

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 67408.

Port of LondonDate of First Survey Apr 18Date of Last Survey May 25No. of Visits 6No. in Reg. Book 18on the Iron or Steel P.S. MorrisPort belonging to LondonBuilt at LondonBy whom James I W & S Co LtdWhen built 1905Owners London County Council

Owners' Address

Yard No.

Electric Light Installation fitted by The James I W & S Co LtdWhen fitted 1905

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Simple single cylinder engine enclosed type with splash lubrication. Dynamo multipolar type (4 pole) compound wound with former wound armature

Capacity of Dynamo 30 Amperes at 100 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed In Engine Room Starboard side

Position of Main Switch Board In Engine Room having switches to groups A, B & C of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 1 for engine room circuit one 8 way board with 8 switches fitted in Engine Room. 2 for forward accommodation one 6 way board with 6 switches fitted in Engine Room 3 for after accommodation one 6 way board with six switches fitted in bar in aft Saloon

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 yes

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

Total number of lights provided for 47 arranged in the following groups:—

Group	Number of lights	Candle power	Current (Amperes)
A	20	16	12
B	12	16	7
C	15	16	9
D			
E			

Must head light with 2 lamps each of 64 candle power, whether incandescent or are lights incandescent

Side light with 2 lamps each of 64 candle power, whether incandescent or are lights incandescent

Cargo lights of 64 candle power, whether incandescent or are lights incandescent

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

Where are the switches controlling the masthead and side lights placed

## DESCRIPTION OF CABLES.

Cable Type	Amperes	Wires	Diameter (L.S.G.)	Total Sectional Area (square inches)
Main cable carrying	30	19	1/8	
Branch cables carrying	12	7	1/8	
Branch cables carrying	9	7	20	
Leads to lamps carrying	6	3	22	
Cargo light cables carrying	2.5	108	0.06	

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

The whole of the wiring is run in galvanized steel screwed barrel with draw in boxes and inspection piece. The wires and cables are 2000 megohms grade vulcanized braided and compounded. Fittings watertight throughout with guards and outer glasses.

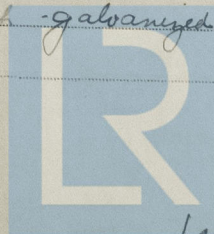
Joints in cables, how made, insulated, and protected

No joints made the sub. circuits being looped through lampholders.

Are all the joints of cables thoroughly soldered, resin only having been used as a flux no 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 no

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 Cables run under beams through galvanized steel tubing as described above





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 Steel barrel and watertight fittings

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

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

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

How are cables carried through beams no cables through beams through bulkheads, &c. Watertight glands

How are cables carried through decks Special deck like made watertight in deck

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 \_\_\_\_\_

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 wired

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 the main switch 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 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.

THAMES IRON WORKS, SHIPBUILDING & ENGINEERING CO. LIMITED.

Electrical Engineers

Date

MAY 30 1905

COMPASSES.

Distance between dynamo or electric motors and standard compass no standard compass

Distance between dynamo or electric motors and steering compass about twelve feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
30	Amperes	14	feet from steering compass
12	Amperes	12	feet from steering compass
9	Amperes	8	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.

Builder's Signature.

Builder's Signature.

Date

MAY 30 1905

GENERAL REMARKS.

The above has been fitted in accordance with the Society's rules & the workmanship is good.

C. Martell.

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

Committee's Minute

TUES. 6 JUN 1905

This installation appears to be fitted in accordance with the Rules



Lloyd's Register Foundation