June 10, 1924. 1,497,557

J. L. EASTMAN ET AL

EXTENSION PLUG

Filed April 22, 1922

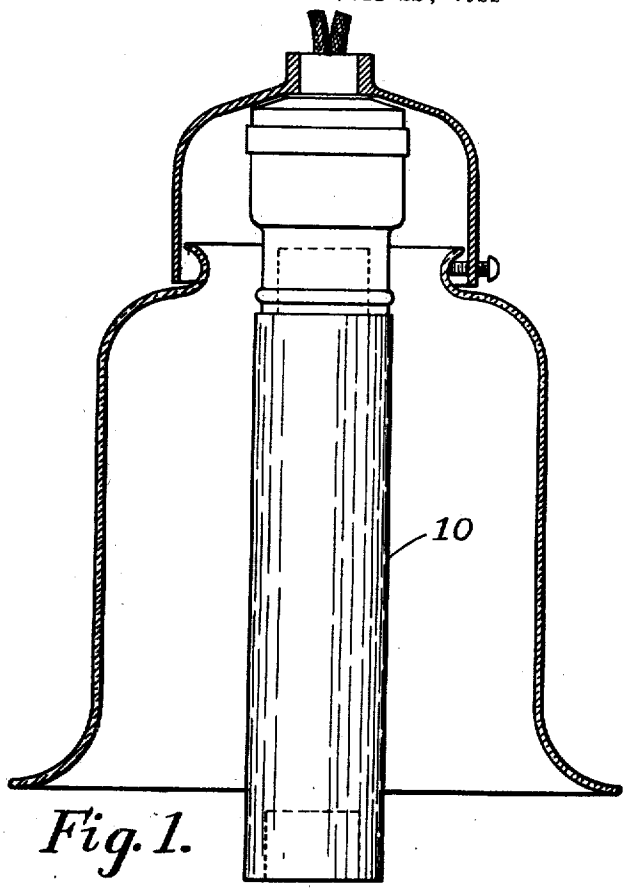


Fig. 1.

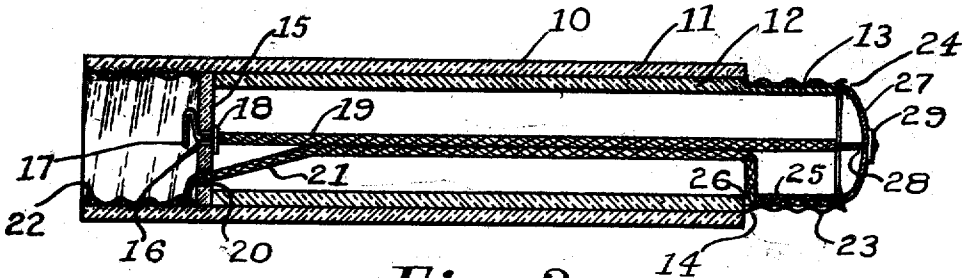


Fig. 2.

J. L. Eastman
W. V. Gould
INVENTORS
BY
Watson E. Coleman ATTORNEY.

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UNITED STATES PATENT OFFICE.

JOHN L. EASTMAN, OF HIGHLAND PARK, AND WILLARD V. GOULD, OF DETROIT, MICHIGAN.

EXTENSION PLUG.

Application filed April 22, 1922. Serial No. 556,009.

To all whom it may concern:

Be it known that we, JOHN L. EASTMAN, a citizen of the United States, residing at Highland Park, in the county of Wayne, in the State of Michigan, and WILLARD V. GOULD, a citizen of the United States, residing at Detroit, in the county of Wayne, in the State of Michigan, have invented certain new and useful Improvements in Extension Plugs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in extension plugs, and has for a particular object thereof the provision of a plug for connecting extension cords and the like to lamp sockets, and more particularly that type of lamp socket which is provided with a shade preventing ready engagement of the ordinary plug in the socket.

A further object of the invention is to provide a device of this character which may be very readily and cheaply constructed.

A still further object of the invention is to provide a device of this character which is simple in construction and arrangement, durable in service, and a general improvement in the art.

These and other objects we attain by the construction and arrangement shown in the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of our invention and wherein like reference characters designate like parts throughout.

In the drawings:

Figure 1 is a sectional view taken through an electrical fixture showing an extension plug constructed in accordance with our invention applied thereto; and

Figure 2 is a longitudinal sectional view taken through the plug.

Referring now more particularly to the drawings, the numeral 10 designates a body portion, in the present instance disclosed as composed of an outer sleeve 11 and an inner sleeve 12 having a reduced portion 13. The body portion of the sleeve 12 is of less length than the sleeve 11 and the sleeve 12 is arranged within the sleeve 11 so that the shoulder 14 formed by the reduced extension 13 thereof coincides with an end of the sleeve 12 and is secured thereto, thus providing the body portion 10 at one end with an external shoulder and at the opposite end with an internal shoulder.

The numeral 15 designates a washer formed of fiber and seating against the internal shoulder of the body portion 10. This washer is provided with a central opening 16 adapted for the reception of the threaded shank of a spring contact 17 which is secured to the washer as by means of a nut 18. To the threaded shank of the spring contact 17 is connected one end of a wire 19. The washer 15 is further provided with an opening 20 through which is directed an end of an insulated wire 21. In that end of the body portion 10 having the internal shoulder against which the washer 15 abuts, a female socket 22 is disposed, having its inner end abutting the washer 15 and having the end of the wire 21 soldered or otherwise secured thereto. This sleeve 22 may be secured in position within the body portion by any suitable means as by coating the same with glue or the like in applying the same. Upon the reduced end of the sleeve 12 is mounted a male plug sleeve 23, the inner end of which abuts the external shoulder of the body portion 10. The upper end of this sleeve is open and provides a shoulder 24, the purpose of which will presently appear. The reduced extension is provided upon its exterior surface with a groove 25 having an opening 26 communicating with the bore of the sleeve 12 so that the end of the wire 21 may be introduced through the groove and secured to the sleeve 23. The open end of the plug sleeve 23 is closed by a fiber washer 27 having a central opening 28 through which the free end of the wire 19 may be directed. This fiber washer has secured thereto about the opening 28 thereof, a metallic washer 29 to which an end of the wire 19 is soldered, with the fiber washer 27 firmly seated against the shoulder 24 of the sleeve 23 effectually preventing removal of the fiber washer.

From the foregoing it is believed to be obvious that an extension plug constructed in accordance with our invention may be very cheaply manufactured and will at the same time be durable and efficient in service. It will furthermore be obvious that the construction thereof as hereinbefore set forth is capable of some change and modification without materially departing from the

spirit of our invention and we accordingly do not limit ourselves thereto except as hereinafter claimed.

We claim:

An extension plug comprising an outer shell of insulating material, an inner shell of insulating material engaged within the outer shell and terminating in a reduced extension projecting beyond one end thereof, a metallic threaded shell mounted on said extension and adapted to be screwed into a socket, the other end of said inner shell terminating short of the adjacent end of the outer shell to define a shoulder, a disc of insulating material within the outer shell bearing against said shoulder, a threaded metallic shell mounted within the outer shell between said disc and the adjacent end of the outer shell, a connecting wire passing through said disc and through the inner shell with its end secured to both metallic shells, a contact located at the center of the disc, a contact located at the center of the closed end of the first named metallic shell, and a wire connecting both of said contacts.

In testimony whereof we hereunto affix our signatures.

JOHN L. EASTMAN.
WILLARD V. GOULD.