

No 392 S.S. PERICLES LIST OF CIRCUITS

	GROUP	LIGHTS	CANDLEPOWER	TOTAL CURRENT
A	1st Class Accommodation	94	16	56.4
B	" "	62	16	37.2
C	3rd Class "	91	16	54.6
D	Daylight	94	16	56.5
E	" 3rd Class	60	16	36.0
F	Crew + Signals	71	16	42.6
G	Personnel	136	16	83
H	Engine Room	59	16	35.4
I	Storehold	42	16	25.2
J	Ceiling & Cabin Fans			31.0
K	Largo	48	16	28.0
L	Auxiliary 3rd Class	No lights fitted		
M	10 HP Sirocco Fan			
N	" "			
O	7 1/2 HP "			
P	" "			
Q	" "			
R	2 1/2 HP "			
S	" "			
T	Lathe			
U	Arc Lamps Forward			20
V	" Aft			20



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Lloyd's Register  
Foundation



## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 6480

Port of *Belfast* Date of First Survey *Feb. 14<sup>th</sup>* Date of Last Survey *June 1<sup>st</sup>* No. of Visits *16*  
 No. in Reg. Book on the *Steel* of *Crucibles* Port belonging to *London*  
 Built at *Belfast* By whom *Hawland & Wolff L.* When built *1908*  
 Owners *McDermott & Co. (V. Thompson & Co.)* Address *London*  
 Yard No. *392* Electric Light Installation fitted by *W. H. Allen & Co. L.* When fitted *1908*

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

*Two 12" x 20" x 12" Compound Engines direct-coupled to two six-pole compound wound dynamos*

Capacity of Dynamo *750* Amperes at *100* Volts, whether continuous or alternating current *Continuous*

Where is Dynamo fixed *Recess aft end Eng. Room top platform level* Whether single or double wire system is used *single wire*

Position of Main Switch Board *Aft end Dynamo Room* having switches to groups *as per attached sheet* of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each *no auxiliary boards fitted*

If cut outs are fitted on main switch board to the cables of main circuit *yes* and on each auxiliary switch board 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 *100* 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 *783 & extras etc* arranged in the following groups: *as per attached sheet*

	lights each of	candle power requiring a total current of	Amperes
<del>A</del>	<del>lights each of</del>	<del>candle power requiring a total current of</del>	<del>Amperes</del>
<del>B</del>	<del>lights each of</del>	<del>candle power requiring a total current of</del>	<del>Amperes</del>
<del>C</del>	<del>lights each of</del>	<del>candle power requiring a total current of</del>	<del>Amperes</del>
<del>D</del>	<del>lights each of</del>	<del>candle power requiring a total current of</del>	<del>Amperes</del>
<del>E</del>	<del>lights each of</del>	<del>candle power requiring a total current of</del>	<del>Amperes</del>

*Two* Mast head lights with *one* lamp each of *32* candle power requiring a total current of *1.2* Amperes

*Two* Side lights with *one* lamp each of *32* candle power requiring a total current of *1.2* Amperes

*6* Cargo lights & each of *8* - *16* candle power, *and three* whether incandescent or arc lights

If arc lights, what protection is provided against fire, sparks, &c. *by enclosing in wired globes provided with ash trays.*

Where are the switches controlling the masthead and side lights placed *in wheelhouse under Bridge*

## DESCRIPTION OF CABLES.

Main cable carrying *750* Amperes, comprised of *91* wires, each *11 S.W.G.* L.S.G. diameter, *1.0* square inches total sectional area

Branch cables carrying *56.5* Amperes, comprised of *19* wires, each *16* L.S.G. diameter, *.062* square inches total sectional area

Branch cables carrying *42.6* Amperes, comprised of *19* wires, each *17* L.S.G. diameter, *.047* square inches total sectional area

Leads to lamps carrying *3.0* Amperes, comprised of *1* wires, each *16* L.S.G. diameter, *.0032* square inches total sectional area

Cargo light cables carrying *4.8* Amperes, comprised of *145* wires, each *38* L.S.G. diameter, *.0045* square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

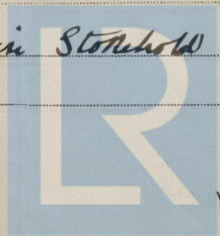
*The conductor is tinned, insulated with two layers pure rubber & one layer vulcanising rubber, the whole vulcanised together & finally taped & braided. In Storehold the wiring is run in Galv. steel conduit & in Engine Room the cables after vulcanising are served & spirally armoured with G.I. Joints in cables, how made, insulated, and protected *wires & braided over all.**

*Thoroughly soldered, insulated with two layers pure rubber & one layer prepared tape & varnished.*

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 *yes*

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 *in strong wood casing & in Storehold in Galv. steel Conduit*





**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 by enclosing in solid drawn galvanized conduit

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat none near undue heat

What special protection has been provided for the cables near boiler casings run in solid drawn galv steel conduit

What special protection has been provided for the cables in engine room spirally armoured with G.I. wires & braided overall

How are cables carried through beams in fibre funnels through bulkheads, &c. in glands lashed with fibre

How are cables carried through decks in G.I. pipes lashed with fibre

Are any cables run through coal bunkers yes or cargo spaces yes or spaces which may be used for carrying cargo, stores, or baggage no

If so, how are they protected By galvanized pipe or channel iron according to position

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

If so, how are the lamp fittings and cable terminals specially protected heavy cast iron covers

Where are the main switches and cut outs for these lights fitted in storeroom with box

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 a large turned brass nut & screw bolted to hull

How are the returns from the lamps connected to the hull soldered to brass nut & screws

Are all the joints with the hull in accessible positions yes

The installation is 2 supplied with 2 voltmeters and 2 amperemeters fixed on main switchboard

**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 100 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 2500 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.

J. W. Dawson  
W. H. Allen, Son & Co. Ltd. Electrical Engineers Date 8/6/08

**COMPASSES.**

Distance between dynamo or electric motors and standard compass Dynamo 232 feet, nearest motor 35 feet

Distance between dynamo or electric motors and steering compass Dynamo 232 feet, nearest motor 28 feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
26	18	9	
20	35	28	
18.6	35	22	

All the above are double wired.

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 nil degrees on every course in the case of the standard compass and nil degrees on every course in the case of the steering compass.

For Harland Wolff & Co. Builder's Signature. Date 16 June 1908

**GENERAL REMARKS.**

This installation, in my opinion, is in safe working condition, and is of good description throughout. It has been fitted in accordance with the Rules.

It is submitted that this vessel is eligible for the record "Electric Light"

J.P.R. 20.6.08

R. J. O'Sullivan  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.