Received at London Office SAT 14 AUG 1897

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 8506

Port of Leith Date of First Survey 25th March Date of Last Survey 10th June No. of Visits 6

No. in Reg. Book 272 on the ~~Iron or~~ Steel S.S. "Marguerite Depeaux" Port belonging to Rouen

Built at Inverkeithing By whom Cumming & Ellis When built 1896-97

Owners Delin Depeaux & Fils Owners Address Rouen

Yard No. 24 Electric Light Installation fitted by Messrs. J. H. Holmes & Co When fitted 1897

DESCRIPTION OF DYNAMO, ENGINE, ETC.

1 5¾ x 5 Open auto type Engine coupled direct to No 1 Dynamo Revs. 380 per min 60 lbs per ☐" Steam press.

Capacity of Dynamo 60 Amperes at 65 Volts, ~~whether~~ continuous ~~or alternating~~ current

Where is Dynamo fixed Engine room starting platform.

Position of Main Switch Board Near Dynamo having switches to groups A.B.C.&D. of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 1 Amply on board fixed in pantry midships. and 1 do do in Engine room with 4 Switches 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 Yes.

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

Total number of lights provided for 36 arranged in the following groups :—

A Aft	7	lights each of	16	candle power requiring a total current of	6·45 Amperes
B Engine	10	lights each of	16	candle power requiring a total current of	9·8 Amperes
C ~~Midships~~	15	lights each of	16	candle power requiring a total current of	13·8 Amperes
D Forard	4	lights each of	16	candle power requiring a total current of	3·6 Amperes
E		lights each of		candle power requiring a total current of	Amperes
— Mast head light with —		lamps each of	—	candle power requiring a total current of —	Amperes
— Side light with —		lamps each of	—	candle power requiring a total current of —	Amperes
2 Cargo lights of				candle power, ~~whether incandescent or~~ arc lights to take	

If arc lights, what protection is provided against fire, sparks, &c. 10 Amperes Each, Each provided with weatherproof Lanterns and entirely enclosed.

Where are the switches controlling the masthead and side lights placed —

DESCRIPTION OF CABLES.

Main cable carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

Leads to lamps carrying 100 Amperes, comprised of wires, each L.S.G. diameter, 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.

Pure rubber, Vulcanising rubber, proofed tape then the whole vulcanised together, Braided and compounded.

Joints in cables, how made, insulated, and protected Twisted Joints, soldered and insulated with Okonite black and white tape.

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 No.

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 Holds, all run in Iron piping, otherwise in wood casing.

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 sheathed wire.

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

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 Fibre insulators *through bulkheads, &c.* W. T. Glands.

How are cables carried through decks Tubes 2" 0" above deck.

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

If so, how are they protected Iron 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 ———

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 Portable *How fixed* Socket connections

In vessels fitted with single wire system, how is the dynamo terminal fixed to the hull of vessel Double wire System

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

Are all the joints with the hull in accessible positions ———

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* not *an amperemeter, fixed on Main Switch Board*

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 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.

[signature] & Holmes. Engineers *Electrical Engineers* *Date* June 5th 97

COMPASSES.

Distance between dynamo or electric motors and standard compass 80 ft

Distance between dynamo or electric motors and steering compass 30 ft

The nearest cables to the compasses are as follows:—

A cable carrying	*Amperes*	*feet from standard compass*	*feet from steering compass*
A cable carrying	*Amperes*	*feet from standard compass*	*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

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.*

[signature] *Builder's Signature* *Date* 10th June 1897

GENERAL REMARKS. The fittings of this installation were examined while in progress and appear to be in accordance with the Committee requirements as set forth in Notice No. 924, but the installation has not yet been at work and its entire completion is uncertain.

H. Paulsen
Surveyor to Lloyd's Register of British and Foreign Shipping.

TUES, 13 DEC 1898

Committee's Minute It is submitted that this installation appears to be in accordance with the Rules.

20/12/98

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

DEPOT FORM No. 13.