

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 17392

Port of New York Date of First Survey 22 Oct 1918 Date of Last Survey 22 August 1919 No. of Visits 46  
 No. in Reg. Book 14437 on the Iron or Steel S.S. Glenpool (ex Hagen) Port belonging to Bayonne N.J.  
 Built at Kiel By whom F. Krupp A.G. When built 1913  
 Owners Standard Oil Co of New Jersey Owners' Address \_\_\_\_\_  
 Yard No. \_\_\_\_\_ Electric Light Installation fitted by Staten Island S.P. Co When fitted 1919  
 & extended

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two 20 H.P. direct connected steam driven Generators  
 Capacity of Dynamos 180 Amperes at 110 Volts, whether continuous or alternating current Continuous  
 Where is Dynamo fixed Engine room upper platform Whether single or double wire system is used Double  
 Position of Main Switch Board upper platform having switches to groups Five of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each Main deck 1-20 Circuit panel board  
Lower Engine room 1-18 Circuit panel board Forecastle 1-8  
Circuit panel board. Main deck house 1-10 Circuit panel board  
for pump room. Main deck aft 1-14 Circuit panel board  
 If fuses 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 fuses fitted to both flow and return wires or cables of all circuits including lamp circuits Yes  
 Are the fuses of non-oxidizable metal Yes and constructed to fuse at an excess of 5% per cent over the normal current  
 Are all fuses 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 fuses constructed of incombustible materials and fitted on incombustible bases Yes  
 Total number of lights provided for \_\_\_\_\_ arranged in the following groups:—  
 A Engine Room 58 lights 26 plugs 75 Watts candle power requiring a total current of 14 Amperes  
 B Pure Room 20 lights 17 plugs 25 Watts candle power requiring a total current of 5 Amperes  
 C After Quarter 45 lights 17 plugs 75 candle power requiring a total current of 10 Amperes  
 D Fore castle 36 lights 9 plugs 75 candle power requiring a total current of 8 Amperes  
 E Bridge deck 48 lights 21 plugs 75 candle power requiring a total current of 11 Amperes  
 One Mast head light with 2 lamps each of 32 cp. candle power requiring a total current of 2 Amperes  
 Two Side light with 2 lamps each of 32 cp. candle power requiring a total current of 2 Amperes  
12 plugs for Cargo lights of 4 lights each 16 candle power, whether incandescent or arc lights Incandescent  
 If arc lights, what protection is provided against fire, sparks, &c. None

Where are the switches controlling the masthead and side lights placed Next to fuse by Deck-tale

## DESCRIPTION OF CABLES.

Main cable carrying 225 Amperes, comprised of 2 wires, each 4/0 B.S. S.W.G. diameter, 423200 square inches total sectional area  
 Branch cables carrying 10 Amperes, comprised of 2 wires, each # 6 B.S. S.W.G. diameter, 52488 square inches total sectional area  
 Branch cables carrying 5 Amperes, comprised of — wires, each # 10 B.S. S.W.G. diameter, 10404 square inches total sectional area  
 Leads to lamps carrying — Amperes, comprised of — wires, each # 14 B.S. S.W.G. diameter, 4096 square inches total sectional area  
 Cargo light cables carrying — Amperes, comprised of 2 wires, each # 10 B.S. S.W.G. diameter, 26808 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

The wires run in metal mouldings and galvanized  
conduits. The wires are cables double bed  
rubber covered. No Code Standard  
 Joints in cables, how made, insulated, and protected Spliced, secured, covered with  
two coats resin tape and three coats friction tape  
 Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances 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 No  
 How are the cables led through the ship, and how protected Galvanized conduit



**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 Steam tight Boxes - Conduit

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

What special protection has been provided for the cables near boiler casings Conduit + Special wire

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

How are cables carried through beams None through beams through bulkheads, &c. Stopping tubes

How are cables carried through decks Stopping tubes

Are any cables run through coal bunkers None or cargo spaces None or spaces which may be used for carrying cargo, stores, or baggage.

If so, how are they protected See run in galvanized conduit

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage None

If so, how are the lamp fittings and cable terminals specially protected —

Where are the main switches and fuses for these lights fitted —

If in the spaces, how are they specially protected —

Are any switches or fuses fitted in bunkers No.

Cargo light cables, whether portable or permanently fixed Portable How fixed Marine plugs

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 —

Is the installation supplied with a voltmeter Yes, and with an amperemeter Yes, fixed Marine Sensitive

**VESSELS BUILT FOR CARRYING PETROLEUM.**

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas Yes

Are any switches, fuses, or joints of cables fitted in the pump room or companion No.

How are the lamps specially protected in places liable to the accumulation of vapour or gas Conduit. Steam tight globes and guards

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

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.

R. Dowling per R.W. Pero Electrical Engineers Date 9/15/19

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 150 feet

Distance between dynamo or electric motors and steering compass 150 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>10</u> Amperes	<u>5</u> feet from standard compass	<u>—</u> feet from steering compass
A cable carrying	<u>10</u> Amperes	<u>—</u> feet from standard compass	<u>5</u> 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 one degree on any course in the case of the standard compass and one degrees on any course in the case of the steering compass.

George L. Campbell Builder's Signature. Date 15 Sept 1919

**GENERAL REMARKS.**

The installation has been overhauled and extended. The alterations are in conformity with the United States Standard requirements. The vessel is eligible in my opinion to retain the record of "ELEC. LIGHT" as now shown in the Register Book.

It is submitted that this vessel is eligible for THE RECORD Elec. light. AWD 5/11/19 Alan Lawrence Surveyor to Lloyd's Register of Shipping.

Committee's Minute Alan L.P.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

