Sept. 17, 1929. C. F. WILSON 1,728,319

TERMINAL PROTECTOR

Filed April 27, 1928

Fig. 1.

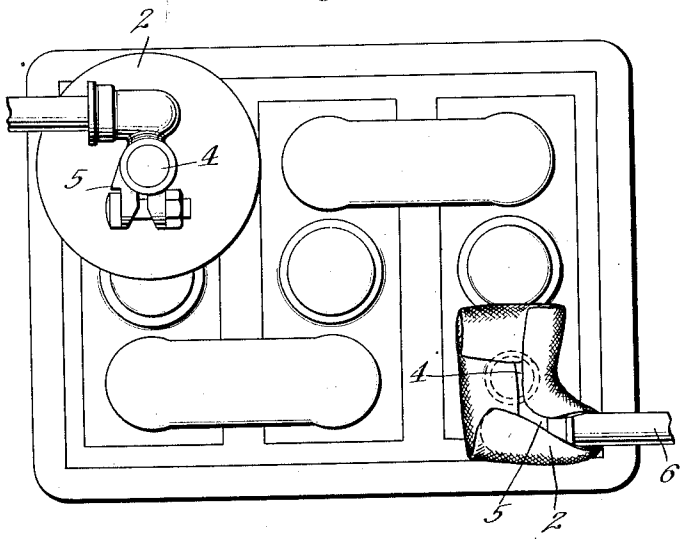


Fig. 2.

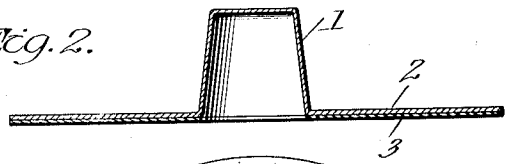
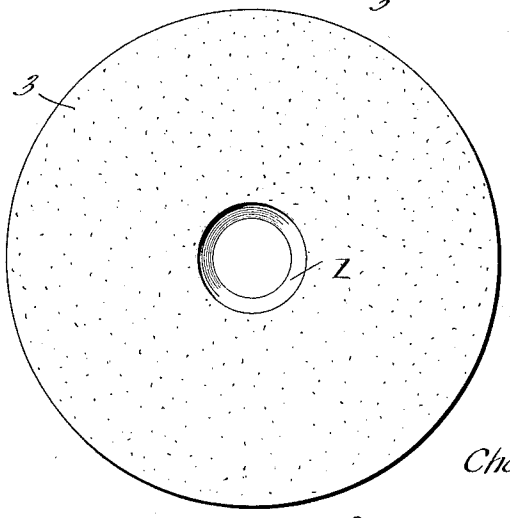


Fig. 3.



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TERMINAL PROTECTOR

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This invention relates to a protector or shield for use particularly upon storage batteries to protect the terminal and connection, including the usual clamp, from the corrosive action of seeping acid.

As stated, the invention contemplates the protection of both the terminal and connection, and to this end comprises a flexible member having an opening or recess therein to receive the battery terminal and when in position the flexible portion, which is in the nature of a brim or flange, may be folded or bent to envelop the exposed parts and to remain in enveloped position.

The device, while preferably made of lead foil may, if desired, be formed of other elementary materials or alloys and the apron or brim itself may, if desired, be made of non-conducting material.

It will be understood that the device can be turned out from a single sheet of material upon a suitable die and is very simple to apply, affording a complete protection against corrosion of the parts which it is designed to protect, and has the very important advantage of cheapness as an article of manufacture.

In the drawings:

Figure 1 is a top view showing the invention applied,

Figure 2 is a section, and

Figure 3 is a bottom view.

The device is made upon a suitable die and is preferably composed of metal foil, although other flexible material may be utilized.

I have used lead foil, for instance, where the recess or sleeve is formed to surround the terminal, since it is a very simple operation to make the device from a single sheet of conducting material.

The flexible member or apron is formed with an opening or sleeve therein which is made of various sizes and in the case of a sleeve shaped to conform to that of the terminal.

While I have shown in the drawing a tubular sleeve or socket closed at one end it will be understood that various forms of openings may be employed to receive the terminal post.

