Nov. 7, 1944. B. DENSEN 2,362,055

POWDER BOX

Filed Jan. 6, 1943

Fig. 1.

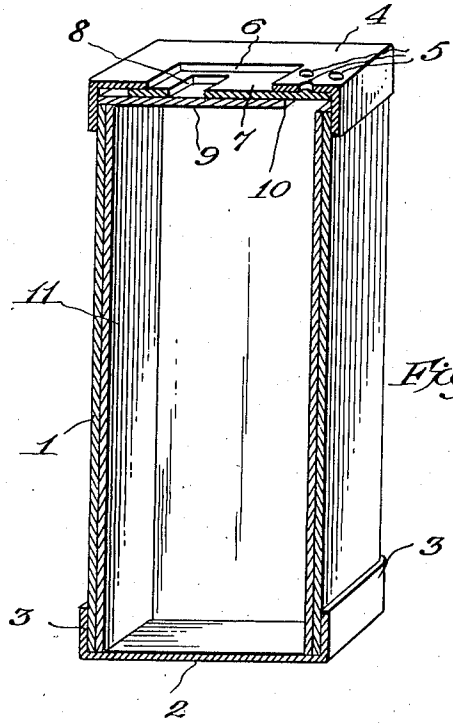


Fig. 2.

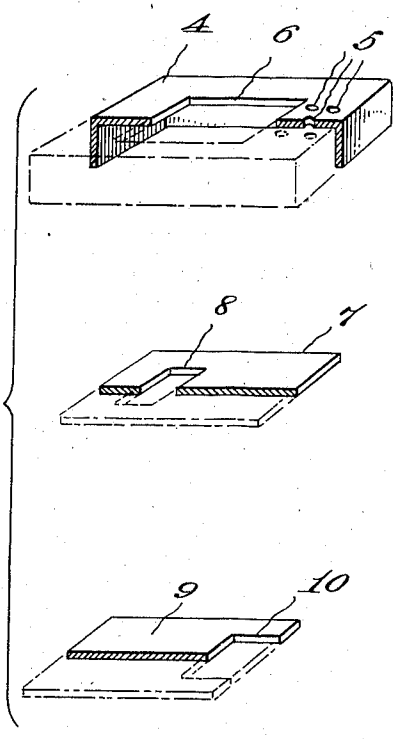
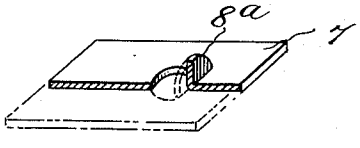


Fig. 3.



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2,362,055

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POWDER BOX

Beatrice Densen, New York, N. Y.

Application January 6, 1943, Serial No. 471,393

1 Claim. (Cl. 222—561)

This invention relates generally to dispensing containers but is adapted especially for use in connection with face powders and other pulverulent material adapted to be dispensed in small quantities by shaking the powder through perforations in the top wall of the container.

The object of the invention, generally speaking, is to provide a simple and thoroughly efficient construction which may be made of paper or cardboard and so constituted that the perforations through which the powder is dispensed may be normally sealed.

Speaking generally the container of the present invention comprises a body of any appropriate size having a closed bottom. The top of the container is closed by a permanent cap provided near one end thereof with a group of perforations. Extending longitudinally of the cover cap is a finger opening through which access may be had to a sliding plate positioned in face abutting relation with the under side of the cover. Beneath this slide plate is an underlying backing plate and both the slide plate and backing plate are positioned between the upper edge of the body and the lower face of the cover cap so that they are thereby held in face abutting relation. The slide plate may be provided with an opening therein to be engaged by the finger of the user in order that the plate may be slid longitudinally to cover or uncover the perforations but in lieu of this operating opening, I may form on the slide plate an upstanding finger piece which may be gripped and operated for this purpose.

An important feature of the invention is that all the parts may be simply and economically manufactured entirely from paper or cardboard.

Features of the invention, other than those specified, will be apparent from the hereinafter detailed description and claims, when read in conjunction with the accompanying drawing.

The accompanying drawing illustrates different practical embodiments of the invention, but the construction therein shown is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a vertical transverse section perspective through a powder box embodying this invention.

Figure 2 shows the cover cap, slide plate and backing plate, dismantled and in section perspective, so that the structures of each of them may be clearly understood.

Figure 3 is a section perspective of a modified form of slide plate which I may employ.

In the accompanying drawing the body of the powder box is indicated at 1 and is made from cardboard manipulated into hollow, transversely rectangular form and open at both ends. This body will of course be of a size appropriate to contain the desired quantity of material and this size may vary accordingly.

