

3 Decks.

IRON OR STEEL STEAMER.

No. 16439

WED, 5 OCT 1898

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

Date of completion of report *27th Aug 1898* Port of *Glasgow* Received at London Office

Survey held at *Glasgow, Clydebank* Date, First Survey *17th May 1897* Last Survey *24th Aug 1898*

On the *Thos S. S. Moskva* Rig *3 masted topsail schooner*

TONNAGE under Tonnage Deck... *4781.96* THREE DECKED VESSEL.

Do. between Tonnage Dk. *1605.57* CLASS *100A.1.*

and 3rd and 4th Dk. *6387.53*

Total under Upper Dk. *6387.53*

Do. of Poop *88.75* Half Breadth (moulded) *29.00*

Do. of Bridge/House *91.42* Depth from upper part of Keel to top of Upper Deck Beams *38.20*

Do. of Forecastle *91.42* Girth of Half Midship Frame (as per Rule) *61.50*

Do. of Houses on Dk. *413.57* *128.7*

Do. of excess of Hatchway *18.45* deduct 7 feet. *7.0*

Do. above Crown of Engine Room *267.03*

Gross Tonnage *7266.69* 1st Number *121.7*

Less Crew Space *395.05* Length *468.0*

Less above Crown of Engine Room *267.03* 2nd Number *56956*

TONNAGE FOR FEES... *6604.61* Proportions—Breadth to Length *8.09*

Less Engine Room *4080.00* Depth to Length—Upper Deck to top of Keel *12.25*

Less Navigation Spaces *57.64* Main Deck ditto *15.48*

Register Tonnage *2734.00* as cut on Beam *2734.00* Destined Voyage *Odessa*

Master *V. Paire* Year of appointment *1897*

Built at *Clydebank, Glasgow*

When built *1897-98* Launched *23rd May/98*

By whom built *Clydebank E & S B Co Ltd*

Owners *Russian Volunteer Fleet*

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

Residence *Odessa*

Port belonging to *Odessa*

If Surveyed while Building, Afloat, or in Dry Dock *While Building*

LENGTH on Deck as per Rule		Feet. 468	Inches. —	BREADTH— Moulded		Feet. 58	Inches. —	DEPTH top of Floors to Do.		Feet. 34	Inches. 26	Power of Engines	Horse. ✓	No. of Decks with flat laid No. of Tiers of Beams		3 4																	
Dimensions of Ship per Register, Length 487 breadth 58.2 depth 26.03 Moulded depth, ft. 37. ins. To Upper Dk. Round up of Beam, Upper Dk. 14 1/2 ins.																																	
FRAMING.								FORGINGS or CASTINGS.								Inches in Ship.		Inches per Rule. Or as Approved.															
FRAME, Angles, or 7. [or] Bars for 1/2 length amidships								4 1/2	3 1/2	13	4 1/2	3 1/2	13	KEEL, Bar or Side Plates, depth and thickness								12 x 3 1/2	12 x 3 1/2										
Do. for 1/2 at each end								6 1/2	3 1/2	9	6 1/2	3 1/2	9	STEM, moulding and thickness. 30 x 12 Steel								14 x 8	14 x 8										
Do. in way of Double Bottoms at Solid Floors								3 1/2	3 1/2	10	3 1/2	3 1/2	10	STERN-POST for Rudder do. do. Cast								14 x 8	14 x 8										
Do. at intermdt. Bkts.								4	3 1/2	10	7	3 1/2	10	for Propeller								14 x 8	14 x 8										
Distance of Frames from moulding edge to moulding edge, all fore and aft								27			27			MAIN PIECE of Rudder, diameter at head								12 1/2	12 1/2										
REVERSED FRAME, Angles outside of B.								4 1/2	4	10	Beyond channel for			do. at heel								10 1/2 x 7 1/2	10 1/2 x 7 1/2										
DEEP FRAMING, depth of girder														RUDDER, how constructed. Single plate 1 1/2 inch. Cast steel frame																			
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships														Can the Rudder be unshipped afloat? Yes.																			
in way of Engines and Boilers														KEELSONS & STRINGERS.								Inches in Ship.		Inches per Rule. Or as Approved.									
thickness at the ends of vessel														CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate																			
depth at 1/2 the half breadth, as per Rule														Rider Plate																			
height extended at the Bilges														Bulb Plate to Intercoastal Keelson																			
FLOORS & BRACKETS in Cell Dble Bottoms								54			54			Horizontal Plates on Floors																			
Distance apart								50		11	50		11	Angles																			
CENTRE GIRDER, in Double bottom, depth and thickness								4	4	10	4	4	10	SIDE KEELSON, Angles																			
Angles, Top								6 1/2	4 1/2	10	6 1/2	4 1/2	10	Bulb or Plate above floors, for								Ing.											
Bottom								4			4			Intercoastal Plate, for								length											
SIDE GIRDERS, number and thickness								4			4			Attached to outside Plating with Angle																			
Angles								3 1/2	3 1/2	10	3 1/2	3 1/2	10	BILGE KEELSON, Angles																			
MARGIN PLATE, depth (exclusive of flange) and thickness								36			36			Bulb or Plate above floors, for								Ing.											
Angles								4	4	10	4	4	10	Intercoastal Plate for								length											
