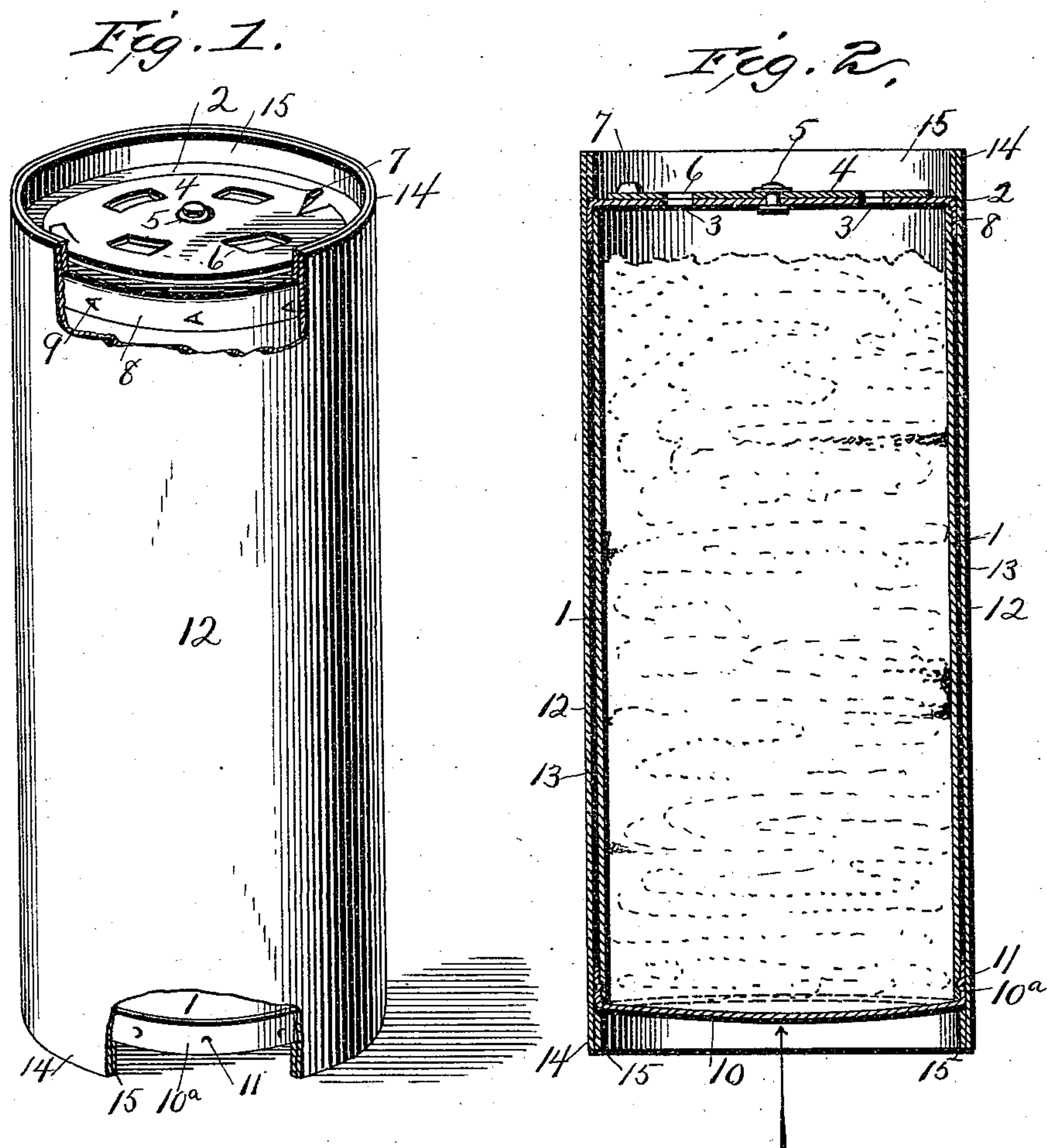


(No Model.)

D. H. GREENE.  
PACKAGE FOR PULVERULENT MATERIALS.

No. 546,526.

Patented Sept. 17, 1895.



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# UNITED STATES PATENT OFFICE.

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## PACKAGE FOR PULVERULENT MATERIALS.

SPECIFICATION forming part of Letters Patent No. 546,526, dated September 17, 1895.

Application filed March 18, 1895. Serial No. 542,202. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID H. GREENE, a citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Boxes or Packages for Pulverulent Materials; and I 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to boxes or packages for soap powder and other pulverulent material.

It has for its object to provide such a box or package with an apertured top provided with a slide-cover having apertures adapted to be brought into register with those in the top or cap and having at the opposite end a spring-bottom, preferably concavo-convex in form, so that by pressing the bottom inwardly the powder will be ejected through the apertured cap or top, the bottom retracting or assuming its normal condition after each depression, so as to be ready for a second impulse or pulsation to eject more of the material.

