	1-6	" " " " br'dth & thickness	55 x 46		55 x 46
SIDE GIRDERS, number on each side & thickness	Three 36		Three 36	" " " " (in way of Bridge)	4 1/2 x 4 1/2 x 62		4 1/2 x 4 1/2 x 62
" state if flanged (top and bottom)	Not flanged			" " Angle (clear of Bridge)			
" Angles (top and bottom)	3 1/2	3 1/2	3 1/2	" Tie Plate at sides of Hatchways			
" to Floors	3 1/2	3 1/2	3 1/2	Deck * Iron or Steel, for full lng.	Steel		Steel
MARGIN PLATE, depth (exclusive of flange) and thickness	35 x 44		35 x 44	" Thickness (clear of Bridge)	4 1/2 x 35		4 1/2 x 35
" Angles to Outside Plating	3 1/2	3 1/2	4 4	" (in way of Bridge)	34		34
" Floors	3 1/2	3 1/2	3 1/2	" Wood Deck. Material & thickness			
" Brackets at intermdt. frmg., wdth & thkns	1-6	3 8	1-6	Second Deck Stringer Plate, br'dth & thickness			
" Height of Outside Brackets above at bilge	3-3		3-3	Angles on ditto, No.			
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	60 x 46		60 x 46	Tie Plates outside Hatchways			
" in Engine and Boiler space	5 1/2 x 46	3 1/2 x 62	4 1/2 x 62	Deck * Iron or Steel, for lng.			
" Remainder in Holds	4 1/2 x 38		4 1/2 x 38	Wood Deck. Material & thickness			
BEAMS, Upper Deck, Single Angle, Bulb, Angle, Plate, Tee Bulb, or Channel	9 3 1/2	5 4	9 3 1/2	Third Deck Stringer Plate, br'dth & thickness			
" In way of Long Bridge	8 1/2	3 50	8 1/2	Angles on ditto, No.			
" Spacing	On every frame			Tie Plates, outside Hatchways			
BEAMS, Second Deck, Single Angle, Bulb, Angle, Plate, Tee Bulb, or Channel				Deck * Material and 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	6 1/2	3 40	6 1/2	Poop Deck Stringer Plate, breadth & thickness	33 x 34		33 x 34
" Angles on upper edge				Angle on ditto	3 1/2 x 3 1/2 x 34		3 1/2 x 3 1/2 x 34
" Spacing	On every frame			Tie Plates			
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	8 1/2	3 46	8 1/2	Deck. Material and thickness	Steel 30		30
" Angles on upper edge				Bridge Deck Stringer Plate, br'dth & thickness	5 1/2 x 52		5 1/2 x 52
" Spacing	On every frame			Angle on ditto	4 1/2 x 4 1/2 x 56		4 1/2 x 4 1/2 x 56
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	8 1/2	3 46	8 1/2	Tie Plates			
" Angles on upper edge				Deck. Material and thickness	Steel 40		40
" Spacing	On every frame			Forecastle Deck Stringer Plate, br'dth & thkns	33 x 34		33 x 34
				Angle on ditto	3 1/2 x 3 1/2 x 34		3 1/2 x 3 1/2 x 34
				Tie Plates			
				Deck. Material and thickness	Steel 30 P.P. 3		308. 3 P.P.

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

W1109-0126 1/2

EQUIPMENT No. 28814-72 LETTER W										ANCHORS.										MANNING D.K. OR PLATING No. FOR RAILWAYS									
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. cwt. qrs. lbs.			Cwts. qrs. lbs.																
14381		1st Bower		53 1 14			30 1 14			44 5 3 0			522			Byss Steel			—			Lumberton 29/3 4/10							
14380		2nd "		52 3 7			30 1 14			44 3 1 21			522			"			—			" 16/3 "							
14329		3rd "		44 2 0			30 1 14			38 18 3 0			442			"			—			" 16/3 "							
		4th "		150 2 21			30 1 14			144 1/2			—			"			—			" 16/3 "							
40377		Stream		14 1 15			3 2 27			16 1 1 0			144 1/2			Ordinary			W. Hingley & Son			Lumberton 29/3 4/10							
40376		Kedge		6 1 2			1 2 13			8 12 2 0			6			"			"			" 16/3 "							

CHAIN CABLES.										HAWERS 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 Towline.		Length and Size per Table 31.			
		Length. Diam.		Tons. cwt. qrs. lbs.		Supplied. Per Rule.		Length. Diam.										Length. Cir.		Tons.		Length. Cir.			
53660		135 2 7/8		107 10		280 5 16		578 3 4		270 2 7/8		Slid link		W. Hingley & Son		Lumberton 29/3 4/10		TOWLINE		120 1/2		39 1/2		120 1/2	
53663		135 2 7/8		107 10		280 5 16		578 3 4		270 2 7/8		"		"		"		HAWERS & WARPS		2 90 2 1/2		2 1/2		4 90 2 1/2	
Steel Wire		90 4 1/2		39 1/2		90 4 1/2		90 4 1/2		90 4 1/2		"		"		"		"		2 90 2 1/2		2 1/2		4 90 2 1/2	

