

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 19958

Port of Hull. Date of First Survey Mar 14th Date of Last Survey Mar 25th No. of Visits 5
 No. in Reg. Book 33 Supp. on the Iron or Steel S/Trawler "NOTRE DAME DE LOURDES" belonging to Boulogne
 Built at Selby By whom Cochrane & Sons When built 1908
 Owners The Christiaens, A Bourgain & Co Owners' Address Boulogne
 Yard No. 425 Electric Light Installation fitted by Campbell & Threlwood When fitted 1908.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Single cylinder engine, continuous current dynamo
 Capacity of Dynamo 65 Amperes at 65 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Star^d side of engine room Whether single or double wire system is used double
 Position of Main Switch Board 5 having switches to groups Two of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Main room & wheel house

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 43 arranged in the following groups:—

Group	Description	Candle Power	Total Current (Amperes)
A	<u>14</u> lights each of <u>119/16 & 34/32</u>		<u>17</u> Amperes
B	<u>29</u> lights each of <u>229/16 & 78/32</u>		<u>36</u> Amperes
C	<u>1</u> light each of <u>1</u>		<u>1</u> Amperes
D	<u>1</u> light each of <u>1</u>		<u>1</u> Amperes
E	<u>1</u> light each of <u>1</u>		<u>1</u> Amperes
3	Mast head light with <u>3</u> lamps each of <u>32</u>		<u>inches in</u> Amperes
2	Side light with <u>2</u> lamps each of <u>32</u>		<u>B.</u> Amperes
12	Cargo lights of <u>16</u>		candle power, whether incandescent or are lights <u>incandescent</u>

If are lights, what protection is provided against fire, sparks, &c. None fitted.
 Where are the switches controlling the masthead and side lights placed Wheelhouse

DESCRIPTION OF CABLES.

Number of Cables	Amperes	Wires	Diameter (L.S.G.)	Total Sectional Area (square inches)
Main cable carrying <u>54</u>	Amperes	comprised of <u>19</u> wires, each <u>16</u>	L.S.G. diameter, <u>.06039</u>	square inches total sectional area
Branch cables carrying <u>36</u>	Amperes	comprised of <u>19</u> wires, each <u>18</u>	L.S.G. diameter, <u>.0542</u>	square inches total sectional area
Branch cables carrying <u>17</u>	Amperes	comprised of <u>7</u> wires, each <u>16</u>	L.S.G. diameter, <u>.032</u>	square inches total sectional area
Leads to lamps carrying <u>1</u>	Amperes	comprised of <u>1</u> wires, each <u>18</u>	L.S.G. diameter, <u>.0018</u>	square inches total sectional area
Cargo light cables carrying <u>4</u>	Amperes	comprised of <u>62</u> wires, each <u>38</u>	L.S.G. diameter, <u>.0032</u>	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

In engine room & exposed positions, lead covered, armoured & braided
 In cabin, lead covered, In fuel room lead covered & braided & run in with casings
 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 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 Yes
 How are the cables led through the ship, and how protected Wood casing & attached to casings etc with clips

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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 covered & armoured*

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

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

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

How are cables carried through beams *Five inches.* through bulkheads, &c. *Water tight glands*

How are cables carried through decks *deck pipes*

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

If so, how are they protected *Lead covered, armoured & in wood casings*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coats, or baggage *Yes.*

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

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

If in the spaces, how are they specially protected *do.*

Are any switches or cut outs fitted in bunkers *do.*

Cargo light cables, whether portable or permanently fixed *portable* How fixed *water tight plug & socket*

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

How are the returns from the lamps connected to the hull *do.*

Are all the joints with the hull in accessible positions *do.*

The installation is *do.* supplied with a voltmeter and an amperemeter, fixed *on main 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 *Yes.*

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

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

The copper used is guaranteed to have a conductivity of *98%* per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than *2500.* 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.

Campbell & Isherwood Electrical Engineers Date *23/4/08*

COMPASSES.

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

Distance between dynamo or electric motors and steering compass *32 ft.*

The nearest cables to the compasses are as follows:—

A cable carrying	<i>34</i>	Amperes	<i>20</i>	feet from standard compass	<i>15</i>	feet from steering compass
A cable carrying	<i>17</i>	Amperes	<i>15</i>	feet from standard compass	<i>10</i>	feet from steering compass
A cable carrying	<i>5</i>	Amperes	<i>10</i>	feet from standard compass	<i>5</i>	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 *9 1/2* degrees on *do.* course in the case of the standard compass and *do.* degrees on *do.* course in the case of the steering compass.

Cochrane & Sons. Builder's Signature. Date *27/4/08.*

GENERAL REMARKS.

The installation of electric lights as far as can be seen is well fitted & the workmanship good; & they under working conditions found satisfactory.

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

Committee's Minute

It is submitted that the Record Elec. Light be noted in the Reg. Book.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.