March 31, 1931. J. C. SHELLER 1,798,174

FUSE PLUG

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Fig. 1.

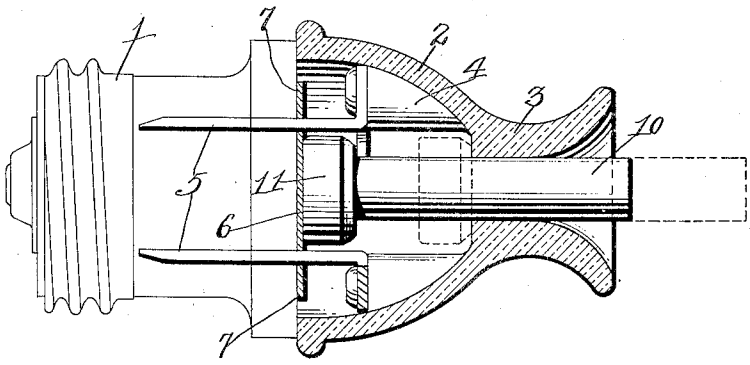


Fig. 2.

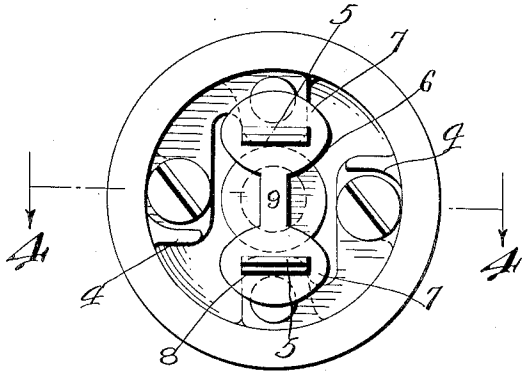
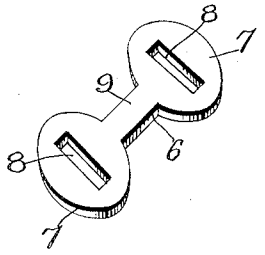


Fig. 3.



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Fig. 4.

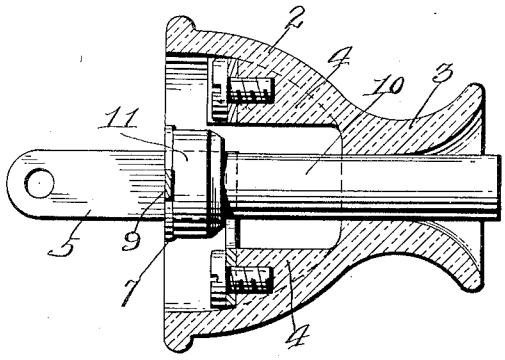
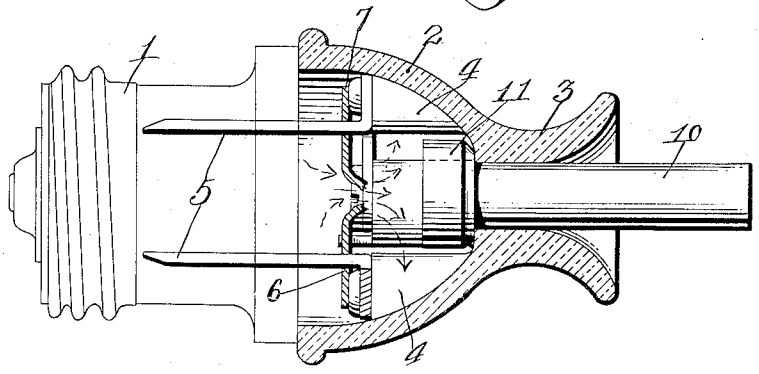


Fig. 5.



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UNITED STATES PATENT OFFICE

JOHN C. SHELLER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANK E. WHITE, OF CHICAGO, ILLINOIS, AND ONE-HALF TO WALTER B. HINTZE, OF CHICAGO, ILLINOIS

FUSE PLUG

Application filed November 23, 1929. Serial No. 409,255.

This invention relates to new and useful improvements in fuse plugs.

