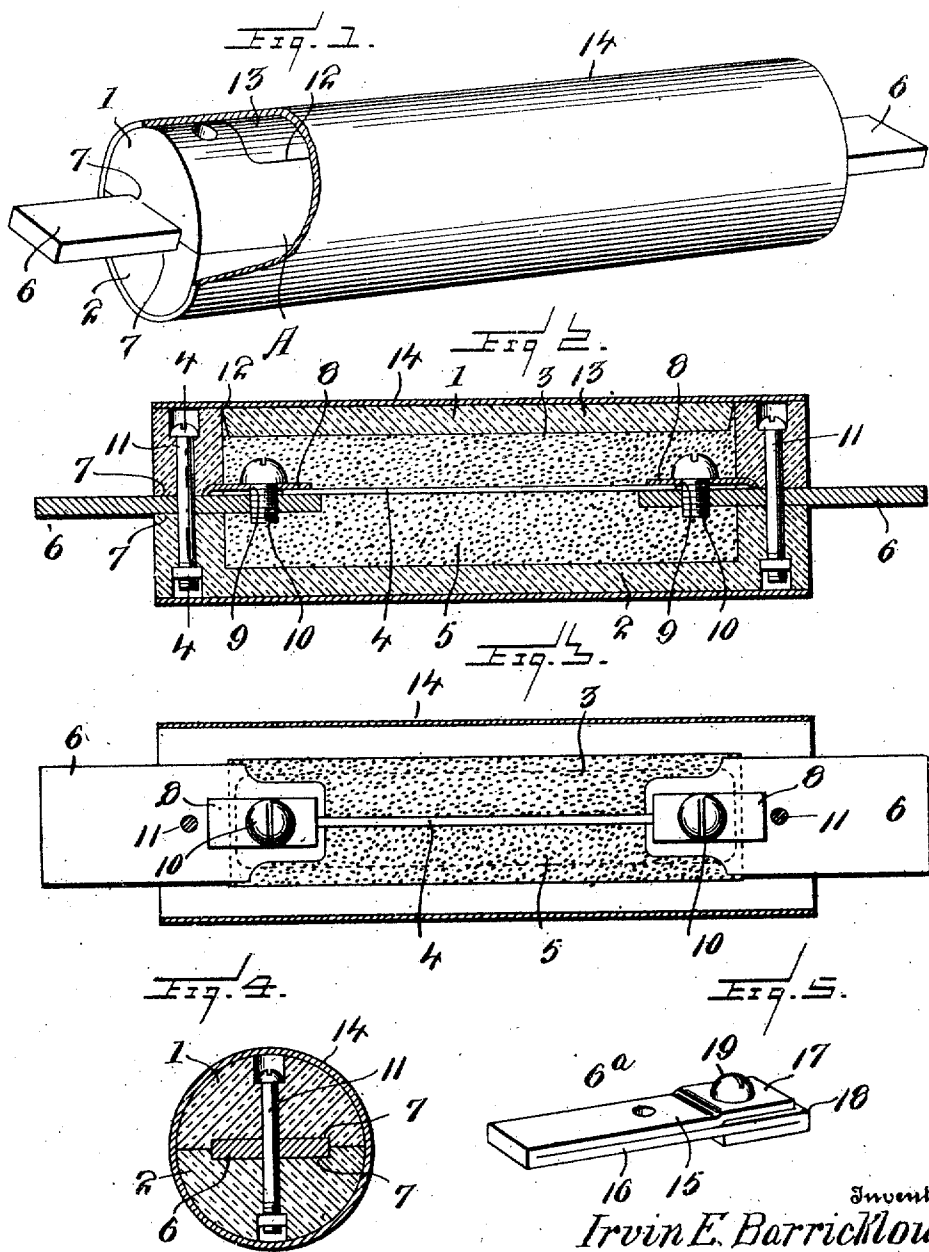


I. E. BARRICKLOW.
ELECTRIC FUSE.
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973,250.

Patented Oct. 18, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

IRVIN E. BARRICKLOW, OF ANTIOCH, CALIFORNIA.

ELECTRIC FUSE.

973,250.

Specification of Letters Patent.

Patented Oct. 18, 1910.

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To all whom it may concern:

Be it known that I, IRVIN E. BARRICKLOW, a citizen of the United States, residing at Antioch, in the county of Contra Costa and State of California, have invented new and useful Improvements in Electric Fuses, of which the following is a specification.

This invention relates to a non-arcing fuse or cut-out for electric circuits and relates more particularly to a fuse of the inclosed type.