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake								36			36			Attached to outside Plating with Angle																			
in Engine and Boiler space								in En. Spa	12	in En. Spa	12			BILGE STRINGER Angles								6 1/2	4 1/2	10	6 1/2	4 1/2	10						
Remainder in Holds								" Bol "	11	" Bol "	11			Bulb Plate for								length											
BEAMS, Upper Deck, Single Angle, Bulb Angle, Plate or Tee Bulb								11			11			Intercoastal Plate for								3/5	length										
Angles on upper edge								54			54			Attached to outside Plating with Angle																			
Average space								12			12			SIDE STRINGER Angles. in E. & B. Space								3 1/2	3 1/2	10	3 1/2	3 1/2	10						
BEAMS, Middle Deck, Single Angle, Bulb Angle, Plate or Tee Bulb														Bulb or Intercoastal Plate, for								Ing.											
Angles on upper edge								54			54			Attached to outside plating with Angle																			
Average space								12			12			Upper Deck Stringer Plates, br'dth & thickness								7.5	13	7.5	13								
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb														Angle on ditto								5.5	11	5.5	11								
Angles on upper edge								54			54			Tie Plates fore and aft, outside Hatchways																			
Average space								12			12			Deck. * Iron or Steel, for full Ing.								10-9		10-9									
BEAMS, Hold, or Orlop, Plate or Tee Bulb Angle, Plate or Tee Bulb														9" Wood Deck. Material & thickness Oak								3 1/2		3 1/2									
Angles on upper edge								54			54			Middle Deck Stringer Plate, br'dth & thickness								7.5	11	7.5	11								
Average space								12			12			Angles on ditto, No. 2								4.4	9	4.4	9								
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb														Tie Plates outside Hatchways																			
Angles on upper edge								54			54			Diagonal Tie Plates on Bms., No. of prs.																			
Average space								12			12			Deck. * Iron or Steel, for full Ing.								8		8									
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb														8" Wood Deck. Material & thickness P. Pine 3 1/2								3 1/2		3 1/2									
Angles on upper edge								54			54			Lower Deck Stringer Plate, br'dth & thickness								6.0	10	6.0	10								
Average space								10			10			Angles on ditto, No. 2								4.4	9	4.4	9								
PILLARS, In 'tween Deck, size and spacing								4 1/4	4 1/6		4 1/4		4 1/6	Tie Plates, outside Hatchways								6		6									
Hold								5 1/2			5 1/2			8" Deck. * Material and thickness P. Pine 3 1/2								3 1/2		3 1/2									
Quarter 'tween Dks.								4 1/4	4 1/6		4 1/4		4 1/6	Hold, or Orlop Stringer Plate, br'dth & thckn's								4.5	10	4.5	10								
in Hold								5 1/2			5 1/2			Angles on ditto, No. 3-1-6 1/2-4 1/2-4 1/2-4 1/2								9	4.4	9									
WEB-FRAMES, In Fore Body, No. and spacing								15	3 1/2	10	15	3 1/2	10	Tie Plates outside Hatchways																			
brdth. & thickness								24			24			Deck. Material and thickness																			
No. of Side Stringers								2	24	10	2	24	10	Poop Deck Stringer Plate, breadth & thickness								3.6	8	3.6	8								
WEB-FRAMES, In E. & B. Space, No. & spacing								6 1/2	4 1/2	13	6 1/2	4 1/2	13	Angle on ditto								3 1/2	3 1/2	9	3 1/2	3 1/2	9						
brdth. & thickness														Tie Plates								2.8	8	2.8	8								
WEB-FRAMES, In After Body, No. and spacing														Deck. Material and thickness Oak								3		3									
brdth. & thickness														Bridge Deck Stringer Plate, br'dth & thickness								4.8	9	4.8	9								
No. of Side Stringers								2	24	10	2	24	10	Angle on ditto								3 1/2	3 1/2	9	3 1/2	3 1/2	9						
Size of Angles or Tee Bars to Web-Frames								6 1/2	4 1/2	13	6 1/2	4 1/2	13	Tie Plates								2.8	8	2.8	8								
BRACKET PLATES to Stringers between														Deck. Material and thickness Oak								3		3									
Web Frames, depth and thickness														Forecastle Deck Stringer Plate, br'dth & thckn's								3.6	8	3.6	8								
														Angle on ditto								3 1/2	3 1/2	9	3 1/2	3 1/2	9						
														Tie Plates								2.8	8	2.8	8								
														Deck. Material and thickness Oak								3		3									
														* If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.																			
														BULKHEADS.								STIFFENERS.				Single or Double Frames.		Height up.					
														Number.								Thickness.		Horizontal.		Vertical.		Spacing.					
														In Vessel.								Per Rule.		Inches.		Inches.		Inches.					
														W. T. BULKHEADS								10		6		5/16		channel bars 10 3/16 x 1/2		30		Double 1 1/2	
														PARTITION																			
														LONGITUDINAL																			

