July 3, 1945. J. P. SMITH 2,379,853

POWDER BOX

Filed April 3, 1943

Fig. 1.

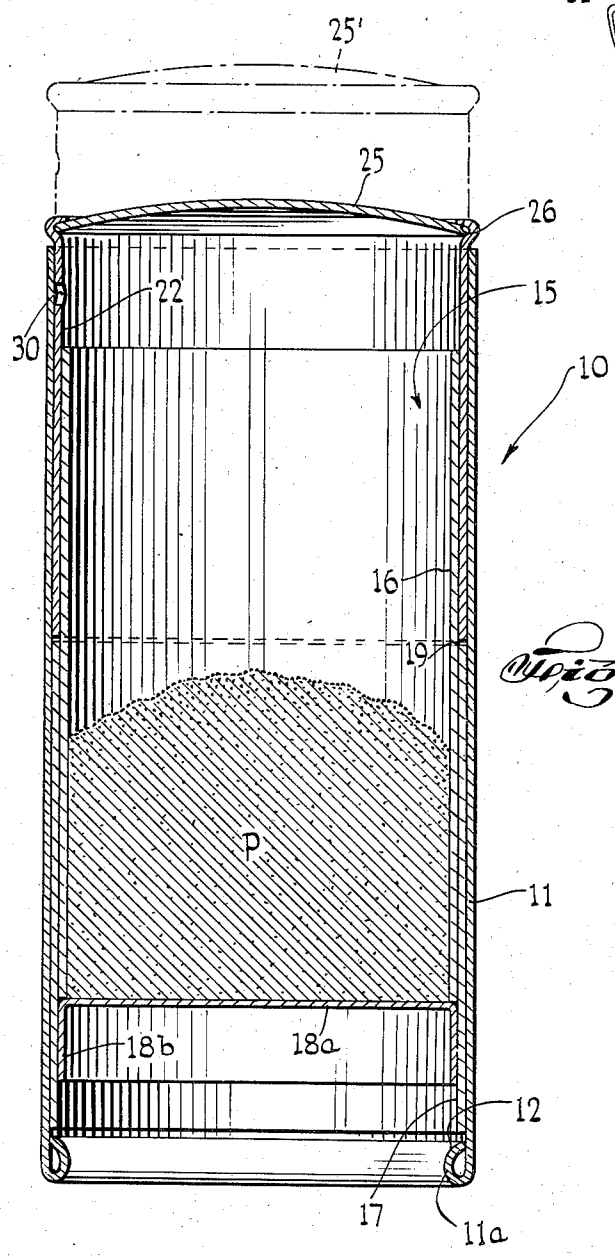


Fig. 3.

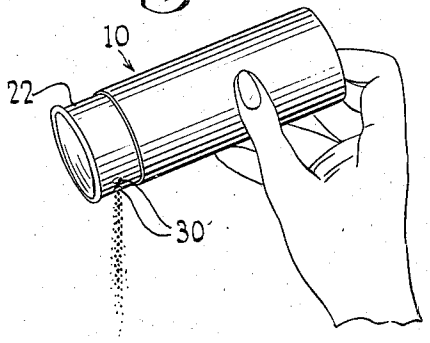
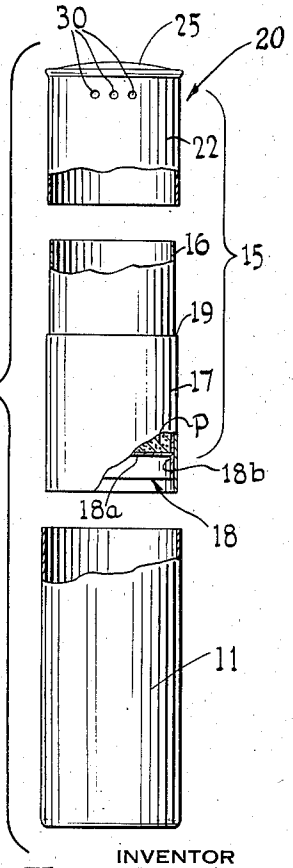


Fig. 2.



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POWDER BOX

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2 Claims. (Cl. 222—519)

My invention relates generally to containers for powder. More particularly my invention is concerned with an improved construction for sifter powder boxes.

One of the objects of my invention is to provide a highly improved and novel sifter powder box of the class described which shall be so constructed and arranged that it may be opened for effective use and subsequently closed while the said box is held in one hand, leaving the other hand of the user free at all times to hold an infant or for any other desired use.

Another object of my invention is to provide a highly improved and novel sifter powder box of the class described which shall be readily adapted for the manufacture thereof out of non-metallic materials, such as paper, cardboard and the like and which at the same time shall possess a high degree of efficiency and practicability in use.

A further object of my invention is to provide a highly improved and novel sifter powder box of the class described which shall comprise relatively few and simple parts which shall be easy to assemble and which shall be characterized by the simplicity of its operation.

Other objects of my invention will become apparent in the following detailed description thereof.

