E. WESTON.

SOCKET OR HOLDER FOR INCANDESCENT LAMPS.

No. 320,026.

Patented June 16, 1885.
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.

The subject of the invention is a holder for incandescent lamps, in which terminal contact-springs are arranged in a socket, and the lamp is supplied with a cylindrical base, carrying contact-plates that encounter the springs when the lamp is placed in the holder. The base of the lamp has projections that fit under the flanged rim of the socket and serve to hold the lamp in position. I have elsewhere shown other forms of locking device for holding the lamp in the socket against the force of the springs, the objects in all being, however, the same, to secure good electrical contacts and to prevent the lamp from becoming detached from the holder or from being injured in any way when removed by unskilled persons.

My present invention consists in another, and in some respects an improved, form of locking device, capable of application, generally, to various forms of socket or holder, but more particularly to the special form above described. I shall describe it, therefore, in connection with this socket by reference to the accompanying drawings.

Figure 1 is a view in elevation and part vertical section of a holder. Fig. 2 is a section on line x x of Fig. 1. Fig. 3 is an end view of the lamp-base, and Fig. 4 a plan of the socket.

As the main portions of the device differ in no essential particular from those shown in the patent referred to, and in applications filed by me, they may be described briefly as consisting of a cylindrical case, A, containing a switch, for which B is the handle or key, and a case, C, above this, which forms the socket proper. In this latter is a recessed plate or cup of insulating material, D, with an opening through its center. To the under side of plate D, or within the recess, is secured a flat spring, E, connected with one of the switch-wires and extending over the perforation in the plate. To the upper side of plate D is fixed an arched spring, F, concentric with the perforation and connected with the other switch-wire. To the neck of the lamp is attached, by plaster-of-paris or otherwise, a cylinder, G, of either metal or insulating material. Its end is closed by a plug, H, of wood, from the center of which extends a pin, K. The lamp wires are carried down through this plug, one through the pin or projection K to a plate, a, carried thereby, the other to a circular plate, b, around the projection.

When the base of the lamp is inserted in the socket, the projection K passes through the perforation in plate D, bringing plate a in contact with spring E and plate b in contact with spring f. The force of these springs, however, tends to lift the lamp out of the socket, and the special means which I employ for preventing this is the subject of my present invention. To this end I insert two pins, c, in the sides of the cylinder or socket C as near to the upper edge as practicable, and the upper edge of the cylinder G, surrounding the neck of the lamp, is spun over to form a bead or rolling flange, L. At diametrically opposite points, corresponding to the position of the pins c, this flange or bead is cut away, as at d, and at two other points indentations e are formed in the under side of the flange.

In inserting the lamp in the socket it is placed so that the pins c enter the flange through the notches d, and the lamp is then turned until the pins are brought into the indentations e. By this means the lamp is firmly held against accidental displacement, and good electrical contact maintained.

However the flange on the cylinder G may be formed is immaterial, although it is most convenient to simply turn or spin it in the manner and form described.

What I claim is—
1. The combination, with a socket or holder containing contacts and having pins c on its sides, of an incandescent lamp and base-carrying terminals, and having a notched flange.
with which the pins engage when the base is inserted in the socket, as and for the purpose specified.

2. The combination, with a socket or holder containing spring-contacts and having pins \(c\) on its sides, of an incandescent lamp and cylindrical base-carrying terminals, and having a notched flange with which the pins engage when the base is inserted in the socket, as set forth.

3. The combination, with a socket or holder containing spring-contacts and having pins \(c\) on its sides, of an incandescent lamp and cylindrical base-carrying terminals, and having its upper edge or rim formed as a bead or flange containing notches and indentations so formed that when the base is inserted in the socket the pins thereon may enter the flange and rest in the indentations, as described.

In testimony whereof I have hereunto set my hand this 15th day of October, 1884.

EDWARD WESTON.

Witnesses:

H. A. BECKMEYER,
M. M. GARVER.