The invention has for one of its objects to improve and simplify the construction of fuses of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use and so designed that the fusible element can be applied with great facility and despatch and with perfect safety to the electrician.

Another object of the invention is the provision of an improved casing for the fusible element and fire proof insulating powder, whereby access to the casing can be had for removing the burnt stubs of the fusible element for replacing by a new element, the latter being secured to the terminals or blades by simple clamping means.

With these objects in view, and others as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrates one embodiment of the invention, Figure 1 is a perspective view of the fuse, a portion of the outer shell broken away. Fig. 2 is a vertical longitudinal sectional view of the fuse. Fig. 3 is a horizontal sectional view thereof. Fig. 4 is a transverse section on line 4-4 of Fig. 2. Fig. 5 is a perspective view of the modified form of the blade and terminal piece.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawings, A designates the body of the device, which is made of porcelain, or other equivalent insulating material and is composed of two sections 1 and 2, that are divisible longitudinally of the body. The body A is provided with a chamber 3 formed partly in each section for containing the fusible element 4 and the fire proof powder 5, in which the element is embedded.

Extending into the end of the body A and between the sections thereof are blades or external pieces 6 that are set in recesses 7 in the opposed face of the sections 1 and 2 of the body and the inner ends of these blades 6 are provided with clamping plates 8, which secure the fusible element thereto. These plates have apertures 9 through which pass headed screws 10, which are threaded in the blades 6 and by loosening the screws, the fusible element can be inserted under the clamping plates, or between the latter and blades. The blades are held in place by screws 11, which serve also to connect the two sections 1 and 2 of the body.

Access to the fusible element 4 is provided through a longitudinal opening 12 in the section 1 of the body A, which opening is normally closed by a cover 13, that sets into the opening so that the outer surface of the cover will be flush with the outer face of the body A. This cover is held in place by a tubular shell 14, which slides longitudinally on and off the body A, but having a snug fit thereon. By this means, no special fastening is required for the cover plate 13, and by merely removing the shell longitudinally the cover is accessible for the purpose of renewing the fusible element. The tubular cover retainer or shell 14 covers the joint between the cover 13 and the body or casing A so that there is no danger of moisture entering the casing and making the powder damp.

In Fig. 5 a modified form of blade or terminal piece 6^a is shown, the same consisting of a strip of metal doubled back on itself to form parallel portions 15 and 16, the free extremity of the portion 15 being offset at 17 to form a jaw cooperating with the extremity 18 of the portion 16 to grip the end of a fusible element, the jaw being clamped by a screw 19.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and

that such changes may be made when desired as are within the scope of the invention.

What I claim as new and desire to secure by Letters-Patent is:

1. In an electric fuse including a casing provided with an opening, a cover for the opening, a fusible element in the casing, and a retainer for the cover slidable longitudinally on the casing and covering the joint between the said cover and casing.
2. In an electric fuse including a casing provided with an opening, a cover for the opening, a fusible element in the casing, and a tubular retainer for the cover removable from the casing.
3. In an electric fuse, comprising a casing having a longitudinal opening, a cover for the opening, a fusible element in the casing, and a retainer surrounding the casing to form the sole means for holding the cover in place and closing the joint between the said cover and casing.
4. A device of the class described, comprising a casing having an opening, a cover set into the opening, a current conducting means in the casing, and a tubular retainer surrounding the casing and removable therefrom to hold the cover in place.
5. A device of the class described, comprising a casing provided with an opening, a cover for the opening, and a cover retainer slidably mounted on the casing and extending over the cover and removable from either end of the casing.
6. A device of the class described, com-

prising a container split longitudinally into two sections, one of the sections having an opening, a cover set into the opening, terminal pieces extending into the casing, means for securing the sections of the casing together, a fusible element connected with the terminal pieces, and a hollow cover retainer surrounding the casing and freely slidable thereon, said retainer being of a greater length than the cover to cover the joint between the latter and section into which the cover is set.

7. An electric fuse, comprising a casing, having openings at opposite ends, terminal pieces extending into the openings, bolts passing transversely through the ends of the casing and through the terminal pieces, clamping plates on the inner ends of the terminal pieces, a fusible element having its ends secured between the clamping plates and terminal pieces, clamping screws passing through the plates and terminal pieces, said casing being composed of sections divisible in the plane of the terminal pieces and held together by the said bolts, one of the sections having an opening through which the fusible element is accessible, a cover for the opening, and a removable shell of the same length as and surrounding the casing to form a retainer for the cover.

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

IRVIN E. BARRICKLOW.

Witnesses:

J. EDWARD RAISCH,
A. C. HARTLEY.