

D. E. BOWN.
FUSE PLUG.

APPLICATION FILED JUNE 17, 1911.

1,042,388.

Patented Oct. 29, 1912.

FIG. 1.

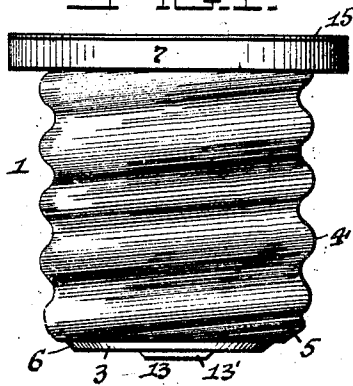


FIG. 2.

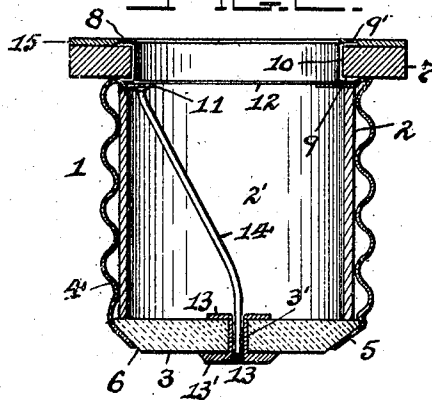


FIG. 3.

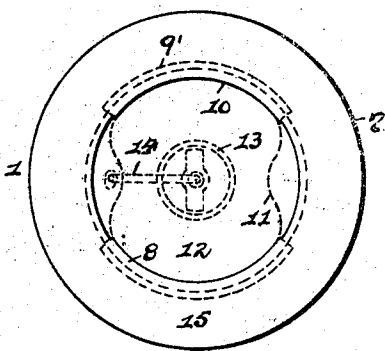
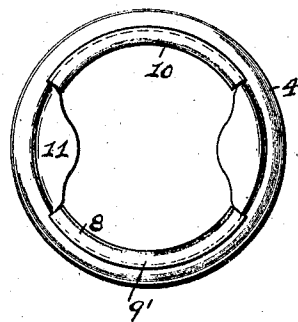


FIG. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID E. BOWN, OF PITTSBURGH, PENNSYLVANIA.

FUSE-PLUG.

1,042,388.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed June 17, 1911. Serial No. 633,903.

To all whom it may concern:

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

My invention relates to fuse-plugs, such as are used for the sockets of fuse-blocks in electric lighting, and has for its object to provide a fuse-plug, which will be cheap and simple in its construction, will contain few parts, will be capable of being easily manufactured 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 drawing, in which—

Figure 1 is a side elevation of my improved fuse-plug. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a top plan view of the same. Fig. 4 is a like view of the shell showing the other parts removed.

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

As illustrated in the drawing, 1 represents my improved fuse-plug, which is provided with the lining 2, preferably formed of fiber, and inner or bottom cap-plate 3. Fitting around the lining 2 and bottom cap 3 is the screw-shell 4, which is usually formed of brass or copper and is secured to said cap by a bottom flange portion 5 bent against an inclined face 6 on such cap.

At the outer end or top of the plug 1 is the head or rim 7, preferably formed of fiber, which extends beyond the screw-shell 4, and is secured to said shell by means of recessed segmental portions 8 bent inwardly from such shell over the outer end of the lining 2 and provided with inner and outer flanges 9 and 9' and inner face 10 for fitting around said rim. Between the segmental

portions 8 on the shell 4 is a ledge or flange 51 portion 11, which is bent inwardly beyond said portions, and between such flanges 11 and the inner flanges 9 on said portions is positioned a cover or diaphragm 12 formed of flexible and transparent material, such as mica, which is securely held in place, so that the fusible conductor wire hereinafter described may be seen without removing such cover.

The bottom cap-plate 3 has an opening 3' formed centrally through the same, within which an eyelet 13 is secured by its flanges 13 fitting against each side of the same, the outer or bottom flange 13' being adapted to fit against a contact-point in the socket of the fuse-block (not shown) and the screw-shell 4 being adapted to contact with said socket, which is threaded in like manner as said cap.

Within the chamber 2' formed by the lining 2 and diaphragm 12 is the fuse-wire or conductor 14, which is secured at one end in any suitable manner; such as by soldering, within the eyelet 13, and its opposite end is secured in any suitable manner, such as by soldering, to one of the flanges 11.

An insulating ring 15, preferably formed of paper, is placed over the outer face of the rim 7 and outer flange portions 9' on the recessed portions 8 of the shell 4, and is secured thereto, in any suitable manner, such as by pasting.

It will thus be seen that my improved fuse-plug is of such a construction that it will do away with certain and separable parts generally employed in this class of plugs, and all the parts of the device being securely held together there is no liability of any of the parts becoming loose or separated. The cover or diaphragm being held tightly closed on the plug will enable the fuse-wire or conductor to be inclosed tightly within the plug, so that dust, moisture, etc., will be excluded, while such cover will also enable such wire to be visible at all times in order to see if such wire is broken or burnt out. The cover or diaphragm being supported by the usual screw-shell will do away with the usual porcelain body ordinarily employed in this class of goods, and thereby enable a great saving in cost of material.

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 lining of insulating material, a screw-shell around said lining, channel portions at one end of the shell forming outwardly extending flanges, inwardly extending flanges on said shell end, a rim supported between said outwardly extending flanges, and a cover supported between said outwardly extending inner flanges and said inwardly extending flanges.
2. A fuse-plug comprising a lining of in-

insulating material, a screw-shell around said lining, channel portions at one end of the shell forming outwardly extending flanges, inwardly extending flanges on said shell end between said portions, a rim supported between said outwardly extending flanges, and a cover extending between said outwardly extending inner flanges and said inwardly extending flanges.

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

DAVID E. BOWN.

Witnesses:

T. B. HUMPHRIES,

J. N. COOKE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."