

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 18284

Port of **SUNDERLAND.** Date of First Survey **"Yew"** Date of Last Survey **London** No. of Visits
No. in **7** on the Iron or Steel **Yew** Port belonging to **London**
Reg. Book **7 sup.** Built at **Sunderland** By whom **Messrs J. L. Thompson & Co** When built **1896**
Owners **Turner, Brightman & Co.** Owners Address **8 & 9 Great St. Helens, E. C.**
Yard No. **340** Electric Light Installation fitted by **J. H. Holmes & Co Newcastle** When fitted **1896**

DESCRIPTION OF DYNAMO, ENGINE, ETC.

6 x 6" Open auto. engine to work @ 110 lbs per sq in coupled to
Nº 13 Dynamo built type 275 Revs.
Capacity of Dynamo **110** Amperes at **60** Volts, whether continuous or alternating current **Continuous**
Where is Dynamo fixed **Port side of Engine room.**
Position of Main Switch Board **New 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 **Forward, 2 Switches, Engine Room,**
7 Switches, Midships, 5 Switches & 1 Fuse, & Navigation Lights
3 Switches.
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 **25%** 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 **See verbal instructions given**
Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases **yes**
Total number of lights provided for arranged in the following groups:—
A **Forward 7** lights each of **16** candle power requiring a total current of **7** Amperes
B **Engine Room 34** lights each of **16** candle power requiring a total current of **34** Amperes
C **Midships 29** lights each of **16** candle power requiring a total current of **29** Amperes
D **Cargo 24** lights each of **16** candle power requiring a total current of **24** Amperes
E **lights each of** candle power requiring a total current of **Amperes**
1 **Mast head light with 1 lamp each of 32** candle power requiring a total current of **Amperes**
2 **Side lights with 1 lamp each of 32** candle power requiring a total current of **Amperes**
4 **Cargo lights of 6 x 16** candle power, whether incandescent or arc lights **Incandescent**
are lights, what protection is provided against fire, sparks, &c. **yes**

Where are the switches controlling the masthead and side lights placed **Wheel house**

DESCRIPTION OF CABLES.

Cable carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
main cable carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
branch cables carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
branch cables carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
leads to lamps carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
argo light cables carrying	Amps	comprised of	wires, each	L.S.G. diameter,	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

lined copper, fine Para rubber, vulcanizing rubber, S. R. proofed tape. The whole
vulcanised together, braided compounded
ints in cables, how made, insulated, and protected **The cables to be joined are first bared thoroughly cleaned**
then woven together soldered, to make a strong metallic joint. The joint is then lapped
with fused tape, prepared tape, S. R. ship, S. R. solution or
e 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
there any joints in or branches from the cable leading from dynamo to main switch board **No**
are the cables led through the ship, and how protected **10 pipes in Tween decks.**

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

wire, & lead covered where exposed to moisture. Iron sheathed

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

Iron sheathed

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 lutes

through bulkheads, &c.

stopping boxes or glass

How are cables carried through decks

Iron deck tubes

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

Iron pipes

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage

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

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

How are the returns from the lamps connected to the hull

Twisted round 3/8" brass screw between two brass washers & screwed to beam

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 copper used is guaranteed to have a conductivity of

99

per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 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.

J. H. Holmes & Co.

Electrical Engineers

Date May 20. 96

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	Amperes	feet from standard compass	feet from steering compass
7	32	32	32
5	32	—	—
3	32	—	—

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

no

degrees on

any

course in the case of the

standard compass and

no

degrees on

any

course in the case of the steering compass.

JOSEPH L. THOMPSON & SONS, Limited.

Joseph L. Thompson

Builder's Signature

Date 9th June 1896

DIRECTOR.

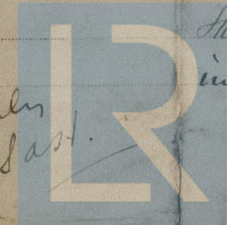
GENERAL REMARKS.

This installation as far as can be seen is fitted in accordance with Rule requirements

W. R. Salmon

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

Committee's Minute



This installation appears to be in accordance with the Rules

Lloyd's Register Foundation