W. HANDLEY & O. M. NICKERSON.

PROTECTOR FOR FUSIBLE CONDUCTORS.

APPLICATION FILED AUG. 6, 1914.

1,172,282. Patented Feb. 22, 1916.

Fig. 1.

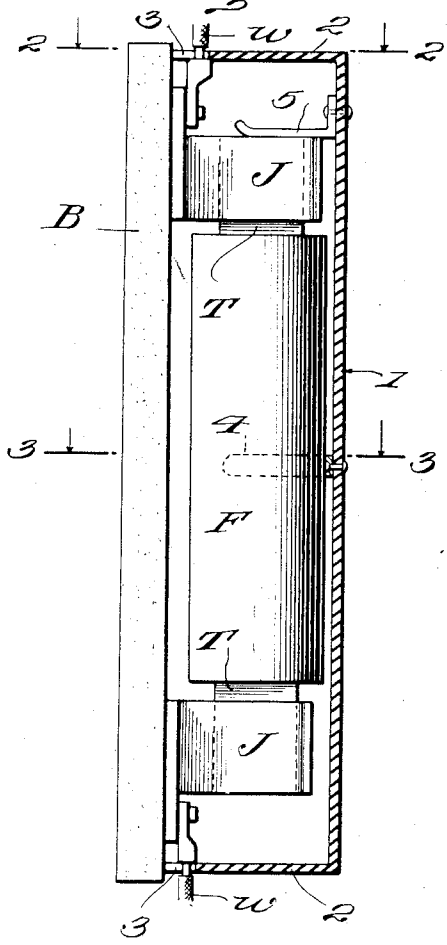


Fig. 4.

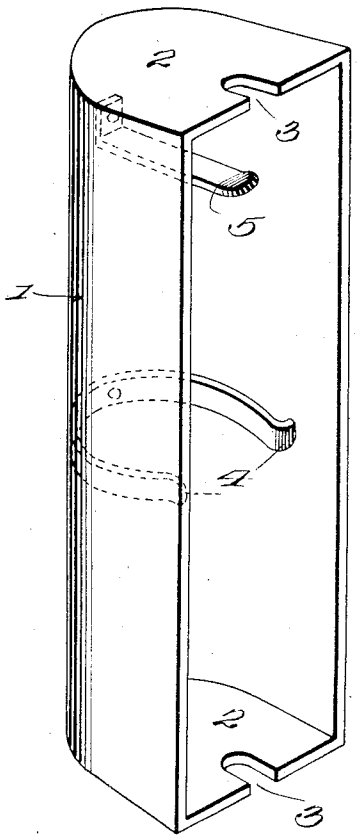


Fig. 2.

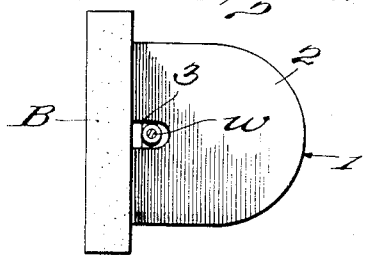
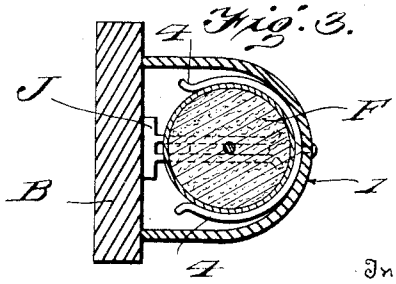


Fig. 3.



Witnesses

O. R. Pierce

C. Semmes

Inventors

Walter Handley

and

O. M. Nickerson.

By H. B. Willson & Co.

Attorney

UNITED STATES PATENT OFFICE.

WALTER HANDLEY AND OSCAR M. NICKERSON, OF MADISON, MAINE.

PROTECTOR FOR FUSIBLE CONDUCTORS.

1,172,282. Specification of Letters Patent. Patented Feb. 22, 1916.

Application filed August 6, 1914. Serial No. 855,434.

To all whom it may concern:

Be it known that we, WALTER HANDLEY and OSCAR M. NICKERSON, citizens of the United States, residing at Madison, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Protectors for Fusible Conductors; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to electrical appliances and more particularly to coverings for fusible conductors.

