(No Model.)

# E. WESTON.

## SOCKET FOR INCANDESCENT LAMPS.

No. 298,143. Patented May 6, 1884.

*Fig. 1.*

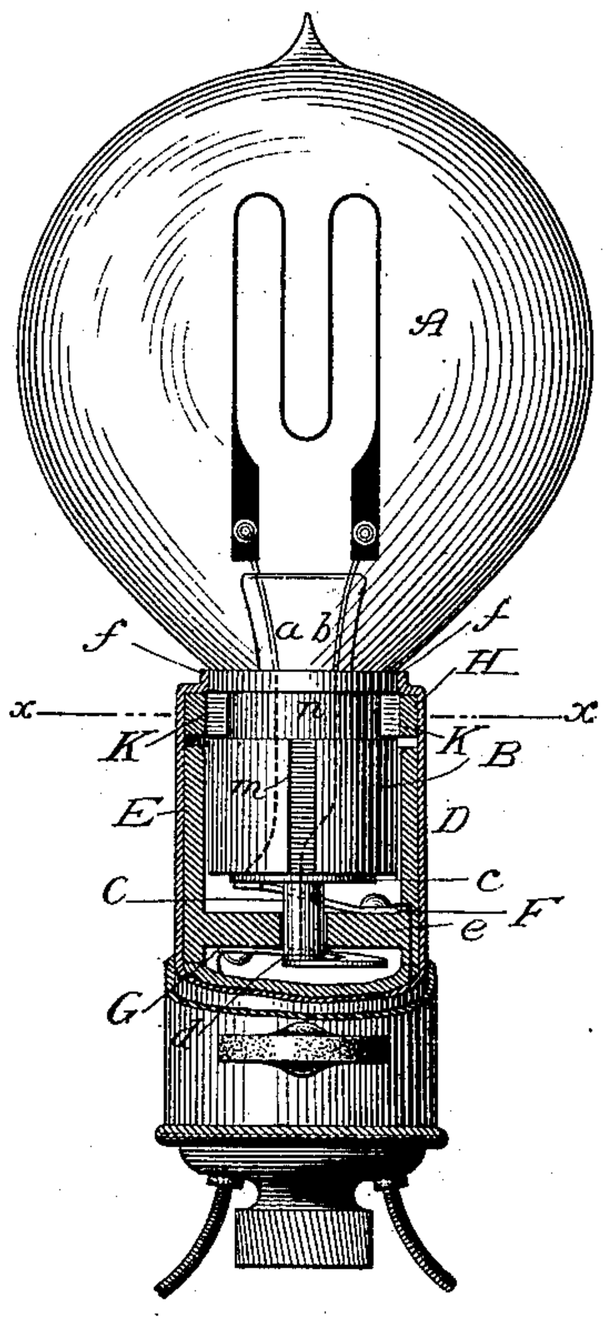



*Fig. 3.*

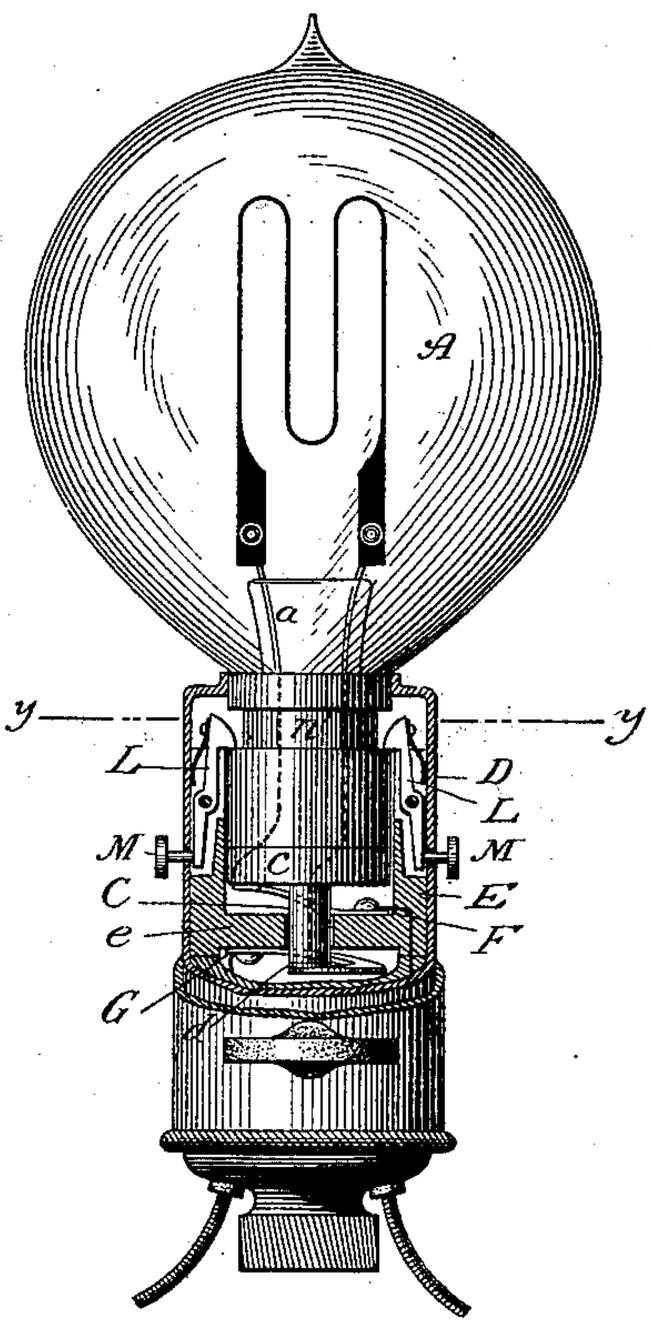



*Fig. 2.*

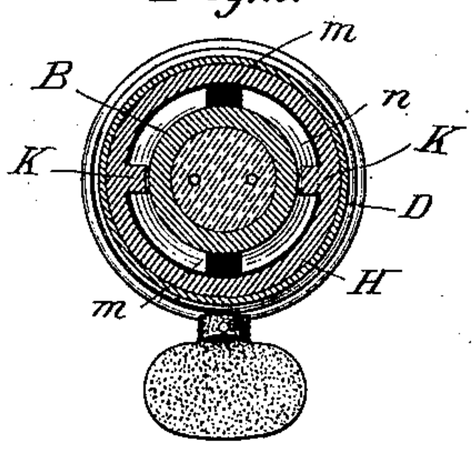
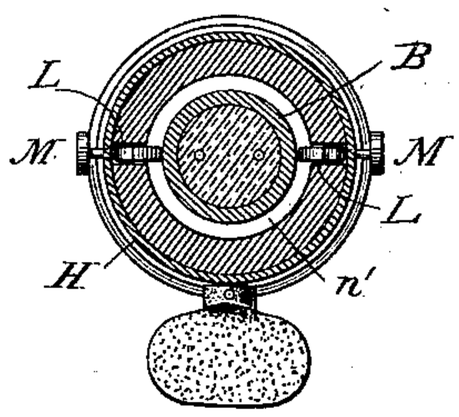



*Fig. 4.*

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# UNITED STATES PATENT OFFICE.

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## SOCKET FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 298,143, dated May 6, 1884.

Application filed October 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD WESTON, a subject of the Queen of Great Britain, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Sockets or Holders for Incandescent Lamps, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

In another application of even date herewith I have shown and described a holder for incandescent lamps, constructed to permit the lamp to be turned in either direction without injury to the connections, mechanical or electrical, while it is held in the holder by the retaining devices. The object of this construction is, mainly, to protect the lamp against injury by the attempts of unskilled persons to remove it from the holder by turning it, as is done with those lamps that are screwed into their holders, and also to preserve, by the pressure of spring-terminals, good contact between the line and lamp conductors. In the case referred to these objects are accomplished by forming or applying to the neck or base of the lamp lugs or ears, and constructing a holder with spring-terminals that form a seat for the lamp, and an interior flange with cut-away portions that permit the lamp to be introduced into the holder and there held.

