No. 745,969. PATENTED DEC. 1, 1903.

J. B. McCARTHY.

ELECTRIC FUSE HOLDER.

APPLICATION FILED DEC. 3, 1902.

NO MODEL.

Fig. 1.

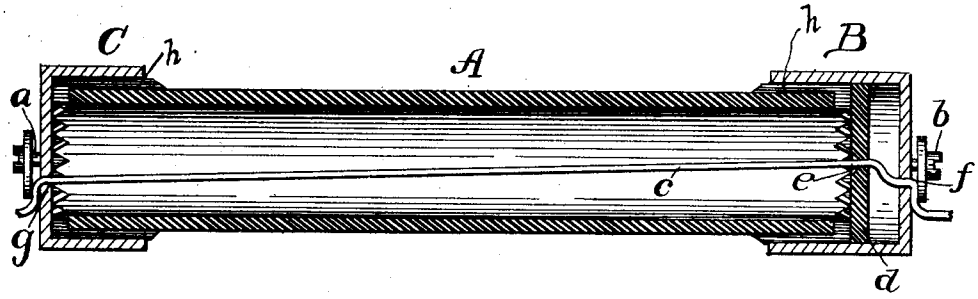


Fig. 2.

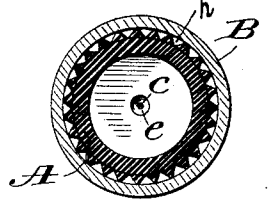


Fig. 4.

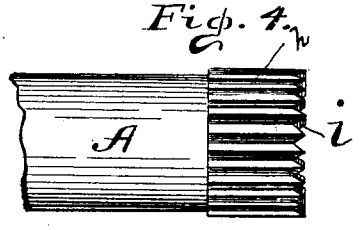
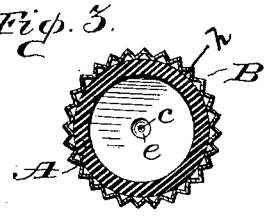


Fig. 3.



WITNESSES:

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No. 745,969. Patented December 1, 1903.

UNITED STATES PATENT OFFICE.

JAMES B. McCARTHY, OF DETROIT, MICHIGAN.

ELECTRIC-FUSE HOLDER.

SPECIFICATION forming part of Letters Patent No. 745,969, dated December 1, 1903.

Application filed December 3, 1902. Serial No. 133,791. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. McCARTHY, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Electrical-Fuse Holders, of which the following is a specification.

My invention relates to an improvement in electric-fuse holders in which a wire-conductor of suitable material is made to carry the electric current and is inclosed in a suitable casing; and its object is to provide a fuse-holder which cannot be "overfused"—viz., cannot be used with a larger fuse than the size for which it is designed.

A further object of my invention is to provide a fuse-holder with a novel and improved means of escape for the smoke and gases from the interior of the casing to the outer air when the fuse is burned out.

In the drawings accompanying this specification, wherein a preferable embodiment of my invention is shown and in which like numerals of reference refer to similar parts in the several views, Figure 1 is a longitudinal section of my improved fuse-holder with the end caps secured thereon. Fig. 2 is a transverse section through one of the end caps and the casing. Fig. 3 is a similar view of a slightly-modified form of my invention; and Fig. 4 is a side elevation of one end of the casing, showing the corrugations in the end for the escape of gases.

Referring now more particularly to the drawings, A is a casing made from fiber, crockery, or any suitable non-conducting material, and B and C are metallic end caps removably secured thereon. The casing A is provided at each of its ends with a plurality of longitudinally-disposed ducts *h*, which when the metallic end caps are in position on the casing form an escape for gases from the interior of the casing when the fuse is burned out. The ducts *h* may be formed either by constructing the casing with a plurality of longitudinally-disposed grooves or depressed portions or with a plurality of longitudinally-disposed raised portions or corrugations and are preferably formed in the casing when it is molded. Communication is established between the ducts *h* and the interior of the casing by forming in the edges of the casing a plurality of notches *i*. To prevent the use of larger fuse-wires in the casing than the size for which it is designed, I secure in one of the end caps B the overfuse-guard *d*. This guard *d* consists of a diaphragm or disk of substantially the same diameter as the interior of the end cap B and is provided at its center with the perforation *e*, through which the fuse-wire *c* is adapted to pass. The gage of the perforation *e* in the overfuse-guard is stamped in plain figures upon the end cap B to indicate the size of fuse-wire for which the fuse-holder is adapted. The end caps B and C are provided with perforations *f* and *g* for the passage of the fuse-wire *c* and with the usual binding-screws *a* and *b* for securing the ends of the fuse-wire.

When I construct the casing A of fiber, I prefer to construct it in the manner shown in Fig. 3 of the drawings. In this instance I form the ends of the casings smooth and the edge with the notches *i* and corrugate the bodies of the metal caps to form the ducts for the escape of the gases from the interior of the casing.

I do not desire to limit myself to the precise form and construction shown in the drawings, inasmuch as it is obvious that many minor changes might be made to the construction illustrated therein without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a fuse-holder, the combination with a casing, of a removable end cap therefor, and ventilating-spaces between the overlapping portions of the cap and the casing.

2. In a fuse-holder, the combination with a casing provided at its ends and on its exterior with a duct, of caps on the ends of said casing.

3. In a fuse-holder, the combination with a casing provided at its ends with longitudinally-disposed ducts and at its edges with notches forming a passage with said ducts from the interior to the exterior of said casing, of caps on the ends of said casing.

4. In a fuse-holder, the combination with a casing provided at its ends and on its ex-

terior with a plurality of longitudinally-disposed ducts, of removable caps on the ends of said casing.

5. In a fuse-holder the combination with a casing of end caps for said casing, ventilating-openings between said caps and the casing and a partition perforated for the reception of a fuse-wire in one of said end caps.

6. In a fuse-holder, the combination with a casing provided at its ends with longitudinally-disposed ducts, of caps on the ends of said casing and a partition perforated for the reception of a fuse-wire in one of said caps.

7. In a fuse-holder, the combination with a casing provided at its ends with longitudinally-disposed ducts and at its edges with notches connecting said ducts with the interior of the casing, of caps on the ends of said casing, and a partition perforated for the reception of a fuse-wire in one of said caps.

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

JAMES B. McCARTHY.

Witnesses:

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ALBERT F. WOOD.