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. (*Leicestershire's martini*) Frames, Shells Scotland Lanarkshire & Colville & Sons: Keelsons, Lanarkshire Shells Shell plating, Colville & Sons, Mossend & Elzabridge: Beams, Colville & Sons & Lanarkshire Shells & Elzabridge: Deck plating & Stringers, Elzabridge, Colville & Sons & Mossend & Lanarkshire; Masts, Mossend & Elzabridge.

Upper Deck { Butts, treble riveted for *full* length amidship.
Stringer Plate { Straps, single, double or overlapped for *3/4* length amidship.
Middle Deck { Butts, treble riveted for *full* length amidship.
Stringer Plate { Straps, single, double or overlapped for *full* length amidship.
Butts of Bilge & Side Stringers and Tie Plates, treble or double riveted *no req.*
Inner Bottom Plating, riveting of Edges, *each side double riveted fore & aft, right* Butts *double*
Centre Girder Butts, *Centre line brace* *full* riveted Keelson Butts, *all fore & aft, and aft of main* *double* riveted.
Frames, riveted through Plates with *1"* in. Rivets, about *7* apart.
Rivets, state whether Iron or Steel *Steel*

[illegible]

MASTS, SPARS, &c.

	Material.	Total Length.	DIAMETER AND THICKNESS.					No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hounds.	Head.	Number.		Size.	Seams.	Butts.	
LOWER MASTS.....	Fore Mast	Steel	103-0 to 104	28 x 7/20	22 x 7/20	23 x 7/20	20 x 7/20	3	3	4 x 3 x 5/16	Single	RT. as reqd.
	Main	"	78-6 "	26 x 8/20	20 x 7/20	21 x 7/20	19 x 7/20	2	-	-	d°	d°
	Mizen	"	61-9 "	23 x 7/20	18 x 7/20	19 x 7/20	15 1/2 x 7/20	2	-	-	d°	d°
Bowsprit	outside H.E. Hds.	"	34-0 "	22 x 7/20	-	-	12 x 8/20	2	2	3 x 2 1/2 x 5/16	d°	d°
Topmasts, Yards and Remainder of Spars 3 1/4 M. Pole topmasts Steel, mizen pole topmast C. Pine; remainder of spars pine.												
Rigging, Material and Size, Shrouds gale? Steel wire. Fore 4", main 3 1/2", mizen 3 1/4". Stays fore 4" double, main & mizen 3" double.												
Sails.	one full	Suit of										Sails, and the following spare sails.