Where the sleeve and apron are made of conducting material, or are made as an integral substance, it is desirable to insulate the undersurface of the sleeve by suitable material, such as wax paper or a layer of plastic insulator, both suitably cemented or secured to the flexible brim in a proper manner. Of course, the sleeve will not have any insulation, and where the apron itself is made of non-conducting material no insulation is required.

In the drawings I have indicated the opening or sleeve by the numeral 1 and the brim or flange by the numeral 2. The insulation upon the underside of the protector I have indicated at 3.

When the shield is placed in position with the terminal extending through the opening or sleeve, the usual clamp and connection are applied and thereafter the brim of flexible material is folded about the terminal connection as shown in Figure 1 and will remain in permanent envelop position about the connection and post. In this manner protection for the various parts of the connection are assured.

It will be noted that insulation 3 will be exposed and contact with any adjacent terminals or leads on the battery, and thus thoroughly insulate the terminal to which the device is applied.

The shape of the opening and of the sleeve will, of course, be varied in accordance with the terminal or post or other member to which it is applied. The position of the opening or sleeve with respect to the flexible flange or brim may likewise be varied from the center if the circumstances require it. In the same manner, the brim itself may be of various sizes and of a shape to conform to the particular connection which it is designed to envelop.

For purposes of illustration, I have shown a very conventional battery having posts 4, clamps 5 and conductors 6.

The invention, it will be observed, provides means for protecting the terminal with a sleeve of conducting material and for protecting the terminal connection as a whole by a flexible envelope which may be bent upwardly to completely and substantially enclose the exposed parts. In this manner cor-

rosion is to a very remarkable degree prevented and the life of the parts consequently lengthened.

I claim:

1. A battery terminal protector having an opening to receive the terminal post, a terminal post encircling sleeve of conducting material around said opening and a flexible portion bendable to envelop said terminal and its connection, said sleeve being disposed between the terminal post and an encircling connection.

2. A battery terminal protector formed of a single sheet of conducting material having a terminal receiving opening therein, a terminal sleeve around said opening adapted to be interposed between the post and a terminal connection and a portion flexible so that it may be formed to envelop the terminal and its connection, and be permanently positioned.

3. A battery terminal protector formed of a single sheet of conducting foil having a terminal receiving opening therein, a terminal sleeve around said opening and a portion flexible so that it may be formed to envelop the terminal and a connection therewith.

4. A battery terminal protector formed of a single sheet of conducting material having a terminal receiving opening therein, a terminal sleeve around said opening, a portion flexible so that it may be formed to envelop the terminal and a connection therewith, and insulation on one surface of said flexible portion.

5. A battery terminal protector comprising a terminal post receiving sleeve of conducting material surrounding a terminal post and disposed between the post and an encircling connection, said sleeve carrying a brim flexible relative to said sleeve and of sufficient width to envelop a terminal connection when bent with respect to said sleeve.

6. In a device of the class described, a protecting means having a socket therein adapted to receive a terminal post and to receive thereabout a connection encircling the socket wall, said means having a portion being flexible to form an envelope about the terminal connection.

7. In a device of the class described, a protecting means comprising a flexible portion having a socket therein adapted to receive a terminal post and to be interposed between the post and an encircling connection, insulation on said flexible portion, the said insulated flexible portion being bendable to provide an envelope for said post and connection.

8. A battery terminal protector having an opening to receive a terminal post, a terminal post encircling sleeve of conducting material around said opening and a flexible portion bendable to envelop said terminal post and a connection therewith, said sleeve having a closed end to cover the tip of a terminal post.

9. In combination, a battery having a terminal post and a connection therewith, a protector for said post and the connection, said protector having an opening receiving the terminal post, and a portion bent over the said post and connection forming an envelop therefor.

10. In combination, a battery having a terminal post and a connection, a protector for said terminal post and its connection having a sleeve fitted upon the terminal post within the connection, and a portion around said sleeve folded over the post and its connection and enveloping the same.

11. A battery terminal protector comprising a terminal post receiving sleeve formed of metallic sheet material, said sleeve having a portion formed to overlie the top of a terminal post and fitting the post within a connection and carrying a brim flexible relative to said sleeve and of sufficient width to envelop a terminal connection when bent with respect to said sleeve.

In testimony whereof I have hereunto set my hand.

CHARLES F. WILSON.