

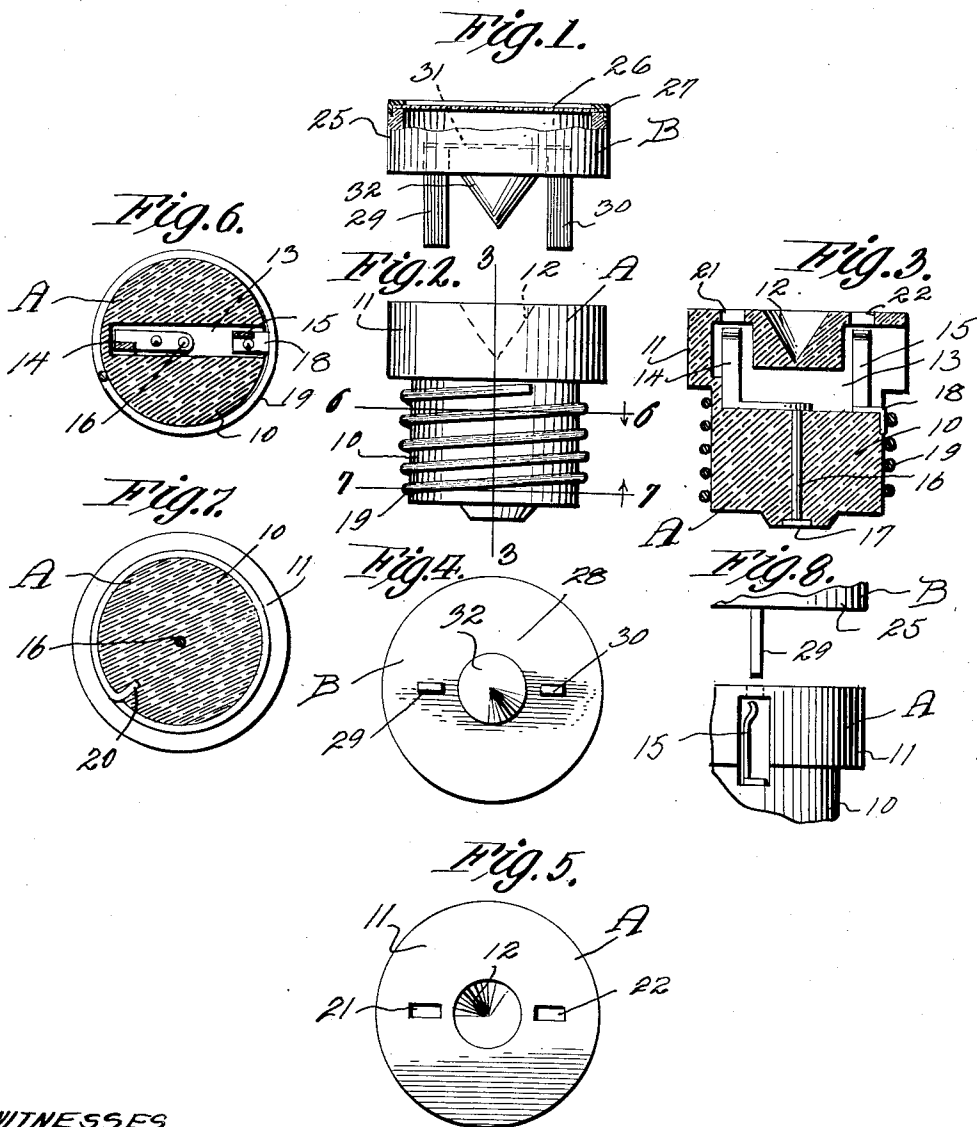
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H. J. BERRIAN

FUSE PLUG

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WITNESSES

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HAROLD J. BERRIAN, OF FISHERS ISLAND, NEW YORK.

FUSE PLUG.

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To all whom it may concern:

Be it known that I, HAROLD J. BERRIAN, a citizen of the United States, residing at Fishers Island, in the county of Suffolk and State of New York, have invented certain new and useful Improvements in Fuse Plugs, of which the following is a specification.

This invention relates to improvements in fuse plugs and the primary object of the invention is to provide means whereby fuse plugs of the correct amperage can only be used with a wiring system, thereby effectively preventing accidents caused by the use of fuse plugs of different amperages with electric lighting system requiring a certain fuse plug of a certain amperage.

A further object of the invention is to provide a fuse plug embodying a body portion and a removable fuse plug portion, the parts being so constructed, that the fuse portion of the desired amperage can only be used with the body portion.

