REPORT of SURVEY for REPAIRS, &c.

3714 | 2 JUL 90 (Received in London Office)

3929 Date of Writing Report ... 18 ... Port of Glasgow

Survey held at Glasgow Date First Survey 5th April Last Survey 27th June 1890. (No. of Visits 14)

on the Steel S.S. "City of Vienna" Master Anderson

TONNAGE:— 4460

Built at Belfast By whom Workman Clark & Co. Lim. When

Owners G. Smith & Sons Port belonging to Glasgow

Owner's Address (if not already recorded in Appendix to Register Book.)

Surveyed Afloat or in Dry Dock Afloat Name of Dock Queens Destined Voyage Calcutta via Liverpool

Length of Poop ft.: of Forecastle ft.: of Raised Qr. Deck ft.: Moulded Depth ft. ins. (if these particulars are not yet recorded in the Register Book.)

Classed Contemplated | Character in Register Book: 100A1

Last Survey, No. Port

State clearly the cause of Repairs if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage should be separated from Repairs due to other causes. State also the dates and Initials of any letters respecting this case.

Society's Freeboard (if assigned) as painted on Ship — in Summer ft. ins. — in Winter ft. ins.

REPAIRS, OR EXAMINATION AS PER RULE, FOR Completion of vessel after machinery was put on place & of part equipment.

The engine & boiler hatchway coamings & casings and deck plates in way of same fitted & permanently fastened in place. The following steel hawsers put on board

Fathoms		Tested to Tons		Reqd by rules Equipment letter - U -
100	5	59	Supplied by	90 Fath. 4 3/4
				120 — 4 3/4
120	4	33	Dixon & Corbitt	90 — 4
120	4	33	R.S. Newall & Co.	90 — 3 1/4
120	3	18		

120 Fath of 4 3/4 is to be put on board at Liverpool intimation which has been sent to the Society's surveyors at that port.

Electric Lighting:— There are two dynamo electric machines of the Holmes type each capable of supplying current for 120 lamps:—

PRESENT CONDITION OF THE ... Good

...ways	"	Plating (Bottom) & Counter	Good	Ceiling	Good	Boats	Good
	"	Rivets	"	Rudder	"	Masts, Yards, &c.	"
... Beams & Fastenings	"	Breasthooks and Stemson	"	Windlass & Capstan	"	Condition, how ascertained	"
...Dk. Beams & Fastenings	"	Transoms, Pointers, & Crutches	"	Pumps	"	Sails	"
...eers	"	Frame at the opening	"	Cement (if Iron Ship)	"	Anchors No. of	"
...rakes	"	Ditto ditto at other places	"	Caulk'ng of Bot'm, D'k, & Watrwys	"	Cables	"
	"	Keelsons	"	Copper, or Y.M. (State if on Felt.)		Hawsers & Warps	"
	"	Clamps & Shelfs		When put on		Standing & Running Rigging	"
...Room Skylights	"	Coal Bunker, Openings, Lids, &c.	Good	Scuppers	Good	Cargo & Main Hatchways Good	Hatches "

General Observations, Opinion as to Class, Recommendation, &c.:

The work referred to above has been satisfactorily effected & the vessel's equipment will, after the steel hawser is put on board at Liverpool, be complete.

Fee (if chargeable) per Scale I., Sec. 27... £ : :
Fee (if chargeable) per Scale II., Sec. 27... £ : :
Fee (per Section 28) £ : :
on Damage, Fee (if any) (per Sec. 28) £ : :
Certificate (if required) to be sent as per margin £ : :
Travelling Expenses (if chargeable) £ : :
Surveyor's Fee (if any) £ : :

Fees applied for, 18
Received by me, 18

J. Dawkins
Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRI 4 JULY 1890
Character assigned See First Entry Report

ROBERT EDMUND TAYLOR & SON, Commercial Steam Printers, 19, Old Street, Goswell Road, London.

BEL 57-0046 (1)

of Glasgow Continuation of Report No. 9929 dated 24th June 1890 on the Steel S.S. City of Vienna: —

Both dynamos are driven by link leather belts from separate engines and each is capable of lighting the ship for ordinary purposes. The machines are also arranged that they may be run together should occasion require. On the sole plates of the machines there are sliding rails fitted so that the belts may be tightened without a stoppage. The Dynamos are both bedded on a strong wood foundation

Switchboards & Instruments: — Close to the Dynamos the main switches & fuses are fitted for controlling the five different circuits into which the lighting is divided. The switchboard is made of slate 1" thick and about 3' square. The switches are of the "snap action" type & have a large rubbing surface & during a good contact without fear of sticking partway. The name of each section is engraved on the switch & are "Port," "Starboard" "Amidships" "f" & "Engine room". Above the switches are mounted the safety cut-outs, one for each dynamo. On the switchboard is also fitted an Am meter for each dynamo & a Volt meter common to both. By these instruments it is claimed that the risk of fire arising from leakage can be entirely avoided as by periodical tests made of each section & the readings of the am-meter taken the proper amount of current passing would be ~~ascertained~~ registered according to the lamps burning, and any adjustment of pressure, if needed, effected by the Voltmeter.

Conductors: — The wiring is entirely on the "double system" (lead & return) separate positive & negative wires being led to each of the five sections direct from the switchboard. The Covering of the wire is composed of vulcanized india rubber, pure rubber, prepared tape & braided hemp; the insulation resistance is said to be about 600 megohms per mile, & both positive & negative wires are of the same Equality. The wires are all of 96 p.p. pure copper tinned. From the Engine room to the various points of distribution the wires are all enclosed in wood casing, the covers of the casing being all fixed with brass screws. In conveying the wires through the decks a brass tube having wooden bore — as per sample — is secured by means of flanges at middle and a hole bored so as to allow the wires to pass through the centre. Instead of carrying the wires below the deck the twin wire is carried through galvanized iron piping this being in short lengths joined by ~~screwed~~ couplings under iron covers at sides of hatchways at upper deck.

Branch Switches & Fuses: — Wherever the diameter of the wire is decreased or a branch joined to a main wire a fusible Cut out is fitted as near as possible to the junction

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S.S. City of Vienna

in such a position that they can be readily got at. In the Engine room & about the decks where porcelain fuse boxes would be apt to get broken the safety fuse is fitted on a small slate base with brass cover & in the State rooms & berths porcelain fuse boxes are used; branch switches are also connected for each lamp & for groups; the action of the switch being quick breaking to cause as little sparking as possible.

The fittings are all made of sufficient size to allow both positive & negative wires being carried right through to the lampholders. The lampholders are of the bayonet-joint pattern with double spring contacts fitted to a centre piece of slate. The fittings in exposed places like the wires are all made perfectly watertight every precaution taken to guard against water damaging the insulation.

The fittings for the mast & side lights are of the portable form. The Connectors being fitted in watertight teak wood boxes & from these a flexible wire is connected & hung up each night when the lanterns are fixed in their places.

In each of the lanterns (which are the ships ordinary regulation type) there are two lamps of 16 C.P. each.

For Cargo work there are four portable clusters with 5 lamps in each and these are supplied by flexible wires fixed to connectors which are fitted near the hatchways.

A special test was made with the machines running at full load for 6 hours Continuous run & the lights were maintained throughout without any heating of the Coils or sparking at the brushes.

Samples of the various fittings referred to in the report are being forwarded today (10th July)

The installation has been fitted by Messrs Paterson Cooper of London & Glasgow.

J.D.