

# REPORT ON ELECTRIC LIGHTING INSTALLATION.

Port of Belfast

Received at London Office TUES. 22 AUG 1893

No. 4277 \*

No. in 59 Name of Ship Magie

Built at Belfast

When built 1893

Reg. Book. 59

Electric Light Installation fitted by H. A. Allen & Co.

when fitted July 1893.

## DESCRIPTION OF DYNAMO AND ENGINE.—

Two each H. A. Allen's Vertical single cylinder direct-acting engine coupled direct to compound dynamo

Capacity of Dynamo each 130 Amperes at 60 Volts, whether continuous or alternating current continuous

Where <sup>are</sup> Dynamos fixed On bottom platform between Thrust Blocks.

## LAMPS.—

Is vessel wired on single or double wire system single Total number of lights 260 arranged in the following groups:—

A 32 lights each of 16 candle power requiring a total current of 32 Amperes

B 40 lights each of 16 candle power requiring a total current of 40 Amperes

C 29 lights each of 16 candle power requiring a total current of 29 Amperes

D 35 lights each of 16 candle power requiring a total current of 35 Amperes

E 24 lights each of 16 candle power requiring a total current of 24 Amperes

F 20 lights each of 16 candle power requiring a total current of 20 Amperes

G 24 lights each of 16 candle power requiring a total current of 24 Amperes

H 20 lights each of 16 candle power requiring a total current of 20 Amperes

I 24 lights each of 16 candle power requiring a total current of 24 Amperes

J 24 lights each of 16 candle power requiring a total current of 24 Amperes

K 24 lights each of 16 candle power requiring a total current of 24 Amperes

L 24 lights each of 16 candle power requiring a total current of 24 Amperes

M 24 lights each of 16 candle power requiring a total current of 24 Amperes

N 24 lights each of 16 candle power requiring a total current of 24 Amperes

O 24 lights each of 16 candle power requiring a total current of 24 Amperes

P 24 lights each of 16 candle power requiring a total current of 24 Amperes

Q 24 lights each of 16 candle power requiring a total current of 24 Amperes

R 24 lights each of 16 candle power requiring a total current of 24 Amperes

S 24 lights each of 16 candle power requiring a total current of 24 Amperes

T 24 lights each of 16 candle power requiring a total current of 24 Amperes

U 24 lights each of 16 candle power requiring a total current of 24 Amperes

V 24 lights each of 16 candle power requiring a total current of 24 Amperes

W 24 lights each of 16 candle power requiring a total current of 24 Amperes

X 24 lights each of 16 candle power requiring a total current of 24 Amperes

Y 24 lights each of 16 candle power requiring a total current of 24 Amperes

Z 24 lights each of 16 candle power requiring a total current of 24 Amperes

AA 24 lights each of 16 candle power requiring a total current of 24 Amperes

AB 24 lights each of 16 candle power requiring a total current of 24 Amperes

AC 24 lights each of 16 candle power requiring a total current of 24 Amperes

AD 24 lights each of 16 candle power requiring a total current of 24 Amperes

AE 24 lights each of 16 candle power requiring a total current of 24 Amperes

AF 24 lights each of 16 candle power requiring a total current of 24 Amperes

AG 24 lights each of 16 candle power requiring a total current of 24 Amperes

AH 24 lights each of 16 candle power requiring a total current of 24 Amperes

AI 24 lights each of 16 candle power requiring a total current of 24 Amperes

AJ 24 lights each of 16 candle power requiring a total current of 24 Amperes

AK 24 lights each of 16 candle power requiring a total current of 24 Amperes

AL 24 lights each of 16 candle power requiring a total current of 24 Amperes

AM 24 lights each of 16 candle power requiring a total current of 24 Amperes

AN 24 lights each of 16 candle power requiring a total current of 24 Amperes

AO 24 lights each of 16 candle power requiring a total current of 24 Amperes

AP 24 lights each of 16 candle power requiring a total current of 24 Amperes

AQ 24 lights each of 16 candle power requiring a total current of 24 Amperes

AR 24 lights each of 16 candle power requiring a total current of 24 Amperes

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AT 24 lights each of 16 candle power requiring a total current of 24 Amperes

AU 24 lights each of 16 candle power requiring a total current of 24 Amperes

AV 24 lights each of 16 candle power requiring a total current of 24 Amperes

AW 24 lights each of 16 candle power requiring a total current of 24 Amperes

AX 24 lights each of 16 candle power requiring a total current of 24 Amperes

AY 24 lights each of 16 candle power requiring a total current of 24 Amperes

AZ 24 lights each of 16 candle power requiring a total current of 24 Amperes

BA 24 lights each of 16 candle power requiring a total current of 24 Amperes

BB 24 lights each of 16 candle power requiring a total current of 24 Amperes

BC 24 lights each of 16 candle power requiring a total current of 24 Amperes

BD 24 lights each of 16 candle power requiring a total current of 24 Amperes

BE 24 lights each of 16 candle power requiring a total current of 24 Amperes

BF 24 lights each of 16 candle power requiring a total current of 24 Amperes



# DESCRIPTION OF INSULATION, PROTECTION, &c.—

Joints in cables, how made, insulated, and protected

All joints are pinned with cables being all connected to terminals in the various distributing trunks, being soldered in from thence taken direct to each lamp

Are all the joints of cables thoroughly soldered, resin only having been used as a flux

Resin is used as a flux

How are cables led throughout the ship

All cables except those in engine room are run in hard wood casing. Those in engine room being surrounded and clipped to bulkheads.

What special protection has been provided for the cables in open alleyways

Hard wood casing, cables being run through hounds.

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

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

Boiler casings being carefully avoided

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

galvanized iron wire sheathing

How are cables carried through decks

galvanized iron duct pipes through bulkheads tubes packed with fibre

Are any cables run through coal bunkers

no

or cargo spaces

yes

If so, how are they protected

being taken along the channel - iron

Are any lamps fitted in coal bunkers or spaces which may be used for cargo

special cable fittings with cast-iron covers are used for fittings in holds.

If so, how are they specially protected

iron covers are used for fittings in holds.

Cargo light cables, whether portable or permanently fixed

portable

How fixed

W. & A. Allen on floor.

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

coupled to field magnets.

How are the returns from the lamps connected to the hull

twisted around lead of 3/8" brass rod and soldered.

Are all the joints with the hull in accessible positions

joints are of brass and are easily accessible

## TESTING, &c.—

Has the installation been thoroughly tested to its full capacity during a trial of

11

hours' duration

The insulation resistance of the whole installation was not less than

ohms

The installation is

supplied with a voltmeter and

an amperemeter, fixed

on Main Switchboard

## General Remarks.—

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.

W. H. Allen

Electrical Engineers

Date 17<sup>th</sup> August /93.

## COMPASSES.—

Distance between dynamo and standard compass

84 feet

Distance between dynamo and steering compass

104 feet

The nearest cables to the compasses are as follows:—

A cable carrying

2

Ampères

#

feet from standard compass

11

feet from steering compass

A cable carrying

13

Ampères

13

feet from standard compass

—

feet from steering compass

A cable carrying

Ampères

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

degrees on

course in the case of the standard compass

and

degrees on

course in the case of the steering compass.

Builder's Signature

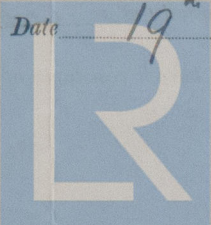
Date

A. L. Jones

Surveyor's Signature

Date

19<sup>th</sup> August 1893



Lloyd's Register Foundation