It is a well known fact that there is considerable danger, prevalent with the use of the types of fuses in every day use. This danger is due to the fact that the jacks of the fuse blocks are exposed and to the fact that the fuses themselves, when ruptured, become dangerous on account of the flash of flame which occurs.

The primary object of the invention, is to provide a simple and efficient covering for fuses of this character, which will effectually overcome the objectionable features above mentioned.

A secondary object of the invention, is to provide simple means for securing the protector or covering, yieldingly in position over the fuse.

With the above objects in view, the invention resides in certain novel features of construction, herein described and claimed and shown in the drawings wherein—

Figure 1 is a vertical section through the invention, showing the same applied to an inclosed fuse; Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1; Fig. 3 is a similar view on the line 3—3 of Fig. 1; and Fig. 4 is a perspective view of the invention removed from the fuse.

In the accompanying drawings, we have illustrated a fuse block B, the usual jacks J rigidly mounted thereon, current conducting wires *w* connected to said jacks, and an inclosed fuse F, the latter having the usual terminals T for engagement with the jacks J. This form of fuse and mounting is shown for the purpose of illustrating one form of fuse in connection with which our invention may be employed.

Coming now more particularly to the details of the present invention, we have shown our protector in the form of a casing 1 of insulating material, said casing being of any suitable shape in cross section, but preferably semi-cylindrical, and having one of its sides entirely open, its opposite ends being closed by end walls 2 which may be formed integrally with the remainder of the casing or may be separate therefrom. As clearly shown in Fig. 1, the casing is adapted to be placed over the fuse F and its connections with the fuse block B. When in this position, the inner edge of the casing 1 is adapted to contact with the outer face of the fuse block B, this being made possible, by providing the end walls 2 with notches 3, said notches being formed on the open side of the casing and being adapted for the reception of the wires *w*.

For the purpose of removably securing the casing in position, we preferably provide a pair of resilient fingers or clips 4 which are carried by and project into the interior of the casing 1 and are adapted to yieldingly embrace the fuse F. In order to prevent the casing 1, from dropping, when the fuse F stands vertically, we provide said casing with an inwardly extending finger 5, said finger being adapted to overlie the uppermost jack J.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that we have produced an extremely simple yet efficient covering for fuses of the character generally employed. It will also be seen that the entire covering or casing, may be removed, during which operation, the fingers 4 will spring outwardly and allow the fuse F to remain in its proper position between the jacks J.

It may here be stated that the notches 3 are of such size as to allow the gases, generated by the blowing of the fuse, to readily escape.

Various changes in form, proportion and minor details may be resorted to without departing from the spirit of the invention as claimed.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A fuse protector comprising a casing closed at its opposite ends and open at one of its sides, the portions of said ends at the open side of said casing being notched for the reception of the current conducting wires of a fuse block, a finger projecting inwardly from said casing near one end

and adapted to contact with one of the jacks of said block and a pair of spring fingers projecting inwardly from said casing and adapted to yieldingly embrace a fuse.

2. A protector for application to an upright fuse having its opposite ends supported by a pair of jacks, said protector comprising a casing closed at its opposite ends and open at one side, said casing being adapted to form a covering for said fuse and said jacks, a finger projecting inwardly from said casing near its upper end and designed to rest upon the uppermost of said jacks and a U-shaped spring clip secured to said casing below said finger and adapted to embrace said fuse.

3. A fuse protector comprising an elongated casing closed at its opposite ends and open on one side, said casing being substantially semi-cylindrical, the end walls thereof being provided with notches for the reception of current conducting wires of a fuse block, and a U-shaped fuse embracing spring housed transversely in said casing and secured thereto at its bend, the two arms of said spring being bent to conform with the bend in said casing, the free ends of said arms turning inwardly from said casing and then deflecting outwardly and disposed at the open side of the casing to facilitate the engagement of the spring with a fuse.

4. A fuse protector comprising a casing open on one side, a resilient clip secured in said casing and adapted to engage a fuse, and a finger secured in said casing, said finger and said clip forming a means respectively for supporting and holding said casing in place on the fuse.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

WALTER HANDLEY.
OSCAR M. NICKERSON.

Witnesses:
GERTRUDE GILMAN,
JOS. P. LANCASTER.