No. 837,183. PATENTED NOV. 27, 1906.

D. E. BOWN.

FUSE PLUG FOR ELECTRIC LIGHTING.

APPLICATION FILED AUG. 14, 1905.

Fig. 1.

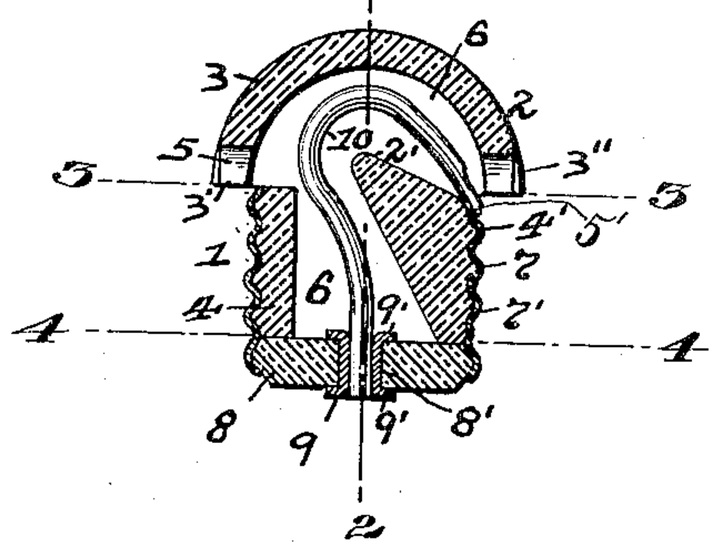


Fig. 6.

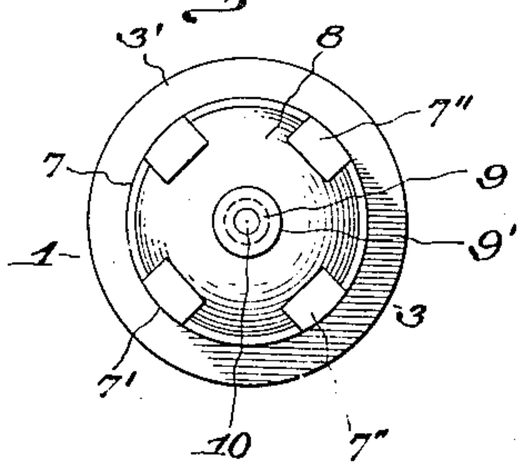


Fig. 2.

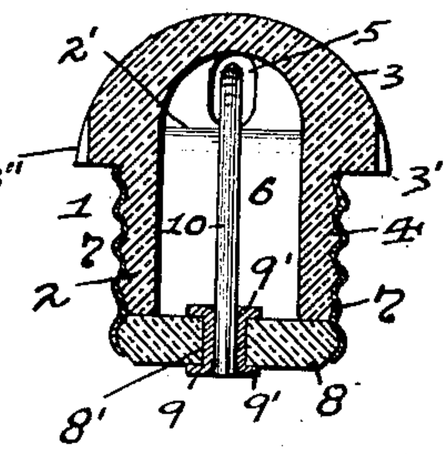


Fig. 3.

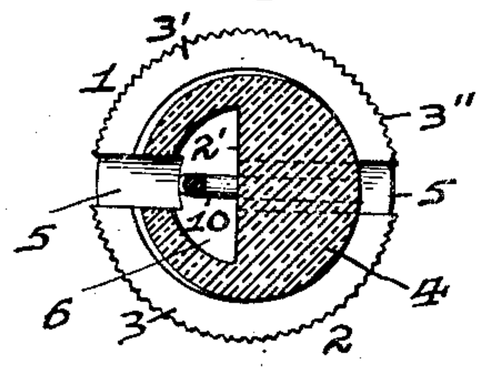


Fig. 4.

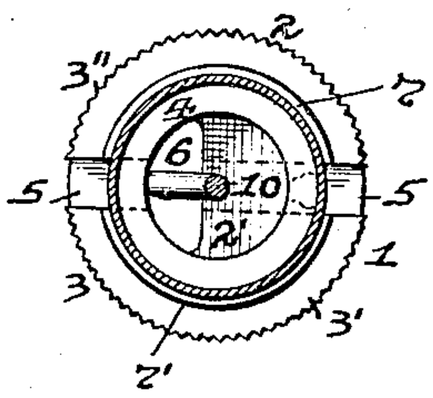
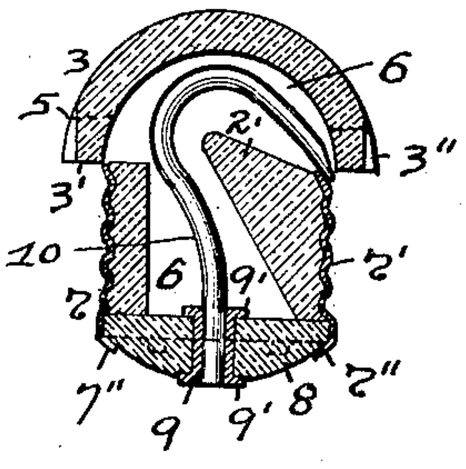


Fig. 5.



