(No Model.)

F. W. LORD.

ELECTRIC LIGHTING SYSTEM.

No. 588,683. Patented Aug. 24, 1897

Fig. 2.

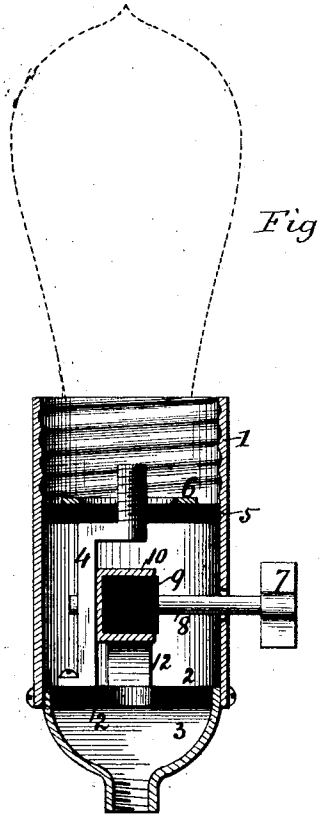
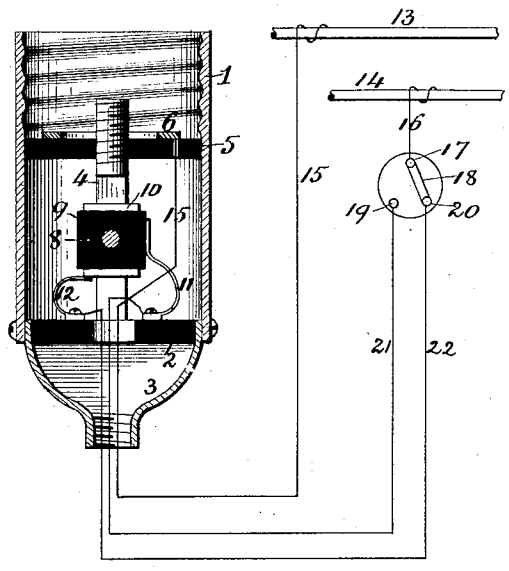


Fig. 1.



WITNESSES

A. B. Driggs

I. J. Masson

INVENTOR

Frederic W Lord

by E. E. Masson, Attorney

UNITED STATES PATENT OFFICE.

FREDERIC W. LORD, OF BOSTON, MASSACHUSETTS.

ELECTRIC-LIGHTING SYSTEM.

SPECIFICATION forming part of Letters Patent No. 588,683, dated August 24, 1897.

Application filed June 19, 1897. Serial No. 641,426. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. LORD, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Electric-Lighting Systems, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to electric lighting, and particularly to the ordinary incandescent systems, though it is applicable to any multiple-arc system whatever, and comprises an improvement in sockets and systems of connection of that type in which it is possible to light and extinguish any particular lamp either at the lamp-socket or at any distant point.

In the accompanying drawings, which illustrate a particular embodiment of my invention, Figure 1 is a view, partly in section, of my improved socket and a diagram of the electrical connections; and Fig. 2 is a view, partly in section, at right angles to the view shown in Fig. 1, but with the electrical connections omitted.

The socket itself, which may be of a type suited to any preferred lamp-base, is shown as consisting of the cylindrical shell 1, supported by the insulating-plate 2, which in turn is supported by the conical shell 3. The plate 2 supports a metal bar 4, which in turn carries a second insulating-ring 5. The upper end of the bar 4 is cylindrical and screw-cut to receive the thread of the lamp-base. The insulating-ring 5 also carries the metal annulus 6, which makes contact with a similar annulus on the lamp-base, as is well understood in the art.

The key 7 controls, through a shaft 8, the insulating-block 9, and this block is embraced at the end and on two sides by the metal strip 10, in contact with the shaft 8. Two metal springs 11 and 12 are fastened to the ring 2.

The mains of the lighting system are shown at 13 14. From the mains 13 a wire 15 leads to the annulus 6, while from the main 14 a wire 16 leads to the contact 17 of the two-way switch 18. This two-way switch may be of any preferred type. From its two contacts 19 20 wires 21 22 lead to the springs 11 12.

In the position shown the switch 18 rests on the contact 20, connecting the spring 12 with the main 14. From the spring 12 the circuit leads through the metal piece 10, shaft 8, and strip 4 to the inner contact of the lamp, thence through the lamp to the annulus 6 and by the wire 15 to the main 13. The lamp will therefore burn; but if the switch 18 be thrown to the contact 19 the circuit will lead from 14, through the wire 16, switch-blade 18, contact 19, wire 21, to the spring 11. At this point the circuit will be broken by the insulating-block 9. If, on the other hand, the switch 18 be left on the contact 20 and the key 7 be turned a quarter of a revolution, the spring 12 will leave the metal strip 10 and will rest on the block 9. It is then obvious that the lamp may be extinguished either at the switch 18 or at the socket. In either case it will be seen by tracing the circuits that it can be lighted either by turning the key 7 a quarter of a revolution or by throwing the switch 18. In brief, the connections are such that a turn of the key or a movement of the switch will in all cases light the lamp if it be extinguished and extinguish it if it be lighted.

It will be seen that my improved socket differs from the ordinary socket in that it contains a two-way switch instead of the usual simple contact making and breaking switch. It therefore constitutes a two-way socket and is connected at corresponding points to the two-way switch 18.

It will be obvious that various changes in form and connections may be made without departing from the spirit of my invention. I do not, therefore, limit myself to the specific arrangements shown and described, but

I claim as my invention and desire to secure by Letters Patent—

1. The combination in an electric-lighting system of a two-way switch, and a two-way lamp-socket connected at two corresponding points to the two-way switch, and connections from the third point on the socket and on the switch to the mains of the system.

2. A two-way lamp-socket comprising means for making contact with a lamp, three contact-points connected to leading-in wires, and means for connecting one of the points to either of the other two, through the lamp-contacts.

3. In a two-way lamp-socket, the combina-

tion of an insulating-block, with a metal strip thereon, two springs bearing upon said block, and means for connecting either of the springs with the metal strip and at the same time disconnecting the other one of the two springs from the metal strip, substantially as described.

4. In a lamp-socket, the combination of two spring-contacts, a rotatable switch adapted to make contact with one only of the springs in any particular position, two lamp-terminals, and connections from one of the lamp-terminals to the rotatable switch.

In testimony whereof I hereunto set my hand in presence of two witnesses.

FREDERIC W. LORD.

Witnesses:
THOMAS P. CURTIS,
EDWARD RUSSELL COFFIN.