May 29, 1928. 1,671,566

A. T. BALDWIN

DRY BATTERY

Filed May 31, 1923

Fig.1.

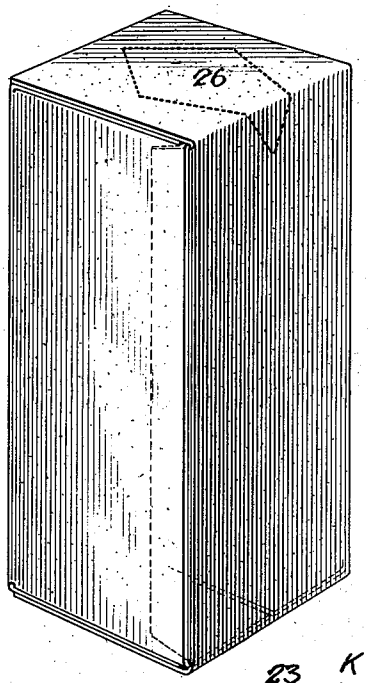


Fig.3.

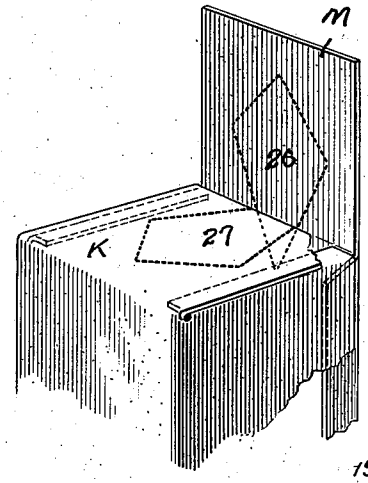


Fig.2.

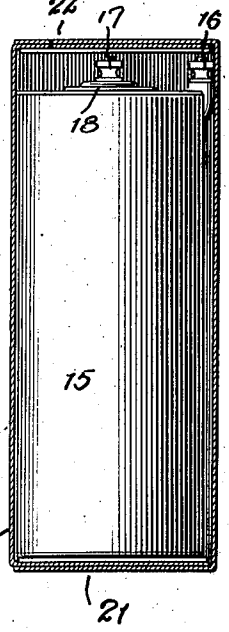


Fig.4.

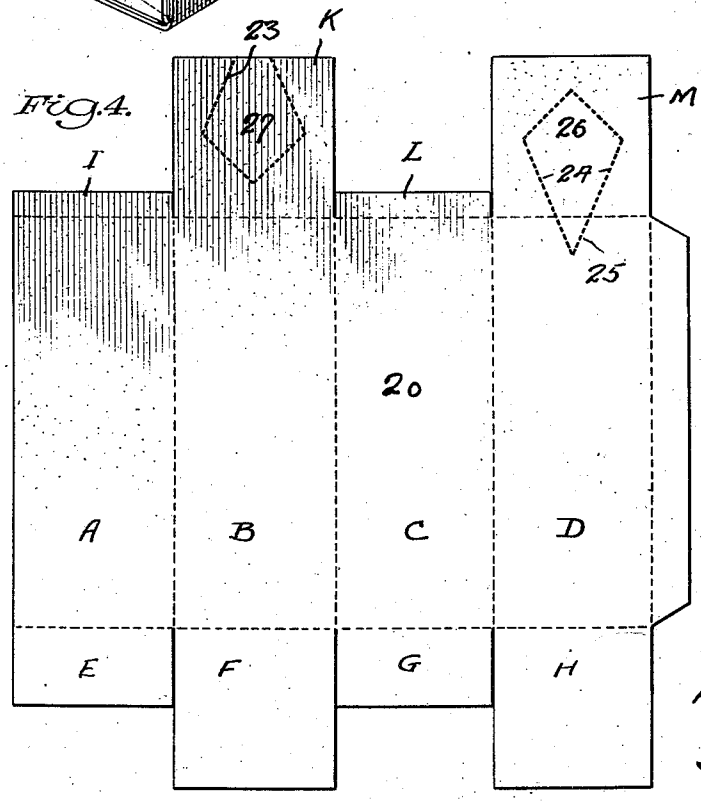
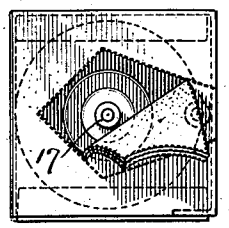


Fig.5.



INVENTOR

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BY

Howson and Howson

ATTORNEYS

Patented May 29, 1928. 1,671,566

UNITED STATES PATENT OFFICE.

