

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 11,814

Port of Glasgow Date of First Survey 14th Nov. 1896 Date of Last Survey 14th Nov. 1896 No. of Visits 1
 No. in Reg. Book on the Iron or Steel S.S. "Intrepid Castle" Port belonging to Londonderry
 Built at Glasgow By whom The Fairfield Coy. Ltd. When built 1896
 Owners Castle Mail Packet Co. Owners Address D. Currie & Co.
 Yard No. 393 Electric Light Installation fitted by Siemens Bros. & Co. When fitted 1896

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Three Siemens H. B. 12/20 1/2 Comp. & Round Dynamos.

Capacity of ^{each} Dynamo 110 Amperes at 105 Volts, whether continuous ~~or~~ alternating current

Where is Dynamo fixed In Main Engine Room

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

Positions of auxiliary switch boards and numbers of switches on each

If cut outs are fitted on main switch board to the cables of main circuit Yes and on each auxiliary switch boards 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

All switches and cut-outs constructed of incombustible materials and fitted on incombustible bases Yes

Number of lights provided for 549 arranged in the following groups:—

<u>43</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>46</u>	Amperes
<u>3</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>66</u>	Amperes
<u>0</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>64</u>	Amperes
<u>1</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>58</u>	Amperes
<u>1</u> lights each of	<u>16</u>	candle power requiring a total current of	<u>56</u>	Amperes
<u>1</u> lights each of	<u>32</u>	candle power requiring a total current of	<u>32</u>	Amperes
<u>1</u> lights each of	<u>32</u>	candle power requiring a total current of	<u>320</u>	Amperes
<u>1</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>128</u>	Amperes
<u>1</u> lamps each of <u>50</u>	<u>1832</u>	candle power requiring a total current of	<u>320</u>	Amperes

6 lamps of 16 candle power, whether incandescent or arc lights Incandescent

st fire, sparks, &c.

and side lights placed In chart room

<u>4</u> wires, each	<u>13</u>	L.S.G. diameter, <u>'04653</u> square inches total sectional area
<u>19</u> wires, each	<u>16</u>	L.S.G. diameter, <u>'06113</u> square inches total sectional area
<u>19</u> wires, each	<u>16</u>	L.S.G. diameter, <u>'06113</u> square inches total sectional area
<u>4</u> wires, each	<u>12</u>	L.S.G. diameter, <u>'05944</u> square inches total sectional area
<u>4</u> wires, each	<u>15</u>	L.S.G. diameter, <u>'07736</u> square inches total sectional area
<u>4</u> wires, each	<u>18</u>	L.S.G. diameter, <u>'04653</u> square inches total sectional area
<u>4</u> wires, each	<u>18</u>	L.S.G. diameter, <u>'01267</u> square inches total sectional area
<u>4</u> wires, each	<u>20</u>	L.S.G. diameter, <u>'00713</u> square inches total sectional area

DESCR

India insulated with pure and vulcanized
braided and coated with preservative compound.

Joints in cables, how generally jointless system and protected

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 None as far as we know

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 Well seasoned teak and pine casing and Iron pipes.

GLS176-0166

14814 gls

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 *Iron pipes*

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

What special protection has been provided for the cables near boiler casings *Iron pipes*

What special protection has been provided for the cables in engine room *Iron pipes*

How are cables carried through beams *Through hard wood + spec^l fibre bushes* through bulkheads, &c.

How are cables carried through decks *By specially constructed deck pipes*

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

If so, how are they protected *In Iron pipes*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage *Not in coal bunkers.*

If so, how are the lamp fittings and cable terminals specially protected *In cast iron sockets*

Where are the main switches and cut outs for these lights fitted *Outside of cargo spaces.*

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 *Portable* How fixed

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel *By gun metal eyes bolted to beams*

How are the returns from the lamps connected to the hull *By 1/8" gun metal screws.*

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

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

Insulation of cables is guaranteed to have a resistance of not less than *60* statute mile after 24 hours' immersion in seawater.

The foregoing statements are a correct description of the Electric Light installation fitted by that it is at this date in good order and safe working condition.

FOR SIEMENS BROTHERS & CO. LIMITED.

Sttaessel Electrical Engineer

COMPASSES.

Distance between dynamo or electric motors and standard compass *about 150*

Distance between dynamo or electric motors and steering compass *110*

The nearest cables to the compasses are as follows:—

A cable carrying	<i>25</i>	Amperes	<i>40</i>	feet from stand
A cable carrying	<i>19</i>	Amperes	<i>40</i>	feet from sto
A cable carrying		Amperes		feet from

Have the compasses been adjusted with and without the electric installation at work at

The maximum deviation due to electric currents, etc., was found to be *nil*

standard compass and *nil* degrees on course in the

Builder's Signature

GENERAL REMARKS.

The Electric lighting of this vessel in our opinion has been satisfactorily carried out

James Morrison & A. M. Keand
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

This installation appears to be fitted in accordance with the Rules

LM 28/11/96