

(No Model.)

W. D. KURZ & H. AMUNDSON.
ELECTRIC LAMP SOCKET.

No. 474,667.

Patented May 10, 1892.

Fig. 1.

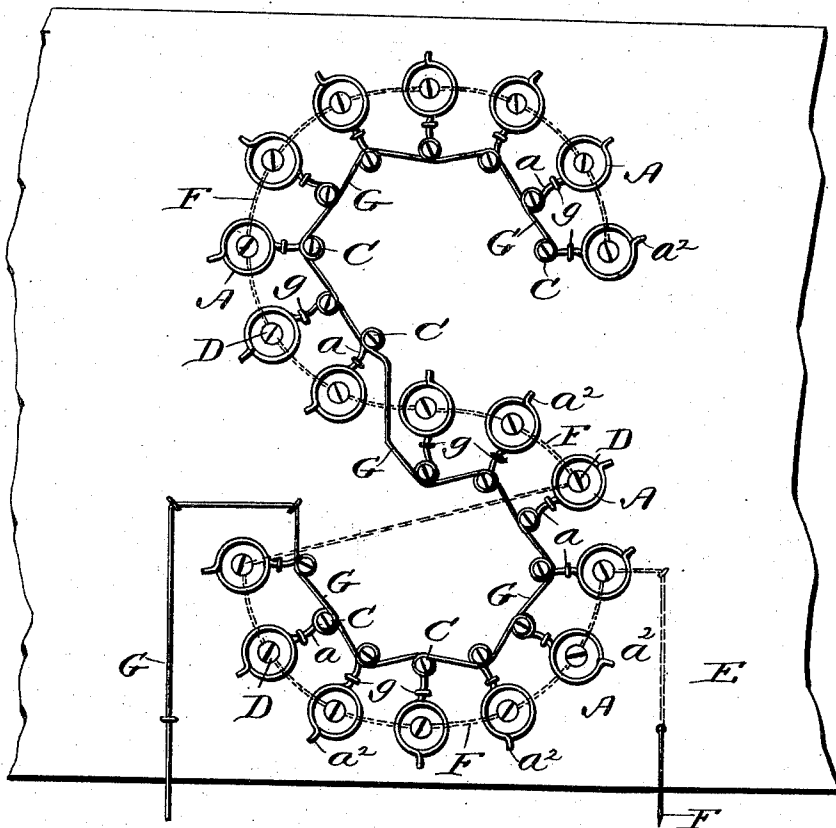


Fig. 2.

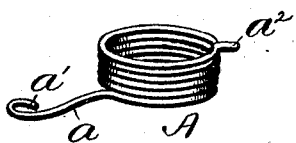
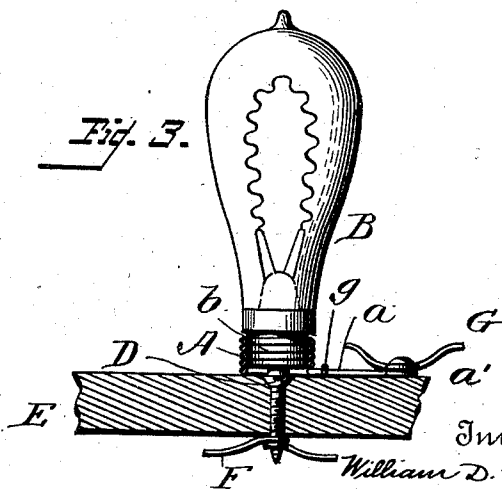


Fig. 3.



Witnesses
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By their Attorneys
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UNITED STATES PATENT OFFICE.

WILLIAM DAVID KURZ AND HANS AMUNDSON, OF LA CROSSE, WISCONSIN.

ELECTRIC-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 474,667, dated May 10, 1892.

Application filed September 26, 1891. Serial No. 406,934. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM DAVID KURZ and HANS AMUNDSON, citizens of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Electric-Lamp Sockets; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric lighting, and especially to the incandescent lamp and means and appliances for supporting the said lamp and including it in the circuit.

The purpose of the invention is to provide a system of wiring and a lamp-holder which is especially adapted for outside decorative illumination and which will admit of the use of bare wire and prevent rain from lodging in the holder or socket and short-circuiting the lamp.

A further purpose of the invention is to facilitate the wiring of the structure to be illuminated and also insure a firm and positive electrical connection between the lamp terminals and the terminals of the holder under vibrations of large amplitude of the lamp due to jars of the structure, should the same be a factory, boat, or moving vehicle, thereby preventing an interruption of the circuit and a breakage of the carbon filament of the lamp.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a plan view of a support, showing the application of the invention thereto, the wire on the reverse side of the said support being shown in dotted lines. Fig. 2 is a perspective view of a holder detached. Fig. 3 is a cross-section showing a lamp in position.

The lamp-holder A is composed of a single coil of wire of proper size to form a socket to receive the threaded plug *b* of the lamp B. One end of the coil or socket is projected to form the arm *a*, which is in the plane of the base-coil and which is slightly curved and terminates in the eye *a'*, which receives a

screw or other fastening C. The other end of the coil or socket is bent out and forms a projection *a*², which is grasped between the thumb and forefinger to facilitate the detachment of the lamp when the same is to be removed.

For ornamental wiring the electric contacts D, being screws which extend through the support E, are placed in the proper position on the support or structure E to present the outline of the desired design, and are electrically connected on the reverse side of the said support by the wire F, which is coiled about the projecting ends of the said contacts D. The sockets or holders A are placed on the support or structure E so that the contacts D occupy a central position relative to each socket and are secured in place by staple or fastening *g*, which is driven over arm *a* close to the said socket and by screw or fastening C, which passes through the eye *a'*. Two fastenings *g* and C are provided for each socket. The wire G is in electrical connection with the fastenings C, preferably by taking a turn around each. The wires G and F are included in the circuit in the ordinary manner. When the lamp is properly inserted in the socket, the electric terminals thereof are in electrical connection with the socket and the contact D. By reason of the socket being of a coil of wire, it will grasp the threaded plug end of the lamp firmly, will yield to vibrations, and being open will prevent the lodgment of water and the short-circuiting of the lamp.

By having the positive wire on one side of the support and the negative or neutral wire on the opposite side of the said support no short-circuiting can possibly occur by reason of the two wires coming in contact, thereby decreasing the chances of fire and obviating the chief source of trouble experienced in temporary outdoor decorative lighting.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a support and a series of electric contacts extending through the said support and in electrical connection on the reverse side thereof, of a series of sockets, each formed of a single coil of wire and

placed concentric with one of the said contacts, the said sockets being in electrical connection, substantially as and for the purpose described.

- 5 2. The combination, with a support and a series of electric contacts extending through the said support and in electrical connection on the reverse side thereof, of a series of sockets, each socket formed of a single coil of
10 wire and placed concentric with a contact and having an arm which terminates in an eye, and fastenings for securing the said arm to the said support, one set of the fastenings being in electrical connection, substantially as
15 set forth.

3. The hereinbefore-specified lamp-socket,

composed of a coil of wire having one end of the wire extended to form the arm *a*, by means of which the said socket is secured to the support and having the other end of the said wire extended to form the projection *a*² for the finger to obtain a purchase upon when removing or attaching the lamp, substantially as set forth.

In testimony whereof we affix our signatures 25 in presence of two witnesses.

WILLIAM DAVID KURZ.
HANS AMUNDSON.

Witnesses:

FRANK WINTER,
WALTER C. WINTER.