

1 ~~or 2~~ Decks.

IRON OR STEEL STEAMER.

Received at London Office

17100
MAR 27 1893

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

Date of completion of Report 23rd Mar 1893 Port of Glasgow

No. 12100 Survey held at Glasgow Date, First Survey 7th Nov 1892 Last Survey 23rd Mar 1893

On the Twin screw ship "Vulcan"

Rig One pole mast

Table with columns for Tonnage under Deck, Do. of Poop, Do. of Raised Or., Do. of Bridge House, Do. of Houses on Deck, Do. of castles, Do. of Forecasts, Do. above Crown of Engine Room, Gross Tonnage, Less Crew Space, Less above Crown of Engine Room, Tonnage for Fees, Less Engine Room, Less Navigation Spaces, Register Tonnage as cut on Beam.

Table with columns for CLASS 100 A, FEET, Half Breadth (moulded), Depth from upper part of Keel to top of Main Deck Bms., Girth of Half Midship Frame (as per Rule), 1st Number, Length, 2nd Number, Proportions—Breadths to Length, Depths to Length—Main Deck to top of Keel, Destined Voyage.

Table with columns for Master, Year of appointment, Built at, When built, Launched, By whom built, Owners, Managers, Residence, Port belonging to.

Summary table with columns: LENGTH on Deck as per Rule, BREADTH—Moulded, DEPTH—Top of Floors to Main Deck Beams, Power of Engines, Horse, No. of Decks with Flat laid, No. of Tiers of Beams.

Dimensions of Ship per Register, Length, 120.0 breadth, 25.1 depth, 11.8.

Moulded Depth, ft. 12 ins. 5 1/2. Round of Beam 6 inches.

FORGINGS AND CASTINGS.

Table for FORGINGS AND CASTINGS with columns: Inches in Ship, Inches per Rule Or as Approved. Items include KEEL, STEM, STERN-POST, MAIN PIECE of Rudder, RUDDER.

FRAMING.

Table for FRAMING with columns: Inches in Ship, Inches per Rule Or as Approved, 20ths per Rule. Items include FRAME, FLOORS, BEAMS, BRACKETS, GIRDDERS, MARGIN PLATE, INNER BOTTOM PLATING, BEAMS (Main and Raised Quarter Deck, Lower Deck, Hold, Poop Deck, Bridge Deck, Forecastle Deck), PILLARS, WEB FRAMES, BRACKET PLATES.

KEELSONS AND STRINGERS.

Table for KEELSONS AND STRINGERS with columns: Inches in Ship, Inches per Rule Or as Approved, 20ths per Rule. Items include CENTRE LINE KEELSON, SIDE KEELSON, BILGE KEELSON, SIDE STRINGER, Main and Raised Quarter Deck Stringer, Lower Deck Stringer, Hold Stringer, Poop Deck Stringer, Bridge Deck Stringer, Forecastle Deck Stringer.

PLATING.

Table for PLATING with columns: Inches in Ship, Inches per Rule Or as Approved, 20ths per Rule. Items include FLAT PLATE KEEL, PLATES in Garboard Strakes, Bilges, Sheerstrake, Poop Sides, Raised Quarter Deck Sides, Bridge Sides, Forecastle Sides.

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

* State clearly where plating is of alternate thickness—as distinguished from diminished thickness at end of vessel.

12100 gls.

BULKHEADS. No. in Vessel 4 No. Req'd. by Rule 4

Ceiling betwixt Decks, thickness and material in hold do. do. 2 1/2 pin W. T. BULKHEADS } Thickness, 5/20 Angles, Vrtcl. 3x3x20 Spacing, 30 Height up, Main Deck Sngl. or Dbl. Frames, Double

Number of Breasthooks Three PARTITION... Vrtcl. Hrzntrl. 3x3x20 48

Crutches Two LONGITUDINAL Vrtcl.

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

The FRAMES extend in one length from Keel to Main Deck Riveted through Plates with 3/4 in. Rivets, about 5 1/4 apart

The REVERSED ANGLE on floors and frames extend from middle line to side stringer and deck alternately

Double from bilge to bilge in E & B space.

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.

Garboard, double riveted to Bar Keel or Flat Plate Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double or double riveted; treble for 1 length; with rivets 3/4 in. dia., averaging 2 1/2 ins. from cr. to cr.

