

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 49084

Port of Riverpool Date of First Survey 2<sup>nd</sup> July Date of Last Survey 30<sup>th</sup> July No. of Visits 4  
 No. in on the Iron or Steel S.S. "Faithful" Port belonging to Riverpool  
 Reg. Book 5 Built at Dunfer By whom Dunfer Shipbuilders Co. When built 1900.  
 Owners J. H. Powell & Co. Owners' Address Riverpool  
 Yard No. 131 Electric Light Installation fitted by Messrs. Hiley & Crehan, Dunfer When fitted 1900.

### DESCRIPTION OF DYNAMO, ENGINE, ETC.

"Castle" dynamo No 10 pipe, compound wound driven by direct coupled  
 5 1/2 x 5" vertical engine, both made by J. R. Holmes & Co.

Capacity of Dynamo \_\_\_\_\_ Amperes at \_\_\_\_\_ Volts, whether continuous or alternating current continuous

Where is Dynamo fixed In engine room on lower platform

Position of Main Switch Board \_\_\_\_\_ having switches to groups \_\_\_\_\_ of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each \_\_\_\_\_

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

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 \_\_\_\_\_

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

Are all cut outs fitted in easily accessible positions \_\_\_\_\_ 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 Yes.

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

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

A	lights each of _____	candle power requiring a total current of _____	Amperes
B	lights each of _____	candle power requiring a total current of _____	Amperes
C	lights each of _____	candle power requiring a total current of _____	Amperes
D	lights each of _____	candle power requiring a total current of _____	Amperes
E	lights each of _____	candle power requiring a total current of _____	Amperes
	Mast head light with _____ lamps each of _____	candle power requiring a total current of _____	Amperes
	Side light with _____ lamps each of _____	candle power requiring a total current of _____	Amperes
	Cargo lights of _____	candle power, whether incandescent or arc lights _____	

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 <u>10</u> Amperes, comprised of <u>4</u> wires, each <u>16</u> L.S.G. diameter, <u>0.22</u> square inches total sectional area
Branch cables carrying _____ Amperes, comprised of _____ wires, each _____ L.S.G. diameter, _____ square inches total sectional area
Branch cables carrying _____ Amperes, comprised of _____ wires, each _____ L.S.G. diameter, _____ square inches total sectional area
Leads to lamps carrying _____ Amperes, comprised of _____ wires, each _____ L.S.G. diameter, _____ square inches total sectional area
Cargo light cables carrying _____ Amperes, comprised of _____ wires, each _____ L.S.G. diameter, _____ square inches total sectional area

### DESCRIPTION OF INSULATION, PROTECTION, ETC.

Joints in cables, how made, insulated, and protected \_\_\_\_\_

Are all the joints of cables thoroughly soldered, resin only having been used as a flux \_\_\_\_\_ 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 \_\_\_\_\_

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 \_\_\_\_\_



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

Are they in places always accessible

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

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

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

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

How are cables carried through beams

through bulkheads, &c.

How are cables carried through decks

Are any cables run through coal bunkers or cargo spaces or spaces which may be used for carrying cargo, stores, or baggage

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

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

Cargo light cables, whether portable or permanently fixed

How fixed

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

Brass washer 1" dia secured by 3/8" screw

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

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

Insulation of cables is guaranteed to have a resistance of not less than 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.

Electrical Engineers

Date

**COMPASSES.**

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying Amperes feet from standard compass feet from steering compass

A cable carrying Amperes feet from standard compass 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

Yes.

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

Builder's Signature.

Date

**GENERAL REMARKS.**

This installation has now been completed as above and, so far as can be seen, is in accordance with the Rules and eligible in my opinion to have the notification "Elec. Light" now recorded.

B. J. Davidson

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

Committee's Minute LIVERPOOL

- 3 AUG 00

Record "Electric Light"

It is submitted that this installation now appears to meet the requirements of the Rules



Lloyd's Register Foundation

7.8.00

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM NO. 13.