A further object of the invention is to provide novel means for constructing the body portion whereby the same, when once inserted in a socket, will be prevented from being removed therefrom by unauthorized persons and thus effectively prevent the body portion being removed and an ordinary fuse plug associated with the socket in lieu thereof.

A still further object of the invention is to provide an improved fuse plug of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings; in which drawings:

Figure 1 is a side elevation of the fuse portion of the improved fuse plug showing the same partly broken away.

Figure 2 is a side elevation of the body portion of the improved fuse plug.

Figure 3 is a diametric section through the body portion taken on the line 3—3 of Figure 2.

Figure 4 is a bottom plan view of the fuse portion of the improved fuse plug.

Figure 5 is a top plan view of the body portion of the improved fuse plug.

Figure 6 is a horizontal section taken on the line 6—6 of Figure 2.

Figure 7 is a horizontal section taken on the line 7—7 of Figure 2.

Figure 8 is a detail fragmentary section illustrating the means of associating the fuse and the body portion of the improved fuse plug together.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates the body portion of the improved fuse plug and B the fuse portion of the improved plug.

The body portion of the plug A is preferably formed of porcelain or some other insulating material and includes cylindrical stem 10 having the enlarged portion 11 formed on the upper end thereof. This enlarged portion 11 is provided at its axial center with a depressed conical socket 12, for a purpose, which will hereinafter more fully appear. This socket forms an important and vital part of my invention. The body A is provided intermediate the stem 10 and the enlarged portion 11, with the hollowed out chamber 13 and in this chamber are fitted contacts 14 and 15, which can be formed with suitable electric conducting resilient material. As shown the contact 14 is connected with an axial lead 16 which extends through the stem 10 and which has connected therewith the axially disposed contact button 17. The contact 15 is connected as at 18, with the outer contact wire 19, which will now be described. The stem 10, is not provided with the usual metal shell provided with struck-in threads but has coiled thereabout in lieu of the shell, the resilient electric conducting wire 19, the inner or lower end of which is embedded or anchored as at 20 in the stem. The upper end of the wire is left free, for a purpose, which will now be described.

It is obvious that when the body A is threaded into a socket, that the lower end of the wire will be held taut and thus permit the easy threading of the plug in the socket. However, when an attempt is made to unthread the body A from the socket it is obvious that the wire will have a tendency

to uncoil and thus bind against the threads of the socket and effectively prevent the unloosening and removal of the body. This of course prevents the association of ordinary types of fuse plugs with the socket.

The fuse portion B of the improved fuse plug embodies an annular hollow body 25 the top of which is covered by a suitable piece of mica or other transparent material 26, which can be held in place by a retaining ring 27. This annular hollow body 25 is formed upon a suitable bottom wall 28, which supports contacts 29 and 30, which are adapted to be inserted in the openings 21 and 22 formed in the body A and thus engage the contacts 14 and 15 carried by the body. These contacts 29 and 30 are adapted to be bridged by any suitable preferred type of fusible wire, which is adapted to carry a current of a predetermined amperage. The axial center of the lower wall 28 is provided with a conical extension or knob 32 which is of the same shape and configuration as the conical socket 12, which permits the easy association of said parts A and B and the conical knob or extension 32 also forms a convenient guide for facilitating the easy placing of the parts together.

It is obvious however that the part B which is provided with its conical knob 32 could not be associated with any other body unless provided with a companion socket for the same. It is of course the intention to provide plugs of different amperages

with different types of knobs and recesses so that other parts of plugs of the same amperage can be associated together.

From the foregoing it can be seen that an improved fuse plug has been provided of exceptionally simple and durable character, which will effectively prevent the use of different plugs of different amperages being used with a lighting circuit calling for a particular plug of a particular amperage.

Changes in details may be made without departing from the spirit or the scope of this invention.

What I claim as new is:—

A fuse plug comprising a body portion including a stem, a cylindrical extension formed on one end of the stem, the stem extension having a chamber therein, contacts fitted in the chamber, a fuse carrying portion including a pair of contacts adapted to be detachably fitted in said chamber and engage the contacts therein, a fuse wire carried by said fuse carrying portion connecting the contacts thereof together, an extension formed on the inner face of the fuse carrying portion, and said body portion having a socket for receiving said extension.

In testimony whereof I affix my signature in presence of two witnesses.

HAROLD J. BERRIAN.

Witnesses:

FRANK BROOKS,
BERTHA E. BROOKS.