ALLEN T. BALDWIN, OF MONTCLAIR, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NATIONAL CARBON COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

DRY BATTERY.

Application filed May 31, 1923. Serial No. 642,568.

My invention relates to dry batteries, and particularly to a container therefor. The object of my invention is to provide a container which seals the battery terminals against access except by a tell-tale rupture of the container.

In the accompanying drawings—

Fig. 1 is a perspective of a battery casing in which my invention is embodied in one form;

Fig. 2 is a vertical section therethrough showing the battery within the casing;

Fig. 3 is a partial perspective of the terminal end of the casing showing one of the end flaps in open position;

Fig. 4 is a plan of the casing blank; and

Fig. 5 is a broken plan of a battery showing the manner in which the terminal end of the casing is ruptured to expose the binding terminals.

Surreptitious theft of current from batteries before they are sold to the consumer is a common practice in many retail stores, incident to the testing of lamps or other equipment. This leads to deterioration of the battery and the consequent dissatisfaction of the customer with the service which the battery gives. The present invention provides a simple and effective sealed container or battery casing which prevents access to the battery terminals without a tell-tale rupture of the casing which puts the purchaser on guard.

As here shown the battery is of the usual cylindrical type, comprising a zinc shell 15 to which is secured at one end the terminal 16, the second terminal 17 being mounted at the head of the central carbon pole 18. The battery is enclosed within an insulating casing 19 of rectangular outline formed from heavy paper or card-board.

The casing blank 20, indicated in Fig. 4, comprises the sections A, B, C and D which form the four side walls thereof. At one end of the casing the several sections A to D inclusive, have flaps E, F, G and H which are folded over and glued together to form a three-ply bottom 21. At the opposite ends of the several sections of the blank are flaps I, K, L and M which are folded over and sealed to form the top 22 of the casing at the terminal end of the battery.

The flaps K and M are of materially greater length than the flaps I and L, the latter being of such limited extent that when folded over from opposite sides of the casing end, a relatively large gap remains between them. Within the area of this gap the flap K, which rests directly upon and is sealed to the outer faces of the flaps I and L, is scored at 23. Within the same area and in register with the scoring of the flap K, the flap M which overlies flap K, is scored at 24. The scoring 24 of flap M is continued down the side section D of the casing at 25 in the form of a V, and is so located as to expose the binding terminal 16 when the areas 26 and 27 of the flaps M and K which lie within the scoring, are removed by rupturing the casing along the scoring lines.

Under normal conditions the casing is sealed at both ends of the battery, and its terminals thus completely enclosed. To obtain access to the terminals the casing top must be ruptured along the scoring and the areas 26 and 27 in the top flaps K and M removed. This may be readily accomplished by the pressure of the finger upon the area within the scoring.

It is common practice to arrange batteries in groups, and the present casing forms an insulating cover for the zinc shell 15, which serves to space and insulate adjacent cells from each other. The break-out area 26—27 is so limited in extent that not only the side flaps I and L, but also the marginal areas of the flaps K and M, overlie the battery top and thus retain the casing in position thereon, even when the terminals are exposed.

Various modifications in detail will readily occur to those dealing with the problem, which do not depart from what I claim as my invention.

I claim—

1. The combination with a dry battery having binding terminals at one end thereof, of a sealed casing of frangible insulating material having at the battery terminal end thereof an area defined by a weakened boundary, said area constituting a tear-out portion smaller than the top of the battery and positioned adjacent to the battery terminals, the removal of which exposes the battery terminals.

2. The combination with a dry battery having binding terminals at one end thereof, of a sealed casing of frangible insulating material having at the battery terminal end thereof an area defined by a weakened boundary, said area including but a portion

of the casing end adjacent said terminals and a contiguous portion of one side of the casing, and constituting a tear-out portion, removal of which exposes the battery terminals.

3. The combination with a dry battery having at one end a central and a marginal terminal, of a sealed casing enclosing the battery body and terminals, but having at the terminal end thereof an elongated tear-out portion of smaller area than the end of said battery, defined by a weakened boundary and including a portion of a side wall of the casing in register with the marginal terminal.

4. The combination with a dry battery having at one end a central and a marginal terminal, of a sealed casing enclosing the battery body and terminals, said casing being of rectangular outline and having folded over end flaps scored in register to define a tear-out area registering with the battery terminals, the scoring in one of said flaps being extended to the margin of the casing end and down one side wall thereof to expose the side of the marginal terminal.

In testimony whereof I have signed my name to this specification.

ALLEN T. BALDWIN.