In the accompanying drawing,

Fig. 1 is a vertical sectional view of a sifter powder box constructed and arranged in accordance with my invention;

Fig. 2 is a disassociated elevational view of the parts that go to make up the completely assembled box illustrated in Fig. 1, but of smaller size and with certain portions broken away to disclose the construction thereof; and

Fig. 3 is an elevational view, of reduced size, of the Fig. 1 form of box and demonstrating a manner of its use.

Referring now in detail to the drawing I have shown a powder box 10 of the sifter type, constructed and arranged in accordance with my invention and comprising an outer tubular member 11 of any desired diameter and having the material of the lower edge 11*a* rolled inwardly to provide an annular abutment shoulder 12, the purpose of which will soon become apparent. Slidably, nestably received within the tubular member 11 is a cylindrical box unit 15 comprising an inner cylindrical side wall 16, an outer cylindrical side wall 17, a bottom wall member 18 and a removable closure member 20.

The outer side wall 17 of the unit 15 fits snugly around the inner wall 16 and is attached thereto against axial displacement by any suitable means known to the art, such as, for example, adhesive or by friction. It is noted that the outer wall extends slightly below the lower edge of the inner wall and terminates a relatively larger distance below the top rim of the said inner wall 16, providing an abutting annular shoulder 19. In the space between the lower edges of the wall 16 and 17 I place my bottom wall member 18 which comprises a horizontal wall part 18*a* and an annular wall 18*b* depending therefrom. The annular wall 18*b* is designed to contactively overlie the inner surface of the wall 17 and may be permanently attached thereto by adhesive. The closure unit comprises a cylindrical side wall 22 of a diameter substantially equal to that of the wall 17 and which is adapted to be slidably received on that portion of the wall 16 which projects upwardly above the wall 17. The downward sliding movement of the closure unit 18 is limited by the shoulder 19. The closure unit 18 is also provided with a top wall 25, which for decorative purposes and also for distinguishing the top from the bottom, is slightly arched. The said wall 25 may be permanently held in position and sealed against leakage by providing a recessed portion 26, adjacent the top of the wall 22, into which the said wall 25 is frictionally received. It is thus seen that the box unit 15 is a complete box adapted to hold a supply of powder P. It is also noted from the above described construction that when the box unit 15 is slidably, nestably received within the tubular member 11 it will move downwardly until the bottom edge thereof strikes the abutment portion 12. The box 10, in this latter described position is in the closed position.

In the side wall 22 of the closure unit 18 I provide one or more apertures 30.

In accordance with my invention as above described, and as illustrated in Fig. 3 of the drawing, a user may grasp the box 10 between the thumb and fingers and with one free finger exert a pushing force against the bottom wall 18*a*. This will cause outward sliding movement of the box unit 15 to the dotted line position 25' of Fig. 1, so that the apertures 30 will project above the outer wall 11 and permit the powder from the box unit 15 to be sifted therethrough.

If desired, to safeguard against leakage of the powder during shipment, a strip of tape or paper may be place over the apertures 30 to temporarily seal the same. The consumer need merely puncture one or more holes through this

tape in alignment with the apertures 30 and the powder box is ready for use.

To close the box after use, and while still holding it in the one hand, it is merely necessary to exert a pushing force with one finger on the top of the box against the wall 25.

It is noted that the above described construction lends itself to the use of cardboard construction or any other suitable non-metallic material and will be sufficiently rigid and sturdy in view of the triple wall construction as clearly shown in Fig. 1 of the drawing.

In accordance with the provisions of the patent statutes, I have herein described the principle and operation of my invention, together with construction which I now consider to represent the best embodiments thereof, but I desire to have it understood that the construction shown is only illustrative and that the invention can be carried out by other means. Also, while it is designed to use the various features and elements in the combination and relations described, some of these may be altered and others omitted without interfering with the more general results outlined, and the invention extends to such use.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. In a sifter powder box of the class described, in combination, an outer tubular member having an abutment portion adjacent the bottom edge of the inner surface of the wall thereof, a box unit adapted to hold powder therein and comprising an inner side wall, an outer side wall, a bottom wall and a completely removable closure, the said outer side wall closely surrounding the said inner side wall and attached thereto for movement therewith, said inner side wall projecting a substantial distance above the top edge of said outer side wall, said closure comprising a top wall and a depending side wall, said last named depending side wall being adapted to nestably slidably receive therein the portion of said inner side wall, projecting above the top edge of the said outer side wall, said outer side wall and said depending side wall being in alignment and both being adapted to be nestably slidably received within said outer tubular member, to provide a three wall thickness of material for the major portion of said sifter powder box, the said abutment portion of said outer tubular member serving to limit the downward sliding movement of said box unit within said tubular member, said closure being axially slidably movable with respect to said box unit and said box unit being axially slidably movable with respect to said outer tubular member.

2. A sifter powder box according to claim 1 in which the top wall of said closure is adapted to serve as the top wall for said outer tubular member and in which the upper end of said inner wall of said box unit terminates a predetermined distance from the said top wall of said closure to provide a space therebetween, and in which a powder dispensing aperture is disposed in the said last named space, so that the user may grasp the sifter box in one hand and with the fingers of the same hand push the said bottom wall of said box unit upwardly to effectively expose the said aperture for sifting powder therethrough from within the said box unit.

JOSEPH P. SMITH.