EQUIPMENT No. 65300 LETTER d + ANCHORS.

[illegible]

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate. Tons.	WEIGHT OF CHAIN CABLE.		Fathoms and Size per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size Per Rule as above.	
				Supplied.	Per Rule.										
25656	150	2½	157-10-00 112-10-00	4693.10		300-28 16	Steel	N. Huxley & Sons Ltd	Newbury 20-9-98. A. Green	TOWLINE	120	12	-	120-12	
25660	150	"	"	4662.19			"	L ^d	L ^d 20-6-98. L ^d	HAWSER	120 120 120	10 8 6	- - -	120-10 120-8 5-120-6	
	300	Total.	"	9362.1	936.03					WARP	2 1 1	120 120 180	4½ 3½ "	29 tons 26" "	2-120-4½ 2-100-3½
Iron Steam Chain or Steel Wire ...)	120	5¼	65 tons			120-5¾	Steel wire	Bullivant & Co.	24-11-97. Millwall S. London E 3.						

HAWSERS AND WARPS.

CHAIN CABLES.															
Number of Certificate.	Fathoms.	Size.	Test per Certificate. Tons.	WEIGHT OF CHAIN CABLE.		Fathoms and Size per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size per Rule.	
				Supplied.	Per Rule.										
25656	150	2 1/2	157-10-00 112-10-00	469	3.10	300-2 5/16	Steel	N. Huxley & Co. Ltd.	Valencia 28-4-98. H. Green	TOWLINE	120	12	-	120-12	
25660	150	"	"	466	2.19	"	"	do	do 20-6-98. do	HAWSER	120	10	-	120-10	
	300	total.	"	936	2.1	936	0.3				5	120	6	-	5-120-6
Iron Steam Chain or Steel Wire ...	120	5 1/4	65 tons			120-5 1/4	Steel wire	Bullivant & Co.	24-11-97. Miller & Co. London E 3 1/2	WARP	2	120	4 1/2	29 tons	2-120-4 1/2
											1	120	3 1/2	26 "	2-100-3 1/2
											1	180	"	and smaller.	

Boats 1 Steam launch, 5 life boats and 7 other boats. efficient.

Pumps, Number efficient 5 No. Diameter of Barrel and Tail Pipe 2-7" down to 2 1/2" tail pipes; 2-5" pumps - 3 1/2" tail pipes.

Windlass is efficient (Harfield's Steam). Capstan efficient (Harfield's Steam).

Engine Room Skylights.—How constructed? 2 No. of Teak framing on deep casings of steel, on Brad's deck.

What arrangements for deadlights in bad weather? none required. Strong bulwark eyes fitted in solid lids.

Coal Bunker Openings.—How constructed? Circular flanks in deck. How are lids secured? by checks. Height above deck? flush.

Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. 10 - 5 1/2" 4. No freeing ports req'd open guard rails.

Ceiling in Holds, thickness and material Red pine 2 1/2". Ceiling 'tween Decks, thickness and material Red pine Sparring 2 1/2".

Cargo Hatchways.—How formed? by plate cornice riveted to steel decks. Hatches, If strong and efficient? yes.

State size No. 1 Hatch (Forward) 9-0 x 12-0 No. 2 Hatch 31-6 x 16-0 No. 3 Hatch 15-9 x 14-0 No. 4 Hatch 24-9 x 14-0. 4-5 1/2" x 14-0

Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch in No. 1 3 fore & afters, in No. 2 3 full depth web plates & 3 fore & afters, in No. 3 1 full depth web plate & 3 fore & afters, in No. 4 2 full depth web plates & 3 fore & afters.

No. of Breasthooks 8 No. of Crutches 4

Bulwarks, height above deck and description 3-6" open guard rails. Main Rail, material and size. Teak. 10" x 3".