One of the objects of my invention is the provision of a fuse plug provided with an inexpensive fuse member, together with means providing an indicator to ascertain when the fuse is blown or destroyed so that it can be easily replaced by a new one.

With the ordinary fuse plugs in use at the present time, it is rather difficult to ascertain, where a number of plugs are used in the same fuse box, which one of the plugs has been rendered useless through blowing of the fuse, and it is, therefore, necessary to test two or three of the plugs, as a rule, before the blown plug can be located.

It is with the above objects in view that I have provided an improved fuse plug having therein a movable indicating member which is forced outwardly into indicating position when the fuse members are destroyed, so that when it is desired to replace the blown fuse, the party replacing the fuse can readily ascertain which one of the plugs has been rendered useless.

With the above and other objects in view, the invention consists in the novel features of construction, the combination and arrangement of parts hereinafter more fully set forth, pointed out in the claims and shown in the accompanying drawings wherein:

Figure 1 is a sectional view through my improved device showing its attachment to a socket plug;

Figure 2 is an end elevation of the attachment;

Figure 3 is a perspective view of the fuse member;

Figure 4 is a sectional view on the line 4—4 of Figure 2, showing the fuse member in operative position with the indicating element in its innermost position; and,

Figure 5 is a view similar to Figure 1 showing the fuse member as having been blown out and the indicating element in its outermost or indicating position.

Referring more particularly to the drawings, 1 indicates a socket plug and used in connection with this socket plug is an insulated shell 2, having a reduced neck portion 3, and provided on its interior with the shoulder portion 4 to which the blade members 5 are attached. These blade members 5 fit into the spaced receiving portions provided for in the socket plug 1, and slidably mounted upon these blade members is the fuse member 6.

The fuse member 6 comprises substantially elliptical shaped end portions 7 each having a transverse slot 8 to receive the blade members 5. The elliptical end portions 7 are integrally connected by means of the connecting strip or neck 9, said strip 9 bridging the connection between the blades 5 so that this structure takes the place of the well known fuse in use at the present time.

Slidably mounted within the neck portion 3 is an indicating pin 10 which may be colored red or any other similar shade which would quickly attract a person's attention with the inner end of the pin formed with an enlarged head portion 11. This head portion 11, when the plug is in operation, as shown at Figure 1, normally rests against the connecting strip 9, as shown in Figures 1 and 4. Therefore, should the fuse member become blown or severed, as shown in Figure 5, the force of the explosion, due to the breaking of the strip 9 will force the pin 10 outwardly to the position shown in Figure 5, and as there is a sufficient amount of friction between the walls of the neck 3 and the pin, the pin will be retained in its outermost position until pushed inwardly again.

It will be apparent from the foregoing that with the use of a fuse plug of this type, the fuse members can be quickly and easily replaced by removing the insulating housing 2, and removing the broken fuse ends from the blades 5, and positioning a new fuse member on the blades 5. It will also be noted that by the use of this improved device, the pin 10, when in a projected position, as shown in Figure 5, provide indicating means whereby a person can readily ascertain which one of the plugs has a blown fuse member, so that the useless fuse member can be removed and replaced by a new one. This form of fuse plug is extremely simple in its construction and can be manu-

factured and placed on the market at a very low cost.

I claim:

1. In a fuse plug, a body shell having a reduced neck, spaced contact blades carried by said shell, a removable fuse member mounted upon said blades and a movable pin in the neck with its inner end normally positioned against said fuse member and adapted to be projected through the neck when the fuse blows out, the pin being propelled outwardly by the explosion at the time of the blowing of the fuse.

2. In a fuse plug, a body shell having a restricted neck portion, spaced contact blades carried by said body shell, a fuse member removably positioned upon said blades, an indicator movable through the restricted neck portion, a head on the inner end of the indicator normally positioned in contact with the fuse member whereby the explosion resulting from the blowing of the fuse member will project the indicator out through the neck.

In testimony that I claim the foregoing I have hereunto set my hand at Chicago, in the county of Cook, and State of Illinois.

JOHN C. SHELLER.