April 18, 1939. W. L. RUTKOWSKI 2,155,022

SLIP COVER FOR PAPER BODIED CONTAINERS

Filed April 18, 1936 2 Sheets-Sheet 1

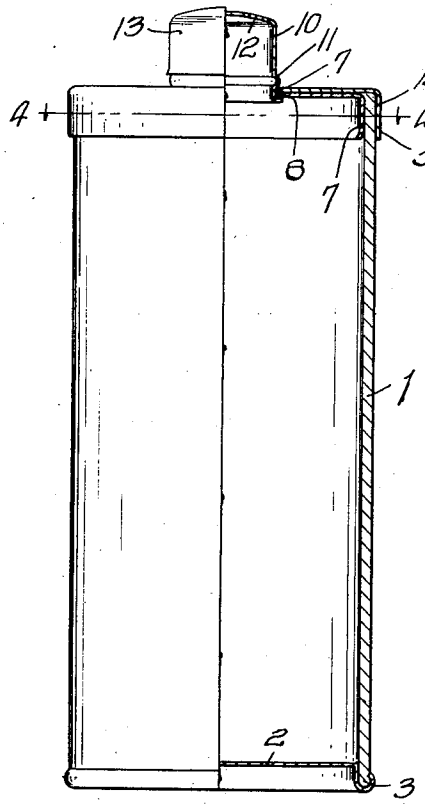


Fig. 1.

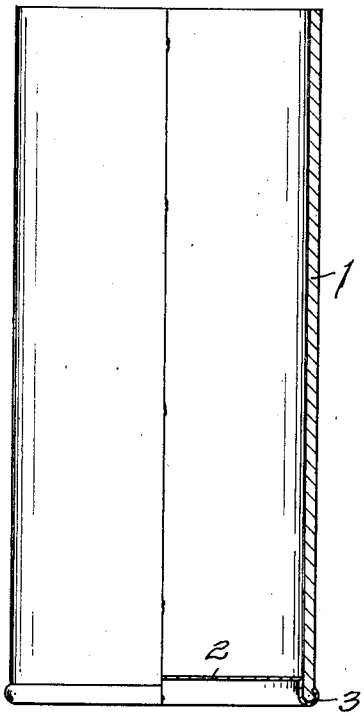


Fig. 2.

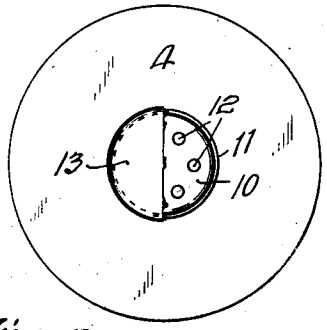


Fig. 3.

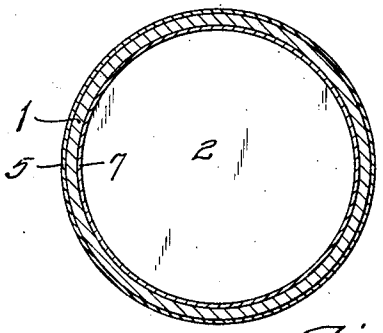


Fig. 4.

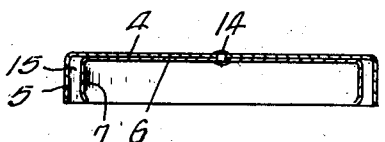


Fig. 5.

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April 18, 1939. W. L. RUTKOWSKI 2,155,022

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Filed April 18, 1936 2 Sheets-Sheet 2

Fig. 6.

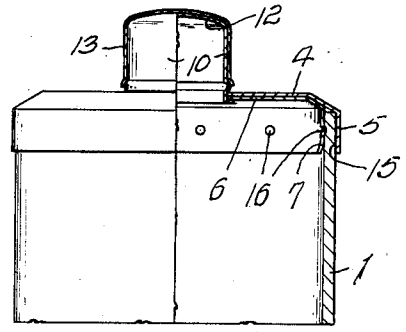


Fig. 7.