The bottom of the body is closed by a bottom cap 2 made from cardboard with upstanding marginal flanges 3 which telescope over the bottom of the body and are preferably adhesively secured thereto. At its top, the body is provided with a cover cap 4 constructed in substantially the same way as the bottom cover cap except that it is provided near one of its ends with a group of dispensing perforations 5 and with a longitudinally spaced finger opening 6.

Directly beneath and in face abutting relation with the cover cap is a slide plate 7. This is in the form of a flat piece of cardboard of a width substantially equal to the interior width of the cover cap and of a length somewhat less than the interior length of such cap, so that when the plate is slid to the left in Figure 1, it will uncover the perforations 5 but when slid to the right in this figure, it will seal such perforations. The length of this plate, however, is such that at no time will it unseal any part of the finger opening 6.

The slide plate 7 is shown in Fig. 1 as provided with an opening 8 so that a finger of the operator may be passed through the opening 6 and into the opening 8 for the purpose of longitudinally sliding the plate 7. In lieu of this opening, however, I may stamp up from the material of the plate 7 a finger piece 8a, as shown in Figure 3, which finger piece may be grasped for the purpose of sliding the plate as described.

Positioned in face abutting relation to the under side of the slide plate 7 is a backing plate 9. This is in the form of a flat piece of cardboard adapted to fit snugly into the cover cap and cut out at one end as shown at 10 in Figs. 1 and 2, so as to clear the perforations 5.

As shown in Figure 1, the backing plate 9 rests upon the upper edge of the body 1, while the cover cap 4 rests upon the top of the slide plate 7 so that, when this cover cap is secured to the body, the plates 7 and 9 and the cover cap 4 are thereafter maintained in face abutting relation to one another.

The parts are assembled with the top and bottom caps glued or otherwise adhesively secured to the body of the box and this serves to hold all parts of the structure in proper cooperative relation. Under normal conditions the slide is moved to the right in Figure 1 to seal the perfora-

tions 4 so that extraneous matter cannot enter the box and at the same time the contents of the box will be sealed against deterioration or sifting of the powder. When it is desired to dispense powder, the slide is moved to uncover the perforations and the box may thereupon be inverted and shaken to dispense so much of the powder as may be desired.

In practice the box may be made with a body of single thickness cardboard having such an exterior surface as to be satisfactorily printed or lithographed upon as may be desired. In some cases, however, it may be preferred to provide the box with an appropriate liner and I have shown such a liner in Figure 1 as designated 11. The liner here illustrated is of cardboard. It is of rectangular transverse section adapted to snugly fit into the interior of the body 1 and is of a length to extend from the bottom cap 2 upwardly to the backing plate 9. One advantage of employing such a liner is that it may be fabricated from relatively inexpensive material, while the body of the box may be made of somewhat thinner board material of a superior grade and thus better adapted to receive the printing.

Another advantage inherent in the use of the liner is that it assists the body of the box in supporting the slide plate and backing plate in proper abutting relation with respect to the under surface of the cover plate of the cap and in this way precludes separation of these parts in a manner which might possibly permit of sifting of the powder through the joints between them.

The structure of the present invention may be very economically manufactured and the slide closure is such as to effectually protect the contents thereof at all times, yet make such contents readily available for use when it is desired to dispense the same.

The foregoing detailed description sets forth the preferred embodiment of the invention, but the invention is to be understood as fully commensurate with the appended claim.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

A paper container of the character described comprising a box body closed at its top and bottom by top and bottom caps permanently secured directly to the body, the lower of which caps is imperforate and the upper of which is provided near one end with dispensing perforations in spaced relation to which is a finger opening, a dispensing slide plate entirely flat throughout and positioned beneath and in face abutting relation with the top cap and slidable with respect to the perforations in the latter to seal and unseal said perforations, a backing plate entirely flat throughout and positioned beneath and in face abutting relation with the slide plate and loosely seated in face abutting relation upon the upper edge of the body to hold the backing plate in engagement with the slide plate and the slide plate in engagement with the top cap, said backing plate being free from direct attachment to the top cap and said slide plate having an opening therein adapted to be engaged by the finger of the operator extended through the finger opening in the top cap to move the slide plate into and out of sealing relation with respect to the perforations in the top cap, and a liner positioned within the body of the box and conforming to the side walls of the box body with the lower edge of the liner seated on the interior of the bottom cap and the upper edge of the liner seated against the under side of said backing plate to assist the box body in supporting the backing plate.

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