WITNESSES

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FUSE-PLUG FOR ELECTRIC LIGHTING.

No. 837,183. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed August 14, 1905. Serial No. 274,020.

To all whom it may concern:

Be it known that I, DAVID E. BOWN, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Fuse-Plugs for Electric Lighting; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to fuse-plugs, and has special reference to such plugs as are used in electric lighting.

The object of my invention is to provide a fuse-plug for the sockets of fuse-blocks used in electric lighting which will be cheap and simple in its construction, will contain few parts, and will be capable of being manufactured easily and assembled conveniently and rapidly.

To these ends my invention consists, generally stated, in the novel arrangement, construction, and combination of parts, as hereinafter more specifically set forth and described, and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved fuse-plug, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a longitudinal central section of my improved fuse-plug. Fig. 2 is a similar section taken on the line 2 2, Fig. 1, and at right angles to that shown in Fig. 1. Fig. 3 is a cross-section on the line 3 3, Fig. 1. Fig. 4 is a cross-section on the line 4 4, Fig. 1. Fig. 5 is a view showing another form of my improved plug. Fig. 6 is a bottom plan view of the plug shown in Fig. 5.

Like symbols of reference herein indicate like parts in each of the figures of the drawings.

As illustrated in the drawings, 1 represents my improved fuse-plug, which is provided with the body portion 2, preferably formed of porcelain and having the head 3 and shank 4 formed thereon. The head 3 is formed solid and integral with the shank 4 and is of a semicircular shape, while its inner projecting edge or extending portion 3′ is provided with a series of serrations 3″ around the same, and through said extending portion the air-holes 5 communicate with a chamber 6, formed in said head and shank 4. Fitting around the shank 4 of the body portion 2 is the screw-cap 7, which is usually formed of brass or copper and engages with the screw-threads 4′ on the outer face of said shank by its threaded body 7′. This screw-cap 7 carries a cap-plate 8, which is preferably formed of porcelain and has an opening 8′ formed through the same, within which an eyelet 9 is secured by its flanges 9′ fitting against each side of said plate. The outer flange 9′ of the eyelet 9 fits against a contact-point in the socket of the fuse-block, (not shown,) and the screw-cap 7 will contact with said socket, which is threaded in like manner as said cap. Within the chamber 6 of the body portion 3 is the fuse-wire 10, which is secured at one end within the eyelet 9 and extends around a projecting portion 2′ on the shank 4 of said body portion, while its opposite end is soldered to said shank in an opening 5′ therein and at a point adjacent to one of the air-holes 5, and thereby completing the circuit. The portion 2′ extends to and beyond the center of the shank 4 for permitting a long fuse 10 to be used and to form a better insulation between the ends or terminals of said fuse. In Figs. 5 and 6 the cap-plate 8 is shown as removably held within the cap 7 by means of lugs 7″, formed on the body 7′ of said cap, which lugs are bent over against said plate to hold the same in place.

It will thus be seen that my improved fuse-plug is of such a construction that it will do away with certain parts, such as the removable head-cap usually employed in this class of plugs, which required the parts to be connected at the top, thereby greatly cheapening the cost of manufacture of the same and saving time in the assembling thereof. It will also be noted that the integral solid head and large interior air space or chamber construction in the shank and head on the body portion will enable a much longer fuse-wire to be used than in the ordinary cases, and all liability of the said wire short-circuiting will be overcome by the projecting portion within such body portion extending between the ends of the wire. It will further be obvious that there is no liability of the parts becoming loose or separated, and the use of the integral or solid head will enable the parts to be connected at the bottom and will also enable the air-ports to be formed therein, while the opening in the cap-plate will allow the fuse-wire to be inserted through the bottom of the plug.

Various modifications and changes in the design and construction of my improved fuse-plug may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A fuse-plug comprising a body portion having a shank, and a projecting portion within the shank and extending substantially to the center of the same for separating the ends of the fuse and extending the length of the same.

2. A fuse-plug comprising a body portion, a screw-cap fitting on said body portion, and a cap-plate removably held within said screw-cap.

3. A fuse-plug comprising a body portion, a cap fitting on said body portion, a removable cap-plate fitting within said cap, and lugs on said cap adapted to be bent over against said plate for holding the same in place.

In testimony whereof I, the said DAVID E. BOWN, have hereunto set my hand.

DAVID E. BOWN.

Witnesses:

J. N. COOKE,

JAMES L. WEHN.