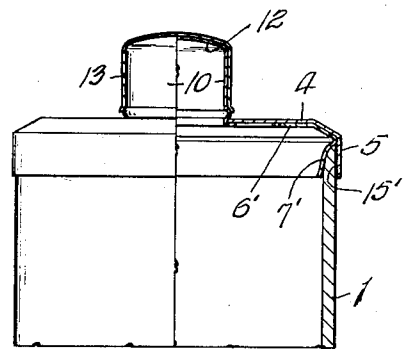
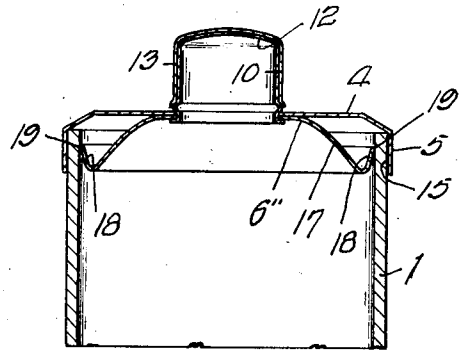


Fig. 8.



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SLIP COVER FOR PAPER BODIED CONTAINERS

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Application April 18, 1936, Serial No. 75,149

6 Claims. (Cl. 229—5.5)

My present invention relates to slip covers for paper container bodies.

An object of the invention is to provide a slip cover having double cover portions provided with depending flange portions, so spaced as to frictionally receive therebetween the end portion of the wall of a tubular paper container body when the cover is applied, by force, to the end thereof.

A further object of the invention resides in the provision of a slip closure for the end, or ends, of a tubular paper container body, and which closure includes two depending flanges, so spaced apart as to frictionally engage and bind against the outer and inner walls of the container body so as to securely hold the closure in position and against accidental displacement on the end of the body.

A further object of the invention resides in the provision of a slip closure embodying two cover portions having spaced depending flanges adapted to frictionally engage the outer and inner walls of a tubular paper container body applied to the end thereof and to suitably secure the two cover portions together by means of a sifter nozzle.

A still further object of the invention is the provision of a slip cover for paper bodied containers, which possesses advantages in points of simplicity and efficiency, and, at the same time proves itself comparatively inexpensive in cost of manufacture.

With the above and other objects in view, the invention consists in the novel features of construction, arrangement and combination of parts hereinafter more fully described and finally pointed out in the claims hereto appended.

Referring to the accompanying drawings:

Fig. 1 is a view partly in side elevation and partly in vertical sectional elevation of a container embodying the features of my invention.

Fig. 2 is a view similar to Fig. 1, before the slip cover is applied to the open end thereof.

Fig. 3 is a top plan view of the container.

Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 1.

Fig. 5 is a modified form of slip cover.

Fig. 6 is a vertical sectional view of another modification of the invention.

Fig. 7 is a vertical sectional view of a further modification of the invention.

Fig. 8 is a vertical sectional view of a still further modification of the invention.

In constructing containers designed to hold toilet powder, ground spices and the like, it is desirable, in order to reduce the cost of same, to form the container body of wound paper, while the closure for the ends of the container body are provided with metal end closures.

In the drawings, the reference character 1 designates a tubular paper container body of any suitable shape such, for instance, as cylindrical, oval, oblong, square, and the like, and which is normally open at both ends thereof. Thus, the body is in the nature or form of a paper tube.

A suitable metal bottom closure 2 of the usual recessed type, fits tightly within one end of the container body, and, it is provided with a peripheral flange 3 which is crimped over the end of the container and into engagement with the outer face thereof.

The closure for the opposite, or upper end of the container body and embodying features of my invention, is designed as a slip type of closure so that it can be easily and readily applied, without the aid of a crimping device, to the top of the container body after the body has been filled with powder, or the like.

The top closure, in one embodiment thereof, consists of two metal caps, one disposed within the other. The outer of the two caps includes a cover portion 4 and a peripheral flange portion 5 depending downwardly therefrom. The inner of the two caps includes a cover portion 6 and a peripheral flange portion 7 projecting downwardly therefrom. The two cover portions 4 and 6 seat one upon the other, and, in one embodiment of the invention are provided with registered openings 8 and 9, respectively, and there is insertable into these openings a suitable sifter nozzle including a body portion 10 open at its lower end and crimped at its lower edge into engagement with the lower face of the inner cover portion 6. The body 10 is formed with an outwardly projecting bead 11 adapted for engagement with the upper face of the outer cover portion 4. The upper end of the nozzle body 10 is closed and provided with suitable sifter or like openings 12. The nozzle may be capped with a suitable detachable slip closure 13. The sifter nozzle may be eliminated, if desired, and in such instance, the cover portions may be connected by means of a suitable fastening device such, for instance, as by a rivet 14.

The flanges 5 and 7 projecting from the cover portions 4 and 6, respectively, are concentrically arranged and suitably spaced apart so as to provide an annular space or recess 15 adapted to receive the end portion of the wall of a paper con-

tainer body when applying the slip closure thereto under hand pressure.

