Oct. 16, 1928. 1,687,718

E. E. FALBE ET AL

ELECTRIC LAMP SOCKET

Filed June 14, 1926

FIG. 1.

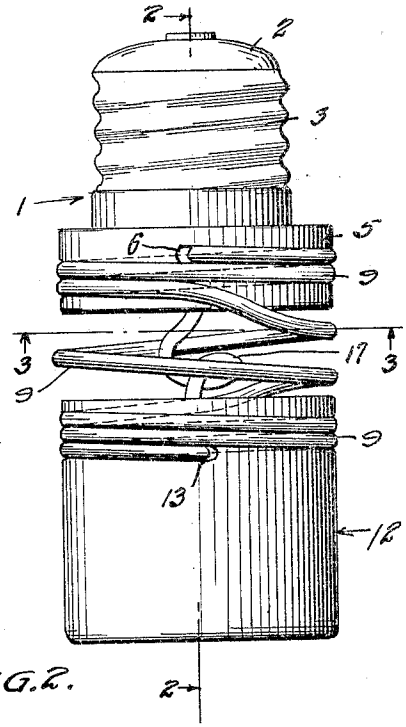


FIG. 2.

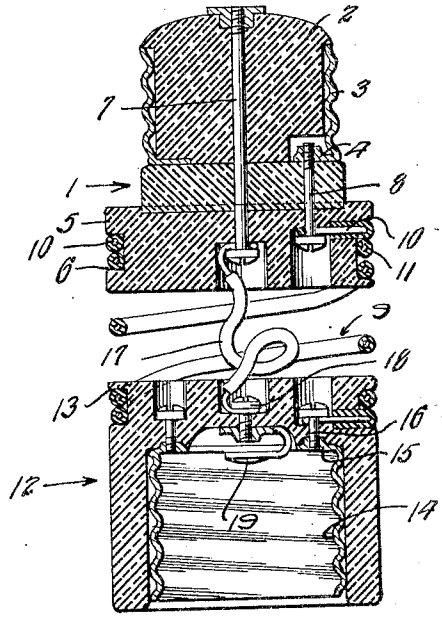
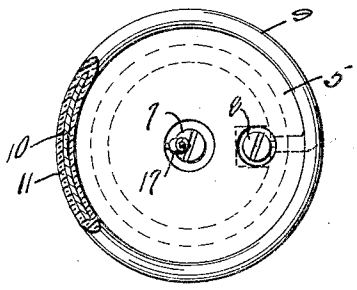


FIG. 3.



Inventor
E. E. FALBE
and QUAY ROHRER.

By Lesley L. Sargent

Attorney

Patented Oct. 16, 1928. 1,687,718

UNITED STATES PATENT OFFICE.

ERWIN E. FALBE AND QUAY ROHRER, OF CORNELL, WISCONSIN.

ELECTRIC-LAMP SOCKET.

Application filed June 14, 1926. Serial No 115,922.

The object of our invention is to provide a novel electric lamp socket, adapted to take up shocks and vibrations without transmitting them to the lamp bulbs and thus overcome or neutralize the destructive vibrations on the filament in the electric bulbs. We attain these and other objects of our invention by the device illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our invention;

Fig. 2 is a section on line 2—2 of Fig. 1; and

Fig. 3 is a section on line 3—3 of Fig. 1.

Like numerals designate like parts in each of the several views.

Referring to the accompanying drawings, we provide a suitable plug 1, including the insulation block 2, spirally corrugated electric conductor 3 encircling the block, ground insulation block 5, and screws 7 extending through blocks 2 and 5 and functioning as an electrical conductor. Ground block 5 is provided with a spiral groove 6, to carry the spiral spring 9, one end of which is connected with the screw 8, which in turn is attached to inwardly bent portion 4 of the corrugated conductor 3. The spring 9 consists of the electrical conductor 10 of metal and the insulation covering 11. After spring 9 is coiled once or twice about member 5, it makes one or two free coils and is then coiled about the spirally grooved portion 13 of the lamp receiving socket 12. The latter element is of insulation material and carries a spirally corrugated metal socket 14 to receive the lamp bulb. This socket has an inwardly bent portion 15, which is engaged by the screw 15, which in turn is in electrical contact with the conductor 10 of spiral spring 9. We provide a flexible insulated conductor 17, electrically connecting screw 7 in member 1 with the screw 18 in member 12. Screw 18 is attached to the spring contact member 19, which conducts the electric current to the lamp bulb.

It will be observed that the spring 9 functions both as a vibration absorbing element and as an electrical conductor. It gives the necessary resilience to the lamp socket to overcome the strain of external vibrations, such as may occur in factory buildings, on bridges, moving objects, in dancing halls and elsewhere where vibrations exert their destructive influence on the life of electric light bulbs. The flexible insulated conductor is in the form of a slack wire and permits of relative movement of members 1 and 12.

What we claim is:

1. A shock absorbing electric lamp socket, comprising a plug, a lamp receiving socket separate from the plug, a coiled spring connecting the plug to the lamp socket and also functioning as an electrical conductor, the plug and the lamp socket each having external spirally grooved portions in which one or two turns of the coiled spring are seated, and a relatively short insulated slack wire extending between electrical conductors in the central portion of the plug and the central portion of the lamp socket to function as the other conductor.

2. In a shock absorbing electric lamp bulb socket, the combination of a plug, an electric lamp socket detachable from the plug, a coiled spring extending between the plug and the lamp socket and functioning as an electrical conductor to resiliently hold said elements in spaced relation, a flexible conductor also extending between said elements and disposed in contact with the conducting screws of said members, spirally corrugated metal cylinder members mounted on the plug and in the lamp socket respectively to function as attaching members, each of said members having inwardly turned portions, screws connecting said inwardly turned portions with one end of the coiled spring in the respective members, screws mounted in the central portions of each of said members to which the flexible electrical conductor is attached, and a spring contact element carried by the screw in the lamp socket section, substantially as shown and described.

ERWIN E. FALBE.
QUAY ROHRER.