The subject of my present application is another means of carrying out the invention, the same consisting, generally, in the combination, with a holder containing lugs or their equivalents, and spring-terminals in position to engage with and exert an upward pressure upon those on the lamp, of a lamp provided with a base containing grooves that permit the lamp to be passed into the socket and there held by the lugs which enter the grooves.

The preferred construction of the devices by which my invention is or may be carried into effect is illustrated in the accompanying drawings.

Figure 1 is a central vertical section of the principal portions of the holder and a part of the lamp. Fig. 2 is a horizontal section on line *x x*, Fig. 1. Fig. 3 is a central vertical section of a holder of modified construction; and Fig. 4, a horizontal section on line *y y*, Fig. 3.

On the neck of an ordinary incandescent lamp, A, I form or apply a cylindrical base, B, having a projecting portion, C, as indicated in Figs. 1 and 3. The conductors of the lamp are brought out through this base, and terminate, the conductor *a* in a metal ring, *c*, on the bottom of the part B, the conductor *b* in a plate or cap, *d*, on the end of the projection C.

D is a cylindrical shell of sheet metal with a lining, E, of insulating material, the latter in the form of a cup with a perforated bottom, *e*. A spring blade or plate, F, is secured in the bottom of the cup E, in position to make contact with the ring *c* when the lamp is in place. Another spring, G, is secured under the cup E, in position to press upon the cap or plate *d* on the projection C, which latter passes through the perforation in the bottom of the cup E when the lamp is in place. The springs F G constitute terminals of a circuit formed by the usual conductors led up through the holder from the main line or a branch thereof. It may be stated that any other arrangement of spring-terminals than this may be adopted which will provide a spring-seat for the lamp and maintain contact with the conductors of the same, in whatever position the lamp may be turned while in the holder.

H is a wooden or metal ring held in place in the shell D by the flange *f f*. K K are two or more projections or ears thereon, extending inward. To permit the lamp to be introduced into the holder, vertical grooves *m m* are cut in the base B, and for retaining it in place a groove, *n*, is cut around the base near the globe. To insert the lamp its base is turned until the grooves *m m* and projections K K register. The lamp is then pressed down upon its spring-seat and turned to bring the projections K into the groove *n*. The upward pressure of the springs F G holds it firmly in this position. The same object is attained by other though similar constructions. For example, in Fig. 3, where the shell D, the lining E, and the contact-plates F G are substantially the same, spring-catches L are shown.

These are adapted to enter a horizontal groove, *n'*, in the base B, corresponding to the groove *n* in Fig. 1. In this case the vertical grooves *m m* are dispensed with. The insertion of the lamp forces aside the catches L L, which enter the groove *n'* when the lamp is down firmly in its seat. Any ordinary catches may be employed for this purpose. Those shown consist of spring-levers pivoted in recesses in the lining E. Pins M pass through the sides of the shell D, and are used for disengaging the catches when it is desired to remove the lamp.

Having now described my invention, what I desire to secure by Letters Patent is—

1. The combination, with an incandescent lamp and a cylindrical base containing a groove or grooves, as described, of a socket or holder having projections or their equivalents therein for entering the grooves in the lamp-base and retaining the same in position, as set forth.

2. The combination, with an incandescent lamp and a cylindrical base containing a groove or grooves, of a socket or holder, projections therein, or their equivalents, for entering the grooves in the lamp-base, and spring contact-plates forming a seat for the lamp, as herein set forth.

3. The combination, with an incandescent lamp, A, and base B, containing grooves *m m*, of a socket or holder, projections K, and spring-contacts F G, all as described.

In testimony whereof I have hereunto set my hand this 1st day of October, 1883.

EDWARD WESTON.

Witnesses:
H. A. BECKMEYER,
H. S. LOWE.