Butts of one Strakes at Bilge for half length, double riveted with Butt Straps 1/20 thicker than the plates they connect.

Edges from Bilge to Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 ins. from centre to centre.

Butts from Bilge to Sheerstrake, worked carvel, double or double riveted; treble for 1 length; with rivets 3/4 in. dia., averaging 2 1/2 ins. from cr. to cr.

Edges of Sheerstrake, double double riveted.

Butts of Main Stringer Plate, double riveted for whole length amidships. Single or Double Butt Straps of Stringer Plate for whole length.

Butts of Inner Bottom Plating double riveted for whole length.

Butts of Centre Cirdes double riveted.

Breadth of edge laps of Shell Plating in double riveting 4 1/2 Breadth of edge laps of Shell Plating in single riveting 2 1/2

Butt Straps of Shell Plating breadth and thickness 9 3/4 8 9/20 5/20 Butts, if Lapped, breadth of laps treble and double.

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double riveted? treble and double.

Manufacturer's name or trade mark of the Iron Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Lanarkshire; Consett; Clydebridge; Halliwell; and Dorman, Long & Co.

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. 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? A few in the butts.

Are the butts of Plating, Stringers, &c., properly shifted and strapped? Yes.

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.
Fore	<u>Pine pole mast.</u>										
Lower MASTS....											
Main											
Mizen											
Bowsprit <input checked="" type="checkbox"/>											
Topmasts, Yards and Remainder of Spars <input checked="" type="checkbox"/>											
Rigging, Material and Size, Shrouds <u>Steel wire 1 3/4</u>											
Sails. <u>One</u> Suit of Sails, and the following spars sails											
Stays <u>Steel wire 2</u>											

EQUIPMENT No. 5957 LETTER d ANCHORS.

Number of Certificate.	WEIGHT, EX. STOCK	WEIGHT OF STOCK.	TEST, PER CERTIFICATE.				WEIGHT REQ. BY RULE	Description of Anchor.	Makers.	Where and when tested and Superintendent.				
			Tons.	cwts.	qrs.	lbs.					Cwts.	qrs.	lbs.	
2931	1st Bower ..	5 3 7 1	1	21	8	0	2	14	5	3	-	Common	Earl of Dundley	
2932	2nd ,, ..	5 3 3 1	1	25	8	0	2	14	5	3	-	"	Robert Oak	Glasgow
	3rd ,, ..											"	Iron & Steel	3rd Mar. 1893
	Collective weight	11 2 10							11	2	-	"	Works (Chim)	G. Ludhouse.
2933	Stream	1 2 16 0	1	20	4	1	2	7	1	2	-	"		
	Kedge	3 24		Including Stock.					3			"		
	2nd Kedge ..											"		

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate. Tons.	Weight of Chain Cable.	Fathoms & Size. Per Rule.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Fathoms	Size.	Fathoms & Size. Per Rule.		
													1701	74 1/2
1702	91			37-2-2	60-1-11				3rd Mar. 1893	Hawser	Hemp	90	4	90.4
				67-3-0					G. Ludhouse.					
	45	2 1/2	9 1/2		45-2 1/2									
	75	2 1/2	9 1/2		75-2 1/2									

HAWSERS AND WARPS.

Boats Two life boats.

Pumps, Number 2 hand in holds, 1 in engine space 1 in fore peak. Diameter of Barrel and Tail Pipe 3/4 in. hold. 1 1/2 in. peak. 3 1/2 in. Capstan

The Windlass is Capier Brod

Engine Room Skylights.—How constructed? Leak on iron coamings.

What arrangements for deadlights in bad weather? glass panels in teak shutters.

Coal Bunker Openings.—How constructed? Cast iron scuttles. How are lids secured? Self locking. Height above deck? 4 ft.

Number of Scuppers, and number and dimensions of Freeing Ports, &c. On each side 3 scuppers, and 3 ports 33x15.

Hatches, if strong and efficient?

Cargo Hatchways.—How formed?

