

J. H. HANSON.
ELECTRIC FUSE PLUG.
APPLICATION FILED DEC. 21, 1908.

949,630.

Patented Feb. 15, 1910.

Fig. 1.

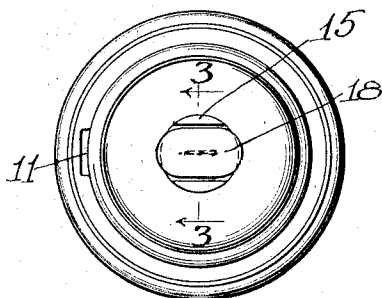


Fig. 2.

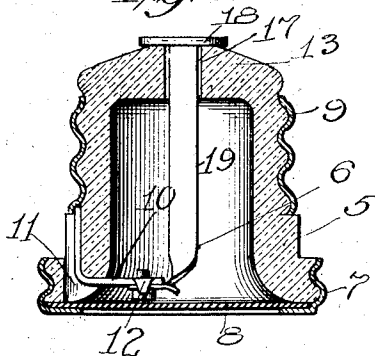
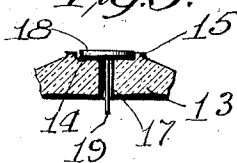


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. HANSON, OF CHICAGO, ILLINOIS.

ELECTRIC FUSE-PLUG.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN H. HANSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Fuse-Plugs, of which the following is a specification.

My invention relates to improvements in electric fuse plugs, and has for its salient object to provide a fuse and plug of cheap, simple construction, so constructed that a fuse may be inserted in place with the greatest ease and expedition.

A further object is to provide a fuse plug which can not be exteriorly wired to "jump" the terminals.

In the drawing, wherein I have shown an embodiment of my invention; Figure 1 is a plan view of a plug and fuse enlarged; Fig. 2 is a vertical cross section, and Fig. 3 is a sectional detail on line 3—3 of Fig. 1.

In the drawing shown, 5 indicates in general an insulating base or plug body, having a longitudinal recess or socket 6 therein, the open bottom of the socket being provided with a cap 7, which may be removable, as shown, or spun on, said cap being preferably partially constituted of a translucent plate 8, of mica or the like, and the base having exteriorly mounted thereon a threaded shell 9 to which is connected a terminal member 10 extending through an opening 11 in the wall of the base into the interior of the socket, and there provided with a terminal clip 12. The shell, 9, or rim contact does not extend clear to the top of the body 5, but is short enough to leave exposed above it a zone 9' of the threaded exterior of the porcelain base.

The inner end of the base 5, which I will hereafter term merely the end, is preferably thickened considerably, as indicated at 13, tapering or rounding upward to a small top plateau 14, from which project, at diametrically opposite points segmental guides or studs 15, and said thickened end has made therethrough a single central aperture 17, preferably a narrow slit. The fusible member consists of a fusible stem adapted to pass through the opening 17, and a head permanently and fixedly connected with the stem adapted to rest upon the plateau 14, itself to constitute the center contact of the plug. Specifically 18 indicates the head, preferably of elongated, oval shape, adapted to rest upon the plateau 14, with its sides con-

finied between the guides 15, its ends slightly overhanging the edges of the plateau, and its top or outer face extending beyond the upper surfaces of the guides 15, said head being made integral with or having attached thereto the fusible stem 19, preferably in the form of a ribbon, shaped to nicely fit in the slot 17 and of appropriate length to extend to the terminal clip 12 of the shell for connection therewith.

To wire a plug, the cover 7 being removed, a fuse wire ribbon 19 slipped in through the end slit 17, so that the head 18 rests firmly in the position described on the plateau 14, the free end of the fuse wire is connected to the clip 12, as shown in Fig. 2 and the cap 7 applied. As both of the operations of threading the fuse into the plug end and connecting the fuse to the clip 12 are performed with the parts easily accessible, the connections may be effected very rapidly. When in place the head of the fuse wire constitutes the center contact so that intimate connection of the fuse wire at one of its two contact points is insured with absolute positiveness; and the other point of connection, to the rim terminal, is always open to inspection through the mica plate of the cap. When a fuse is burned out the upper portion thereof may readily be removed, as the ends of the head 18 overhanging the edges of the plateau at the center of the plug end enable the finger nails or any appropriate instrument to get under the contact member 18 to pry or pull it out. The narrowness of the slit 17, practically makes it impossible to wire the fuse plug with ordinary hard-metal wire, and the shortness of the rim or shell, and the presence of the threaded porcelain zone 9' thereabove, minimizes the possibility of putting a "jumper" permanently across the end of the plug from one side of the rim to the other, for contact with the center contact of the socket, as may readily be done with the plugs now commercially standard.

Having described my invention what I claim is:

1. In a fuse plug, a socketed base having an end aperture, a rim, and a detachable fuse wire enlarged at one end to provide an integral flat head, said wire passing through the aperture in the end of the socket and removably connected to the rim, the head of said wire constituting the center contact of the plug.

2. In a fuse plug, a socketed base carrying a rim member, and a rim terminal extending into the socket near its lower end, said socket providing a single central aperture at its upper end, and a detachable unitary integral structure having an enlarged end consisting of a fuse wire, the small part passing through the said aperture from outside to inside, and connected with the rim terminal, said fuse wire being provided with an integral, enlarged flat disk bearing on the exterior of the base, and constituting a center contact.
3. In a fuse plug, an insulating base having a central recess, a thickened end, centrally apertured and externally terminating in a plateau, and guides flanking said plateau; a rim provided with a terminal extending into the interior of the recess, and a unitary integral and detachable fuse-and-contact structure comprising a head larger through one diameter than another,

seated on the plateau between the guides, and overhanging the edges of the plateau, and a fuse wire extending through the aperture and secured to the rim terminal within the recess.

4. In a fuse plug, an insulating socket base having an end centrally provided with a narrow slit, a rim contact on said base, and a detachable fuse structure comprising a head to form the center contact, and a fuse wire ribbon radially secured to the head and extending through said slit and connected with the rim.

5. The combination with a holding means of, a fuse having an enlarged end part to constitute thereof an electric terminal.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

JOHN H. HANSON.

In the presence of—

GEO. T. MAY, Jr.,
MART F. ALLEN.