It has also for its object to form the body of the box or package of stiff paper-board, for lightness in weight and cheapness of material, and to inclose the same in a separate outside shell or case of similar material, so as to protect the pulverulent material from the influences of air and moisture, thereby keeping the material in a dry state.

It has further for its object to provide means for holding the box or package securely inside of the outside shell or jacket.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, the invention consists in the construction and the combination of parts hereinafter particularly described, and then sought to be specifically defined by the claim, reference being had to the accompanying drawings, and in which—

Figure 1 is an isometrical perspective of the box and jacket with portions of the jacket

broken away, and Fig. 2 a vertical section through the same.

In the drawings the numeral 1 designates the body of the box or package, which is made of heavy pasteboard, strawboard, or similar material, and provided at one end with a cap or cover 2, formed with elongated apertures 3, and provided with a slide-cover 4, secured by a pivot-pin 5 to the cap, and formed with elongated apertures 6, adapted to register with the aperture 3 in the cap for the passage of material therethrough and to be moved out of register, so as to exclude air and dirt from the contents of the box or package at other times. The slide-cover 4 is preferably formed with upturned lips 7 to receive the pressure of the finger or thumb in moving the slide. The cap or cover is formed with a downwardly-extending flange 8, which is formed with spurs 9, made by stamping out a portion of the metal of the flange or otherwise, said spurs being arranged to all point in one direction and inwardly from the flange, so that by slipping the cap over the end of the pasteboard body and making a partial revolution of the cap the spurs will be caused to enter the pasteboard body and thus secure the cap in place. This also admits of the cap being detached by simply turning it in the opposite direction to the points of the spurs. The cap can be readily applied after the box or package is filled with the pulverulent material and detached by turning the cap in the opposite direction. The apertures in the cap and the slide are made preferably elongated, as it is found that such form will tend to break up the material if from any cause it should tend to become at all compact, and the size of the openings can be regulated by the adjustment of the slide, as is obvious. The opposite end of the box or package is provided with a spring-bottom 9, preferably formed of metal, and made of a concavo-convex form, as illustrated by full lines in Fig. 2 of the drawings, the convex face being outward, so that by pressing the bottom inward, as indicated by dotted lines in the same figure of the drawings, the pulverulent material will be ejected through the apertures in the cap of the box or package, thus delivering with ease material from the box in quantities de-



sired. As soon as pressure is taken from off the bottom the metal will assume its normal shape and thus be in condition to be again forced inward for ejecting more of the material. The spring-bottom is provided with a flange 10, which will fit over the end of the box or body, and may be secured thereto by punching or indenting the flange, so that it will be caused to enter the body of the box, as indicated at 11 in the drawings, and thus secure the bottom to the box. The box or package thus formed, after being filled with the pulverulent material, is placed inside of the shell or jacket 12, which will be made of heavy pasteboard, strawboard, or similar material, and this outside shell or jacket will exclude air and moisture from the inside of the box or package, and the contents of the box or package being thus kept from air and moisture will retain its pulverulent condition and be prevented from becoming compact or caked in the box. The flanges to the cap and bottom of the box or package will tend to hold the outside shell or jacket at a slight distance from the wall of the box or package, and thus form a space 13 between the box and jacket, which will tend still further to maintain the inner box or package in a thoroughly dry condition and unaffected by air or moisture. It is preferred to make the shell or jacket of greater length than the box or package, so as to form projecting flanges 14 at both ends of the box, thus protecting both ends of the box from damage and preventing unintentional or accidental depression of the spring-bottom to the box or package and also accidental sliding of the cover to the cap by coming in contact with any body or object. These projecting flanges 14 also serve to receive strips 15, which may be of the same material as the body of the box and jacket, and which, being placed in position after the box is placed in the shell or jacket, will secure the box or package in the shell and prevent the shell or jacket from sliding off the box or

package. The strips 15 may be secured by cement or otherwise to the inside of the flanges 14.

The box or package and its protecting shell or jacket, made as described, afford a cheap and yet very efficient and attractive package for pulverulent materials, effectually protecting the material against the injurious and deleterious effects of air and moisture. It also provides a package easy to manipulate in ejecting material therefrom and at other times having dust and dirt excluded therefrom by closing of the slide over the apertured cap.

I have illustrated and described what I consider to be the best form of the several features of my invention; but it is obvious that some of these features can be used without the others and that the form thereof can be varied without departing from the essential features of the several parts of the invention.

Having described my invention and set forth its merits, what I claim is—

The box or package consisting of the body portion, and the outside inclosing jacket having open ends and extended beyond both ends of the body portion, the valve controlled cap at one end of the body portion having a flange fitting between it and the outside jacket, the spring-bottom at the opposite end of the body portion having a flange fitting between it and the outside jacket, and the circumferential securing strips placed inside of the opposite open ends of the outside jacket to secure the cap and spring-bottom against withdrawal, substantially as and for the purposes described.

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

DAVID H. GREENE.

Witnesses:

C. P. CONNERY,

S. A. CRAWFORD.