

Barrow 823

REPORT ON ELECTRIC LIGHTING INSTALLATION.

Port of Liverpool.

Received at London Office

SAT, 2 JUL 1898

No. in Reg. Book. 21.5. Name of Ship S. S. "Jaboo" Built at Barrowport. When built 1898.
Electric Light Installation fitted by W. Liley & Co., Liverpool when fitted June 1898.

DESCRIPTION OF DYNAMO AND ENGINE.—

1. Robey. High speed vertical steam engine with Pickering Governor, coupled direct to dynamo.
Capacity of Dynamo 20 Amperes at 60 Volts, whether continuous or alternating current Continuous
Where is Dynamo fixed On platform in engine room.

WIRING.—

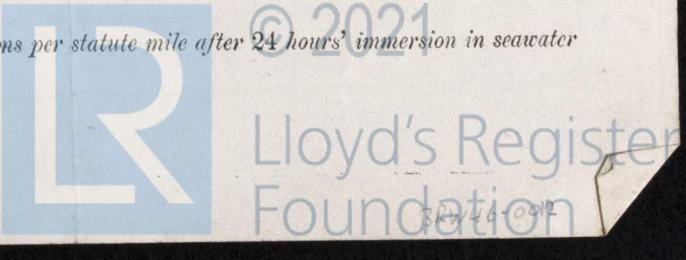
Vessel wired on single or double wire system Double: Total number of lights 18 arranged in the following groups:—
lights each of 16 cp. candle power requiring a total current of 8 Amperes
lights each of 16 cp. candle power requiring a total current of 3 Amperes
lights each of 16 cp. candle power requiring a total current of 3 Amperes
lights each of 16 cp. candle power requiring a total current of 1 Amperes
lights each of 16 cp. candle power requiring a total current of 1 Amperes
Mast head light with 2 lamps each of 32 cp. candle power requiring a total current of 4 Amperes
Side light with 1 lamp each of 32 cp. candle power requiring a total current of 4 Amperes
Cargo lights of 1 8 - 16. candle power, whether incandescent or arc lights
Arc lights, what protection is provided against fire, sparks, &c. _____

SWITCHES AND CUT-OUTS.—

Position of Main Switch Board Near dynamo: having switches to groups A. D. B. C. E of lights as above
Positions of other switch boards and numbers of switches on each Board in wheel house with 1 plug + switch for 6 water portables.
Cut outs are fitted to main circuit Yes: and to each auxiliary circuit Yes:
and at each position where cable is branched or reduced in size Yes where necessary:
If vessel is wired on the double wire system are cut outs fitted on each wire Yes:
The cut outs of non-oxidizable metal Yes: and constructed to fuse at an excess of 50 per cent over the normal current
All cut outs fitted in easily accessible positions Yes:
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 the lamps specially protected in places liable to the accumulation of vapour or gas _____
All switches and cut-outs constructed of unflammable materials and fitted on unflammable bases Yes: Porcelain:

DESCRIPTION OF CABLES.—

Cable carrying 20 Amperes, comprised of 4 wires, each 14 legal standard wire gauge diameter
Cables carrying 9 Amperes, comprised of 4 wires, each 18 legal standard wire gauge diameter
Cables carrying 3 Amperes, comprised of 4 wires, each 22 legal standard wire gauge diameter
Cables to lamps 1 Amperes, comprised of 3 wires, each { 22 / 20 } legal standard wire gauge diameter
Light cables carrying 8 Amperes, comprised of 140 wires, each 38 legal standard wire gauge diameter
The copper used has 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



DESCRIPTION OF INSULATION, PROTECTION, &c.—

P.S. : Vulcanized. Braided & compounded: 600 n. class:

Joints in cables, how made, insulated, and protected

Pure Rubber: Solution & Beets

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

Yes:

How are cables led throughout the ship

In cabins varnished or painted being other places galvanized iron tubings:

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

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

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

How are cables carried through decks

Iron Tubing: — and through bulkheads

Are any cables run through coal bunkers

Yes. or cargo spaces Yes. If so, how are they protected

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

If so, how are they specially protected

Cargo light cables, whether portable or permanently fixed

Portable

How fixed

with flex strings:

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

Are all the joints with the hull in accessible positions

TESTING, &c.—

Has the installation been thoroughly tested to its full capacity during a trial of _____ hours' duration

The insulation resistance of the whole installation was not less than _____ ohms

The installation is _____ supplied with a voltmeter and Volt meter: an ammeter, fixed or Swivel

General Remarks.—

Nearly all cables are run in iron tubing except in cabins:

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.

Wiley & Co. / E. Wiley: 1898, N. S. Elec. Engineers Electrical Engineers

Date June: 25/98

COMPASSES.—

Distance between dynamo and standard compass

20'

Distance between dynamo and steering compass

20'

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
6.		Portable with twin Run:	
1		do	

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.C. Heron: Surveyor's Signature Date 30th June 1898.

This installation appears to be satisfactory
J.M. 4/7/98
Registered Foundation