State size No. 1 Hatch (Forward) No. 2 Hatch No. 3 Hatch No. 4 Hatch

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch

Bulwarks, height above deck and description 2-11 3/4 plating Main Rail, material and size Iron 7x3

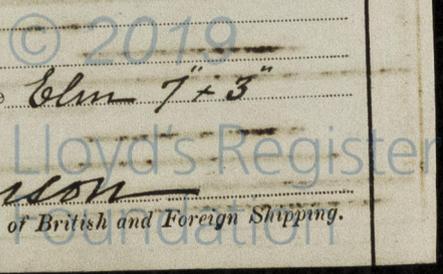
The above is a correct description.

Builder's Signature, (here only.) And Maclean & Co. Surveyor's Signature, J. Thomson

Manager of Ship Building Department. Surveyor to Lloyd's Register of British and Foreign Shipping.

State whether Rivets are of Iron or Steel. Iron.

Form No. 1 A.



12100 G/L

Order for Special Survey No. 2632
Date 2nd November 1892
Order for Ordinary Survey No. ✓
Date ✓
No. 383 in builder's yard.

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 } 1892: - Nov. 7, 11, 15, 17, 22, 24, 30. Dec. 5, 8, 13,
- 2nd. On the plating during the process of riveting } 15, 19, 27, 30. 1893: - Jan. 10, 13, 18, 20, 26. Feb. 1,
- 3rd. When the beams were in and fastened, and before the decks were laid } 6, 8, 13, 17, 21, 24, 27, 28. Mar. 3, 14, 18, 20, 23.
- 4th. When the ship was complete, and before the plating was finally coated or cemented ... }
- 5th. After the ship was launched and equipped

Total No. of Visits 33

State dates and initials of letters respecting this case 21st Oct. 1892. M. 13th Dec. 1892. E.

General Remarks (State quality of workmanship, &c.) The workmanship throughout is good. This vessel is built of steel in accordance with approved tracing forwarded to London on the 21st March 1893, the accompanying tracing of pumping arrangements, the Secretary's letters referred to above, and in general conformity with the Rules for the Class contemplated.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. or Break ✓ ft., Bridge Dk. ✓ ft., F'castle ✓ ft. (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. 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) Part Shade Deck 56 ft. (see letter from Glasgow 30/3/93) One deck (part steel w.s.), one tier of Beams. Official No. ; Signal Letters

PARTICULARS OF WATER BALLAST.—Double bottom, aft, length ✓ and water capacity in tons ✓. Double bottom, forward, length ✓ and water capacity in tons ✓. Double bottom, under engines and boilers, length ✓ and water capacity in tons ✓. If under Engines only, or Boilers only, state which ✓. Double bottom, constructed on the cellular system, length ✓ and water capacity in tons ✓. Fore peak tank, water capacity in tons ✓. After peak tank, water capacity in tons ✓. Midship deep tank, length ✓ and water capacity in tons ✓. Other tanks, if fitted, length ✓ and water capacity in tons ✓. The above have ✓ been tested as required by the Rules. (If necessary, furnish further information by sketch.) How are the surfaces preserved from oxidation? Inside By cement and paint. Outside By paint.

FREEBOARD assigned by the Committee, as per Secretary's Letter, dated 22nd March 1893. In Summer 1 ft. 5 ins. In Winter 1 ft. 6 ins. For Winter in North Atlantic ft. ✓ ins. Fresh Water above the centre of disc 2 1/2 ins. To top of Wood, Iron or Steel Upper Deck. Statutory deck line.

The amount of Entry Fee..... £ 2 : " : " is received by me, (Signature) *Certificate to be sent to Glasgow. Special ... £ 11 : 19 : " 24/3/1893. Certificate* £ " : " : " Travelling Expenses, if any £ " : " : " I am of opinion this Vessel should be Classed + 100 A 1 J. Thomson Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUES. 28 MAR 1893 Character assigned 100A1 Steel Large 15k + LMC 3.93 on fine (Signature)

This Vessel appears to have been built in accordance with the Rules and the approved plans, and it is submitted that she is eligible to be classed + 100 A 1 (Steel) as recommended. + 100 A 1 (Steel) 15k. The Surveyor should be requested to state the length of the Part Shade Deck for record in the Register Book.

Reference should be made to any correspondence connected with the case. The Surveyors are requested not to write on or below the space for Committee's Minute.

Certificate Writer. GLS167A-0128 (212)

