

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 22552

Port of Glasgow Date of First Survey 27 Jan 1905 Date of Last Survey 11 Feb 1905 No. of Visits 4  
 No. in Reg. Book S. S. "Lillebonne" Port belonging to Dublin  
 Built at Dublin By whom The Dublin Dryd Co (No 16) When built 1905  
 Owners J. J. Harrison Owners' Address \_\_\_\_\_  
 Yard No. 46 Electric Light Installation fitted by Alaud Hamilton Ltd. When fitted 1905

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Engine, single cylinder double acting open type direct coupled, on same bedplate, to fourpole dynamo.  
 Capacity of Dynamo 46 Amperes at 100 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 None

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 \_\_\_\_\_ 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 yes, only one size of branch fuse wire used

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases yes  
 Total number of lights provided for 575 - 16 cp arranged in the following groups :-  

A	3	lights each of	25	candle power requiring a total current of	3	Amperes
B	26	lights each of	16	candle power requiring a total current of	15.6	Amperes
C	114	lights each of	16	candle power requiring a total current of	6.6	Amperes
D	16	lights each of	16	candle power requiring a total current of	9.6	Amperes
E		lights each of		candle power requiring a total current of		Amperes
1	Mast head light with 1	lamps each of	25	candle power requiring a total current of		Amperes
2	Side light with 2	lamps each of	25	candle power requiring a total current of		Amperes
5 blue	526	Cargo lights of	16	candle power, whether incandescent or arc lights		Incandescent

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

Where are the switches controlling the masthead and side lights placed Chart Room

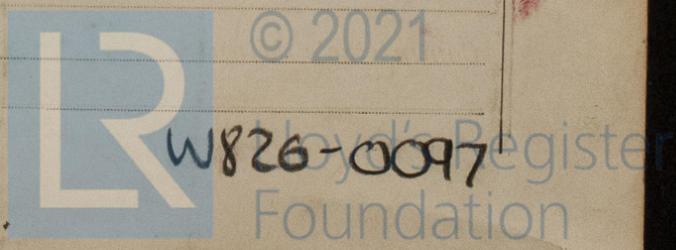
## DESCRIPTION OF CABLES.

Main cable carrying 60.39 Amperes, comprised of 19/16 wires, each .064 L.S.G. diameter, .32 square inches total sectional area  
 Branch cables carrying 22.27 Amperes, comprised of 7/16 wires, each .064 L.S.G. diameter, .19 square inches total sectional area  
 Branch cables carrying 3 Amperes, comprised of 3/20 wires, each .03 L.S.G. diameter, .07 square inches total sectional area  
 Leads to lamps carrying 3 Amperes, comprised of 3/20 wires, each .03 L.S.G. diameter, .07 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.

Screwed tubing in Holds and Cargo spaces  
Casing in Engine Rm etc

Joints in cables, how made, insulated, and protected None  
 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 \_\_\_\_\_  
 How are the cables led through the ship, and how protected Iron pipe + casing



**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 \_\_\_\_\_

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

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

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

How are cables carried through beams Wooden insulators through bulkheads, &c. W.T Bulkhead Glands

How are cables carried through decks Deck tubes

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

If so, how are they protected Iron pipe

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 \_\_\_\_\_

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 \_\_\_\_\_

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 100 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 2000 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.

For **CLAUD HAMILTON, Limited.**

H.W.B.

Electrical Engineers

Date 23/3/05.

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 50 feet

Distance between dynamo or electric motors and steering compass \_\_\_\_\_

The nearest cables to the compasses are as follows:—

A cable carrying 22 Amperes 20 feet from standard compass 20 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 \_\_\_\_\_

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.

**The Dublin Dockyard Co.**

Walter Scott Partners

Builder's Signature.

Date 22/3/05.

**GENERAL REMARKS.**

The installation is satisfactorily fitted.

Arthur L. Jones

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

Committee's Minute

Glasgow 27 MAR 1905

Alcocks Electric Light



It is submitted that the notation Rec. light be recorded in the Register

Lloyd's Register Foundation

28.3.05

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

REPORT FORM No. 13.