

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 25285

Port of Hull Date of First Survey July 3rd Date of Last Survey July 17th No. of Visits 4
 No. in on the ~~Iron~~ Steel PAVLOVA Port belonging to Grimby
 Reg. Book 241 Built at Beverly By whom Broth. Wilm. & Gemmell When built 1912
 Owners The South Western S. F. Co. Ltd Owners' Address Grimby
 Yard No. Electric Light Installation fitted by J. J. J. & Co. Grimby When fitted 1912

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Enclosed mounted single cylinder engine direct coupled to a compound wound continuous current dynamo.

Capacity of Dynamo 69 Amperes at 25 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine room Whether single or double wire system is used Double
 Position of Main Switch Board Engine room having switches to groups Six of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each one in chart room, one in galley.

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 cessel 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 20% 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 56 arranged in the following groups:—

A	<u>Forecastle</u>	<u>10</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>1.5</u>	Amperes
B	<u>Bridge</u>	<u>10</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>1.5</u>	Amperes
C	<u>Passing P</u>	<u>8</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>1.5</u>	Amperes
D	<u>S</u>	<u>7</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>1.5</u>	Amperes
E	<u>Aft</u>	<u>5</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>1.5</u>	Amperes
	<u>3</u>	<u>Mast head lights with</u>	<u>1</u> lamps each of	<u>16</u>	candle power requiring a total current of	<u>2</u> Amperes
	<u>2</u>	<u>Side light with</u>	<u>1</u> lamps each of	<u>16</u>	candle power requiring a total current of	<u>2</u> Amperes
	<u>11</u>	<u>Cargo lights of</u>	<u>16</u>	candle power, whether incandescent or arc light	<u>2</u>	

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

DESCRIPTION OF CABLES.

Main cable carrying 69 Amperes, comprised of 37 wires, each 16 L.S.G. diameter, .1176 square inches total sectional area
 Branch cables carrying 42 Amperes, comprised of 7 wires, each 22 L.S.G. diameter, .00426 square inches total sectional area
 Branch cables carrying 8 Amperes, comprised of 1 wires, each 16 L.S.G. diameter, .0032 square inches total sectional area
 Leads to lamps carrying 8 Amperes, comprised of 1 wires, each 16 L.S.G. diameter, .0032 square inches total sectional area
 Cargo light cables carrying 7 Amperes, comprised of 70 wires, each 36 L.S.G. diameter, .0032 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Braided & vulcanized rubber sheath secured in piping throughout
 Joints in cables, how made, insulated, and protected None Mechanical joints on porcelain in properly designed joint boxes
 Are all the joints of cables thoroughly soldered, resin only having been used as a flux None 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 None
 Are there any joints in or branches from the cable leading from dynamo to main switch board None
 How are the cables led through the ship, and how protected Secured in piping



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 Sealed in piping

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

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

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

How are cables carried through beams Sealed in piping through bulkheads, &c. W.T. joints

How are cables carried through decks W.T. joints

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

If so, how are they protected Sealed in piping

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 Yes

Where are the main switches and cut outs for these lights fitted Yes

If in the spaces, how are they specially protected Yes

Are any switches or cut outs fitted in bunkers Yes

Cargo light cables, whether portable or permanently fixed portable How fixed adjustable boxes

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

How are the returns from the lamps connected to the hull Yes

Are all the joints with the hull in accessible positions Yes

The installation is Yes supplied with a voltmeter and Yes an amperemeter, fixed in engine room

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 Yes

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 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.

Wm. Gemmell Electrical Engineers Date Aug 15th 1912

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 <u>10</u> Amperes	<u> </u> feet from standard compass	<u>6</u> feet from steering compass
A cable carrying <u> </u> Amperes	<u> </u> feet from standard compass	<u> </u> feet from steering compass
A cable carrying <u> </u> Amperes	<u> </u> feet from standard compass	<u> </u> 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.

W. Gemmell Director Builder's Signature. Date

GENERAL REMARKS.

This installation of electric lights has been well fitted the material workmanship are good. It has been tried under full working conditions and found satisfactory.

It is submitted that this vessel is eligible for THE RECORD, ElecLight

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

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



5c.8.11.—Transfer.