The above is a correct description.

Builder's Signature George Thomson

Surveyor's Signature J. L. Minnette

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

16439 gl

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with this case)
1897 m. 29th Mar 15th April, 26th April, 28th April, 20th May, E 27th May.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed where possible, hand fitted elsewhere.*
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 plating? *in few cases at bulk only.*
Are the butts of Plating, Stringers, &c., properly shifted and strapped? *yes.*

General Remarks (State quality of workmanship, &c.) *materials and workmanship good.*
This is a twin screw steel steamer built in accordance with the Rules and the approved tracings and drawings.
Has a cellular double bottom throughout, all compartments of which have been tested by water pressure and proved tight, the peaks have also been tested as required and found satisfactory.
W-T. doors, deck pump & deck have been tested and proved satisfactory.
the W-T. bulkheads have also been tested with water by means of hose.
An installation of Electric lighting is fitted as per 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 *62.75* ft., R.Q.D. or Break — ft., Bridge Dk. *189.* ft., F'castle *68.5* ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated *not joined.*

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) *3 dble Steel M.S. 4 tiers 3 dble (5th - 14th 582 M.S.) 4 tiers Bms.*
Official No. — ; Signal Letters —
How are the surfaces preserved from oxidation? Inside *Portland Cement, and bituminous* Outside *Coated with paint.*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system *yes.*

Where fitted.	Length.		Water Capacity.	Where fitted.	Length.		Water Capacity.
	Feet.	Tons.			Feet.	Tons.	
Double bottom, aft,	83.25	103	(If necessary, furnish further information by sketch.)	Fore peak tank,	25	66	
Double bottom, forward,	139.5	205		After peak tank,	—	—	
Double bottom, under Engines and Boilers,	171.0	641		Midship deep tank,	—	—	
Double bottom, if under Engines only,	—	—		Other tanks, if fitted,	—	—	
Double bottom, if under Boilers only,	—	949			—	—	

State whether the above have been tested as required by the Rules. *yes.*

Order for Special Survey No. <i>3063</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>1897. May 17. 25. 31. June 3. 9. 11. 15. 18. 24. 29. July 2. 6. 8.</i>
Date <i>31st March 1897</i>		2nd. On the plating during the process of riveting	<i>13. 15. 31. Aug 2. 6. 10. 13. 17. 19. 23. 26. 30. Sep 1. 7. 17. 22. 29. Oct 4. 9.</i>
Order for Ordinary Survey No. —		3rd. When the beams were in and fastened, and before the decks were laid	<i>14. 21. 25. 27. Nov. 2. 5. 10. 18. 22. 25. 29. Dec 2. 5. 13. 15. 20. 24. 31. 1897</i>
Date —		4th. When the ship was complete, and before the plating was finally coated or cemented	<i>Jan 17. 14. 18. 24. 28. Feb 3. 11. 14. 15. 21. 23. 26. Mar 1. 3. 4. 11. 12. 16. 18. 23. 27.</i>
No. <i>307</i> in builder's yard.		5th. After the ship was launched and equipped	<i>30. April 7. 8. 14. 19. 22. 29. May 4. 5. 9. 16. 19. 25. 26. Total No. of Visits 107</i> <i>June 1. 10. 15. 20. 22. July 1. 5. 7. 12. 27. 28. 29. Aug 3. 5. 8. 12. 15. 18. 20. 23. 24.</i>

The amount of Entry Fee £ *5* : : : Fees applied for, *31. 8. 1898*
Special Survey Fee £ *90* : *2* : *6* Received by me, *28. 9. 1898*
Travelling Expenses, if any £ : : :
I am of opinion this Vessel should be Classed ** 100 A 1. "Steel".*
With, or without Freeboard, as condition of Class *without*
Certificate to be sent to *Glasgow*
J. J. Mitchell
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute
Character assigned *Large + 2 m/c 10, 98 subject Elec. light.*
100 A 1 Steel Water Sub boilers
3 dble 12 dble - m/c + 4 dble - Teak

TUES. 25 OCT 1898

The Surveyors are requested not to write on or below the Committee's Minute.