

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 47848

Port of Newcastle on Tyne Date of First Survey Oct 13 Date of Last Survey Oct 31<sup>st</sup> 04 No. of Visits 6  
 No. in 15 on the Iron or Steel Prof J. J. A. Stran Port belonging to Hume  
 Reg. Book Built at Low Walker By whom Wm. Dobson & Co. When built 1904  
 Owners Hungarian Levant S. S. Co. Ltd. Owners' Address Buda Pest  
 Yard No. 138 Electric Light Installation fitted by Haleonar & Co. When fitted 1904

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

H.B.V. Direct Coupled Steam Generating Set 6" x 5" Engine by  
Clarke Chapman  
 Capacity of Dynamo 45 Amperes at 110 Volts, whether continuous or alternating current continuous  
 Where is Dynamo fixed Engine Room  
 Position of Main Switch Board Engine Room having switches to groups 4 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each Engine Room 6, Forecasts 4,  
Quadruple Cabin Stair 4, ditty Port 4.

If cut outs are fitted on main switch board to the cables of main circuit yes and on each auxiliary switch board to the cables of auxiliary circuits yes and at each position where a cable is branched or reduced in size yes and to each lamp circuit yes

If vessel is wired on the double wire system are cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the cut outs of non-oxidizable metal yes and constructed to fuse at an excess of 50% per cent over the normal current

Are all cut outs fitted in easily accessible positions yes Are the fuses of standard dimensions yes If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit no

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 82 arranged in the following groups:—

A	10	lights each of	16	candle power requiring a total current of	5	Amperes		
B	12	lights each of	16	candle power requiring a total current of	6	Amperes		
C	13	lights each of	16	candle power requiring a total current of	6½	Amperes		
D	17	lights each of	16	candle power requiring a total current of	8½	Amperes		
E	3	lights each of	8	candle power requiring a total current of	7½	Amperes		
	1	Mast head light with	1	lamps each of	32	candle power requiring a total current of	1	Amperes
	2	Side light with	1	lamps each of	32	candle power requiring a total current of	2	Amperes
	4	Cargo lights of	96	candle power, whether incandescent or are lights	<u>Incandescent</u>			

If arc lights, what protection is provided against fire, sparks, &c. ✓

Where are the switches controlling the masthead and side lights placed

## DESCRIPTION OF CABLES.

Main cable carrying 40 Amperes, comprised of 19 wires, each 17 L.S.G. diameter, 0.046 square inches total sectional area  
 Branch cables carrying 6 Amperes, comprised of 7 wires, each 18 L.S.G. diameter, 0.025 square inches total sectional area  
 Branch cables carrying 8½ Amperes, comprised of " wires, each " L.S.G. diameter, " square inches total sectional area  
 Leads to lamps carrying 1 Amperes, comprised of 1 wires, each 1/18 L.S.G. diameter, .001 square inches total sectional area  
 Cargo light cables carrying 3 Amperes, comprised of 70 wires, each #32 L.S.G. diameter, .003 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Pure & Val. India rubber, tapes, & lead covering

Joints in cables, how made, insulated, and protected Pure rubber tapes, Water proof tapes  
& Rubber solution

Are all the joints of cables thoroughly soldered, resin only having been used as a flux yes Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage yes

Are there any joints in or branches from the cable leading from dynamo to main switch board no

How are the cables led through the ship, and how protected clipped to decks or wood work



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**DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.**

Are they in places always accessible *yes*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *lead covering*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *Steel Armaning*

What special protection has been provided for the cables near boiler casings *dito*

What special protection has been provided for the cables in engine room *dito*

How are cables carried through beams *through lead bushings* through bulkheads, &c. *through W.T. stuffing boxes*

How are cables carried through decks *through iron deck tubes*

Are any cables run through coal bunkers *no* or cargo spaces *no* or spaces which may be used for carrying cargo, stores, or baggage *no*

If so, how are they protected

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage *no*

If so, how are the lamp fittings and cable terminals specially protected *✓*

Where are the main switches and cut outs for these lights fitted *✓*

If in the spaces, how are they specially protected *✓*

Are any switches or cut outs fitted in bunkers *no*

Cargo light cables, whether portable or permanently fixed *portable* How fixed

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel *✓* *double wire system*

How are the returns from the lamps connected to the hull *✓*

Are all the joints with the hull in accessible positions *✓*

**VESSELS BUILT FOR CARRYING PETROLEUM.**

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas *✓*

Are any switches, cut outs, or joints of cables fitted in the pump room or companion *✓*

How are the lamps specially protected in places liable to the accumulation of vapour or gas *✓*

The installation is — supplied with a voltmeter and — an amperemeter, fixed *on Main S. Board*

The copper used is guaranteed to have a conductivity of *100* per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than *600* megohms per statute mile after 24 hours' immersion in seawater.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

*Galooner Cross*

Electrical Engineers

Date *4/12/04*

**COMPASSES.**

Distance between dynamo or electric motors and standard compass *40 ft.*

Distance between dynamo or electric motors and steering compass *35 "*

The nearest cables to the compasses are as follows:—

A cable carrying <i>25</i> Amperes	<i>2</i> feet from standard compass	<i>10</i> feet from steering compass
A cable carrying <i>1/2 25</i> Amperes	<i>4</i> feet from standard compass	<i>8</i> feet from steering compass
A cable carrying _____ Amperes	_____ feet from standard compass	_____ feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power

The maximum deviation due to electric currents, etc., was found to be \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the standard compass and \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the steering compass.

*William Dolson*

Builder's Signature.

Date

**GENERAL REMARKS.**

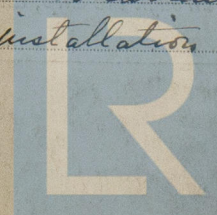
*This installation as far as can be seen appears to be fitted in accordance with the requirements of the Rules.*

*J. J. Findlay*

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

Committee's Minute

*It is submitted that this installation appears to be satisfactory*



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THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.