Boats 2 Life Boats, one cutter, one dingy. Steering Gear, Steam Donkin & Co. Steering Gear, Hand Donkin & Co. Pumps, Number 4 Hand Pumps to the Peak. Diameter of Barrel 6 and 5. State whether they are in efficient working order. Yes. Windlass is Steam by Commercial Rubber & Thompson. Capstan. Engine Room Skylights.—How constructed? Steel plate and angles. What arrangements for deadlights in bad weather? Bulky. Coal Bunker Openings.—How constructed? Plates & angles. How are lids secured? By screws & bolts. Height above deck? 2-3. Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. 10 Scuppers each side, 8 freeing ports each side. 3-2 x 1-6. Ceiling in Holds, thickness and material. 2 1/2 White Pine. Cargo Battsens, thickness and material. 6 x 2 White Pine. Cargo Hatchways.—How formed? Steel plate and angles. Steel web plates. No. 1 Hatch (Forward) 27-1 x 18-0 x 3-7. No. 2 Hatch 29-2 x 18-0 x 3-6. No. 3 Hatch 29-2 x 18-0 x 3-1. No. 4 Hatch 27-1 x 18-0 x 3-0. State size No. 1 Hatch (Forward) 27-1 x 18-0 x 3-7. No. 2 Hatch 29-2 x 18-0 x 3-6. No. 3 Hatch 29-2 x 18-0 x 3-1. No. 4 Hatch 27-1 x 18-0 x 3-0. Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch 4 beams in No. 1 and 2 hatchways. 4 beams in No. 3 & 4. No. of Breasthooks 4 and Decks. No. of Crutches 4 and 4. Bulwarks, height above deck and description. Steel plate 4-0 high x 7 inch struts. Main Rail, material and size. 6 x 3 inch angle. The foregoing is a correct description. Builder's Signature (here only) G. J. Macleod. Surveyor's Signature Alex. Munro. 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. 9-8-12, 14-4-13. 23-8-13-17-10-12, 17-3-13. Managing Director.

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 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 approved plans. The Secretary's letter of the above mentioned date and in general conformity with the rules. The approved plans of Profile & Decks, Midship Section, 2 plans of Rudder & Engine supports are also forwarded. The other approved plans are forwarded with 1st Entry in S's Book.

The Surveyor should state the Number of Report and Name of any Sister Vessel. S's Book, Mrs. Rpt. No. 64977.

The amount of Entry Fee £ 5 : 0 : 0. Fees applied for, MAY 15 1914. Special Survey Fee.... £ 12 : 17 : 0. Received by me, MAY 15 1914. Travelling Expenses, if any £ : : Certificate to be sent to Newcastle Date of issue 27/5/14.

State whether the Vessel has been built under Special Survey. Yes. I am of opinion this Vessel should be Classed *100A1. With or without Freeboard, as condition of Class Without.

Committee's Minute FRI. MAY 22. 1914. Character assigned 100 A1. Lloyds A. & G. P. + L.M.C. 5.14.

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

W1109-0176 $\frac{3}{2}$

GENERAL REMARKS—(continued).

Cpt. 4.

... of writing Report /
... in Survey held
... Reg. Book.
... upon the
... Master
... engines made at
... boilers made at
... registered Horse P
... om. Horse Power as
... /GINES, &c.—
... ia. of Cylinders 2
... the screw shaft fit
... the propeller bos
... between the bearings
... vers are fitted, is t
... ia. of Tunnel shaft
... llars 13 1/4" Dia
... o. of Feed pumps
... o. of Bilge pumps
... o. of Donkey Engine
... Engine Room
... 2 of 2 3/4"
... o. of Bilge Injections
... re all the bilge suction
... re all connections wi
... re they fixed sufficien
... re they each fitted wit
... That pipes are carri
... re all Pipes, Cocks,
... re the Bilge Suction
... dates of examination
... the Screw Shaft T
... ILERS, &c.—
... total Heating Surf
... Working Pressure
... an each boiler be re
... ach boiler 2 dw
... smallest distance betwe
... Thickness 1 3/32" Ra
... ng. seams 2 r. d.
... er centages of streng
... Size of compensating r
... length of plain part
... Working pressure of fu
... Pitch of stays to ditto
... Material of stays
... Material at smallest
... Diameter at smallest
... Thickness 1" Mate
... Diameter of tubes 3
... Pitch across wide
... Thickness of girder a
... Working pressure b
... separately
... Pitch o
... stiffened with rings
... Working pressure of

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 31.5 ft., R.Q.D. ✓ ft., Bridge 02.1 ft., Forecastle 34.0
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated *The Poop is not joined to the Bridge Deck*

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
should appear in the Register Book) 1 0 1/2 (std)

Official No. ✓ ; Signal Letters ✓ State if Machinery is fitted aft *Amidships*
How are the surfaces preserved from oxidation? Inside *Paint + Cement* Outside *Paint*

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

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	114-6	340	Fore peak tank,	—	—
Double bottom, under Engines and Boilers,	—	—	After peak tank,	—	102
Double bottom, if under Engines only,	23-0	88	Deep tank, aft,	—	—
Double bottom, if under Boilers only,	16-8	64	Deep tank, forward,	—	—
Double bottom, forward,	154-2	509	Other tanks, if fitted,	—	—
	Total capacity of double bottom	1001	(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. 4382

Date 15.10.1912

No. 190 in builder's yard.

DATES of Surveys held while building

1913 Aug. 11. 15. 25. 29 Sep. 2. 22. 24. 26. 30 Oct. 2. 7. 9. 10. 17. 20. 22. 23. 29. 30 Nov. 5. 13. 14. 17. 18. 19. 20. 26. 28 Dec. 1. 3. 9. 11. 15. 19. 22. 24. 30. 1914 Jan. 6. 9. 12. 14. 20. 21 Feb. 23. 26 Mar. 4. 11. 13. 17. 18. 20. 23. 25. 27. 31. Apr. 28. 29 May 5. 6. 7. 8. 11. 12

Total No. of Visits 26

Surveyor's Signature

Alex. Munro

Lloyd's Register Foundation