

E. W. JEFFERSON.
 TERMINAL SEAL FOR BATTERIES.
 APPLICATION FILED MAY 21, 1915.

1,168,078.

Patented Jan. 11, 1916.

FIG. 1

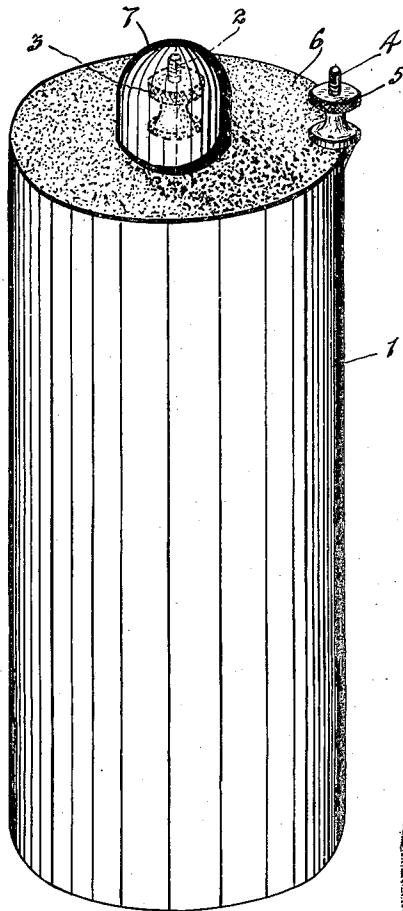


FIG. 3

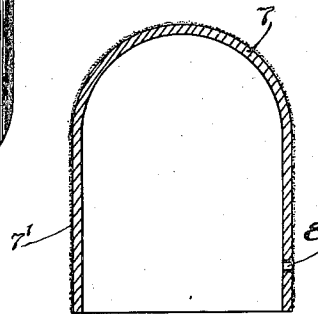
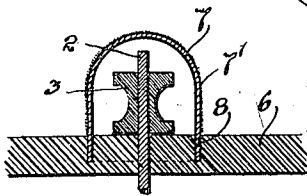


FIG. 2

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TERMINAL SEAL FOR BATTERIES.

1,168,078.

Specification of Letters Patent.

Patented Jan. 11, 1916.

Application filed May 21, 1915. Serial No. 29,554.

To all whom it may concern:

Be it known that I, ERNEST WALTER JEFFERSON, of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Terminal Seals for Batteries, of which the following is the specification.

The invention relates to improvements in terminal seals for batteries or other sources of electromotive energy and the object of the invention is to provide a seal for the terminal of a battery which will inclose the terminal and thereby prevent any electrical connection being made with the terminal unless the seal be designedly broken and by so doing enable the buyer or user of a battery to satisfy himself that the battery has not been previously used.

A further object of the invention is, while providing for a seal for the above purpose, to construct one which can be readily removed to expose the terminal.

With the above objects in view the invention consists essentially in the arrangement and construction of parts hereinafter more particularly described and later pointed out in the appended claims.

Figure 1 represents a perspective view of the device applied on a battery. Fig. 2 represents a vertical sectional view through the cap, adjacent and inclosed parts. Fig. 3 represents an enlarged detailed vertical sectional view through the cap.

In the drawing like characters of reference indicate corresponding parts in each figure.

1 represents a battery of the ordinary form presenting the positive terminal or binding post 2 fitted with a thumb nut 3 and the negative terminal or binding post 4 fitted with a thumb nut 5.

In actual practice I find that the top of the battery is covered over with a self setting insulating composition 6 such as pitch or a rubber composition, this material being poured when hot and allowed to harden or set and inclose the top of the battery.

The parts as above described form no part of my invention as they are customarily found on the various types of batteries now on the market.

With a battery of the type as shown, it will be seen that it is practically impossible for one, when obtaining a battery, to find out, without actual test, whether it has been impaired as a source of electrical energy

through occasional use, as might occur from time to time where such articles are sold.

The object of my invention is to provide a covering, particularly for the positive terminal, which, when intact, will assure the buyer that the battery has not been used. With this end in view I provide a more or less dome shaped cap 7 which is fitted over the positive terminal and has the lower edge thereof open, and provided at the side, slightly above said lower edge, with a small air vent 8. This cap is preferably formed from a more or less stiff paper, although it can be constructed from rubber composition, celluloid or similar material. In cases where the cap is made so small that it might contact with the terminal, when applied, it is necessary that the cap should be formed from insulating material. In other instances, where an air space is reserved between the cap and the terminal, it is not necessary that it be constructed from an insulating material. If formed from paper it is advisable to coat the paper with wax as indicated at 7' to render it waterproof. In fitting this cap on a battery, I put the cap in position over the terminal before the pitch or similar material 6 has hardened and press the lower edge thereof down into the pitch, as shown best in Fig. 2, so that the said lower edge actually becomes set in the pitch when it hardens and accordingly makes the cap a fixed part. The opening 8 is provided to allow the air, trapped in the cap, to escape when the same is being pressed down. In actual practice this opening will appear, in the final position of the cap, just below the upper surface of the pitch. By so covering this opening no approach can be had to the terminal. With this cap on a battery and intact, one is assured that the battery has not been used.

When it is desired to use the battery it is only necessary to tear the cap, if paper, or break it, if formed from rubber or similar material. Once it is broken a wire can be connected to the terminal and the battery used in the usual way.

While I am aware that poles or terminals of batteries or other sources of electromotive force have heretofore been incased by what might be termed a removable cover or one allowing of approach to the terminal, yet, I do not know of any wherein, under normal conditions, the terminal is permanently incased and cannot be approached without

destroying, breaking, mutilating or otherwise disfiguring the protective covering or casing.

Although I have shown and described the terminal seal as incasing the positive terminal of the battery, still it will be readily understood that if desired, in some forms of batteries, this could be enlarged to inclose both the positive and negative terminals. However, it is unnecessary to do this for the reason that the covering of one terminal will effectively prevent the battery being inserted in any electrical circuit.

What I claim as my invention is:—

1. A device for conserving the electrical energy of a battery or other source of electrical energy against discharge comprising, a destructible, covering for a terminal of the battery designed to prevent an electrical connection being made with the terminal without involving the destruction of the covering.

2. A device for conserving the electrical energy of a battery or other source of electrical energy against discharge comprising, a fixed destructible sealing cap entirely inclosing and clear of the positive terminal of the battery.

3. A device for conserving the electrical energy of a battery or other source of electrical energy against discharge comprising, a destructible sealing cap inclosing the positive terminal of the battery and having the base thereof embedded in the top of the battery and surrounding the terminal.

4. A device for conserving the electrical energy of a battery or other source of electrical energy against discharge comprising, a temporary sealing cap in the nature of a paper dome inclosing the positive terminal of a battery.

5. The combination with a battery or other source of electrical energy having the top closed over with a self setting composition and a positive terminal protruding through such composition, of a destructible sealing cap inclosing the said terminal and having the base thereof set in the self setting composition.

6. The combination with a battery or other source of electrical energy having the top closed over with a self setting composition and a positive terminal protruding through such composition, of a destructible sealing cap inclosing the said terminal and having the base thereof open and provided at the side with a vent opening, said cap being placed in position on the battery prior to the setting of the composition and with the base embedded in the composition and with the side opening, in the base, closed by the composition and located, in the final position of the cap, just beneath the upper surface of the composition.

Signed at Winnipeg, this 1st day of May 1915.

ERNEST WALTER JEFFERSON.

In the presence of—

GERALD S. ROXBURGH,
S. SILVERT.