May 25, 1926. 1,585,646

H. T. BUSSMANN

ELECTRIC FUSE

Filed May 7, 1919

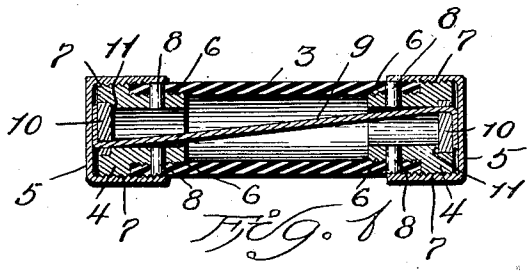


Fig. 1.

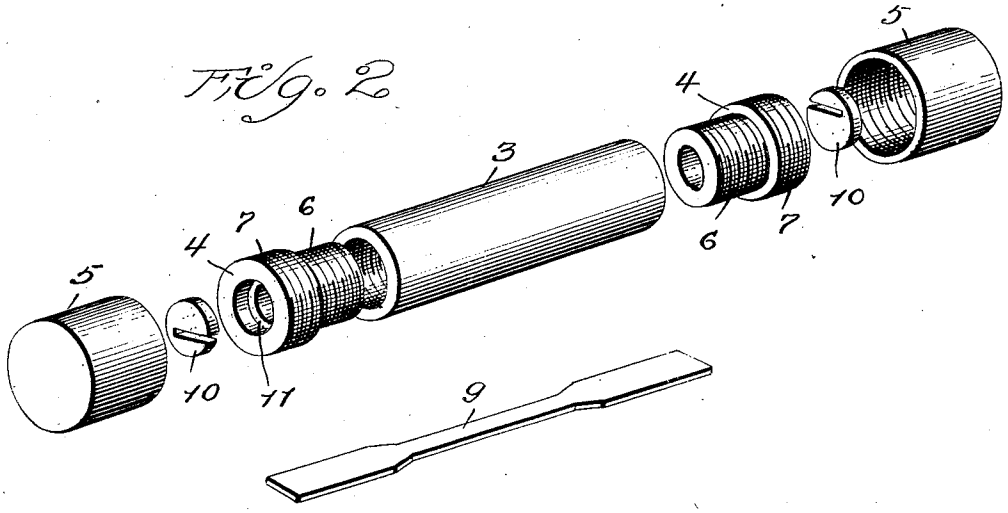


Fig. 2.

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UNITED STATES PATENT OFFICE.

HENRY T. BUSSMANN, OF ST. LOUIS, MISSOURI.

ELECTRIC FUSE.

Application filed May 7, 1919. Serial No. 295,373.

My invention relates to electric fuses and refers particularly to renewable ferrule contact cartridge fuses; yet I do not limit my invention to this type as certain of my improvements are likewise desirable in other types of fuses.

The object of my invention is to provide a fuse that is easily renewed and that is not affected by the varying dimensions of fiber.

These advantages of my invention will be more readily understood by reference to the accompanying drawings, which show a preferred embodiment of my invention. In describing the device shown in the drawings hereto attached and described in the specification, I do not limit my invention to the precise form, shape or construction of the fuse shown, or to the several parts thereof, as various alterations can be made without changing the scope of my invention.

Fig. 1 is a view of my fuse showing a longitudinal section thereof. Fig. 2 is a perspective view of the various parts thereof.

In the drawings, 3 is a casing, 4 is a ring-shaped member partly within the casing and which preferably is arranged so that the cap or ferrule 5 may be held thereon. This member may be attached to the casing by rivets or other means, but I prefer to use threads as shown at 6. By reason of its being attached to the inside of the casing, the shrinking of the fiber more firmly grips the member. This is of great advantage over such type of fuses as have the fittings on the exterior of the casing, as the shrinking of the fiber then permits the fittings to become loose and permits the escape of flame and gas. Where the cap or ferrule is directly attached to the fiber, great difficulty is experienced in removing the cap when the fiber swells. I eliminate this trouble by providing cap or ferrule holding means, preferably threads 7, on the member 4, which is preferably made of metal or other material of unchanging dimensions. The member is held against rotation by means of the rivet 8.

While the cap or ferrule may have its outer end arranged in several different ways, I have shown this cap with a plain flat inner surface to press the fuse strip 9 down on the washer 10.

The fuse strip 9 has its end bent over on the washer 10. This washer may be of several different shapes, but I have shown this washer full round with a slot to pass the strip 9. While this washer may be seated in several different ways, depending upon its shape, I prefer to position it by means of the seat 11.

I claim as my invention:

1. In a renewable ferrule contact fuse, a fibre casing, a metallic ring shaped member having a portion externally threaded substantially throughout its length, adapted to fit within and engage threads in the casing and having a shouldered portion beyond the casing abutting on the end of the casing; said shouldered portion being externally threaded substantially throughout its length; a seat for a fuse link at the outer end of the ring shaped member, which seat substantially closes the opening in the ring shaped member, and a metallic cap, interiorily threaded, adapted to press and hold a link between it and the seat; said cap having sides extending over the shoulder of the metallic member and over a portion of the fibre casing so as to provide a substantial contact surface for the fuse when inserted in contact clips.

2. In a renewable ferrule contact fuse, a fibre casing, a metallic ring shaped member having a portion externally threaded substantially throughout its length, adapted to fit within and engage threads in the casing and having a shouldered portion beyond the casing abutting on the end of the casing; said shouldered portion being externally threaded substantially throughout its length; a washer seated on the metallic member at the outer face thereof and substantially closing the opening in the ring shaped member and acting as a seat for a fuse link, and a metallic cap, interiorily threaded, adapted to press and hold a link between it and the washer; said cap having sides extending over the shoulder of the metallic member and over a portion of the fibre casing so as to provide a substantial contact surface for the fuse when inserted in contact clips.

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