

NWC 23137

# REPORT ON ELECTRIC LIGHTING INSTALLATION.

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Port of Rantes Date of First Survey 20-6-17 Date of Last Survey 1-8-17 No. of Visits 7  
 No. in Reg. Book 1670 on the Iron Steel S.S. "Cornelle" Port belonging to La Rochelle  
 Built at Newcastle By whom Swan & Hunter When built 1889  
 Owners Delmas Freres Owners' Address La Rochelle  
 Yard No.  Electric Light Installation fitted by Chantiers de la Loire When fitted 1917

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Capacity of Dynamo  Amperes at  Volts, whether continuous or alternating current   
 Where is Dynamo fixed  Whether single or double wire system is used Double  
 Position of Main Switch Board  having switches to groups 3 of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each A. Forecastle - 6 B. crew - 6  
C. Chart house - 6 D. Engineers accom - 8  
E. Hoop - 12 F. Machinery space - 10  
 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 100 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 All same size  
 Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes  
 Total number of lights provided for 52 arranged in the following groups: - (44 fixed + 8 portable)  
 A Forecastle - 5 lights each of 16 candle power requiring a total current of 80 Amperes  
 B Crew Accom - 3 lights each of 16 candle power requiring a total current of 48 Amperes  
 C Chart ho. - 4 lights each of 16 candle power requiring a total current of 64 Amperes  
 D Engineers' - 8 lights each of 22 25 & 6 16 candle power requiring a total current of 160 Amperes  
 E Hoop - 12 lights each of 22 25 & 12 16 candle power requiring a total current of 240 Amperes  
 F Mast head light with 1 lamp each of 25 candle power requiring a total current of 25 Amperes  
2 Side light with 1 lamp each of 25 candle power requiring a total current of 25 Amperes  
 No Cargo lights of 0 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 in Chart house.

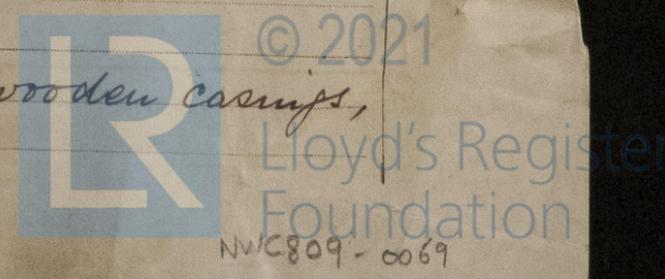
## DESCRIPTION OF CABLES.

Main cable carrying 25 Amperes, comprised of 16 wires, each 0.6 L.S.G. diameter, 4.5 square inches total sectional area  
 Branch cables carrying 19 Amperes, comprised of 16 wires, each 0.5 L.S.G. diameter, 3.1 square inches total sectional area  
 " " " 13 Amperes, comprised of 11 wires, each 1.6 L.S.G. diameter, 2.1 square inches total sectional area  
 Branch cables carrying 7 Amperes, comprised of 4 wires, each 1.2 L.S.G. diameter, 1.13 square inches total sectional area  
 Leads to lamps carrying 5 Amperes, comprised of 4 wires, each 0.4 L.S.G. diameter, .88 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.

Wires covered with rubber & then wound with rubber libband. Armoured cables are covered with rubber, then wound with libband, covered with lead, again wound with libband & finally armoured with steel wire.  
 Joints in cables, how made, insulated, and protected No joints whatever.

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 Under beams, through wooden casings, out near beam knees.



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible? *except those led thro' bunks & cargo spaces.*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture? *Armoured cables led through wood casings.*

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

What special protection has been provided for the cables near boiler casings? *None.*

What special protection has been provided for the cables in engine room? *Armoured cables.*

How are cables carried through beams?  through bulkheads, &c. *Stuffing boxes.*

How are cables carried through decks? *through pipes stuffed watertight.*

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

If so, how are they protected? *Armoured cables led thro' wooden casings under beams.*

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?  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?

The installation is *now* supplied with a voltmeter and *with* an amperemeter, fixed *on the switch board.*

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 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 *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.

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

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. Date

GENERAL REMARKS. *The dynamo & engine will probably be shipped at a Bristol Channel port. The insulation has been tested here. Note, the dynamo for wireless telegraphy has been fixed at a distance of about 7 feet from the standard compass.*

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