The flange of cover portion 4 forming the outer metal cap is preferably straight, whereas the free or lower edge of the flange 7 is preferably bent, or curved inwardly so as to slightly widen the mouth of the space or recess 15 between the flanges to facilitate the application of the slip closure to the top of the container body.

In applying the slip cover to the end of a paper container body, it will be apparent, that force is employed in doing so, and as the closure is forced down to home position, the cover flange 5 frictionally engages the outer wall of the container body, and, the cover flange 7 frictionally engages the inner wall of the container body, and, in so doing, sufficiently squeezes the paper body material to provide a tight fit between the slip closure on the end of the container body, thus assuring it against accidental displacement, or removal from the end of the can body.

Referring to the modification shown in Fig. 6, the can closure embodies two apertured cover portions 4 and 6, respectively, having the depending flanges 5 and 7, respectively, and which apertured cover portions are provided with a sifter nozzle 10 and secured thereto in any suitable manner such, for instance, as shown in Fig. 1. The depending flange 7 of the cover portion 6, it will be observed, is provided with a plurality of outwardly projecting protuberances 16 which are adapted to offer additional resistance to the removal of the closure from the end of a can body, due to the protuberance firmly gripping the inner wall of the can body 1 when applying the closure to the end of a paper or fibrous can body.

Referring to the modification shown in Fig. 7, the can closure embodies the apertured cover portion 4 having the depending flange 5, as shown in Fig. 1, and which cover portion is provided with a sifter nozzle 10 secured thereto in any suitable manner such, for instance, as shown in Fig. 1. Instead of the cover member 6 and its flange 7 being associated therewith as shown in Fig. 1, I employ a ring-like inner cover portion 6' from the outer peripheral edge of which depends a flange 7' which is inclined relative to the flange 5 from its junction with the cover portion 6' so as to provide a substantially wedge-shaped recess or can body wall receiving space 15' between the closure flanges 5 and 7'. The inner cover ring 6' and its flange 7' are secured in position within the outer cover portion 4 and its flange 5 by pressing the metal at or adjacent the junction of the cover ring 6' and the flange 7' outwardly into tight frictional contact with the inner wall of the cover flange 5 to provide what may be termed a press fit at this point. In this modification, it is apparent that the wall material of the can body is compressed when forcing the closure onto the end of a paper can body 1.

Referring to the modification shown in Fig. 8, it will be observed, that the closure embodies the outer apertured cover portion 4 and its depending flange 5, as shown in Fig. 1. Instead of the cover portion 6 and its depending flange 7, as shown in Fig. 1, or the cover ring 6' and its inclined flange or funnel-shaped flange 7', as shown in Fig. 7, I employ an inner apertured cover portion 6'' which terminates in an outwardly downwardly projecting body portion 17, which terminates at its lower end in an upwardly and outwardly projecting flange 18, the upper free edge 19 of which is suitably spaced from the inner wall of the cover flange to provide an annular space 15 between the inner walls of the flanges 5 and 18 to receive the wall of a paper can body when the closure is forced into position on the end of the can body. In this instance, it will be observed that the upper edge of the flange 18, which is more or less raw, firmly grips the inner wall of a paper can body 1 to assist the outer cover flange 5 in securely holding the closure in position.

In either form of the invention, it will be observed that I provide a vertical annular space between the inner cover flange and the outer cover flange to receive the wall of a paper can body when the closure is positioned on the end of a can body. Further, it will be apparent that in either instance, I provide a closure which in reality is a combined slip and friction type of closure, as the outer cover flanges slip over and engage the outer wall of the can body as an ordinary slip cover, and the inner cover flange has a friction fit with the inner wall of a can body, as an ordinary friction type of closure.

Either the top, or the top and the bottom of a container body can be provided with the double flanged slip closure, herein described. However, if both ends of the body are so equipped, the bottom closure is not provided with a sifter nozzle.

The many advantages of the herein described invention will readily suggest themselves to those skilled in the art to which it appertains.

From the foregoing description, it is evident that a simple device for this purpose has been disclosed, but it is to be understood that I do not desire to restrict, or limit myself to the very details of the construction shown and described, which is merely illustrative, it being obvious that changes, not involving the exercise of invention, may be made without conflicting or departing from the spirit of the invention within the scope of the appended claims.

What I claim is:

1. A closure of the class described, in combination, a cap member with a dependent flange, a second cap member within the first cap member and having a dependent flange, means for securing said cap members together as a unit, said cap members having central openings, said flanges being spaced apart to provide a container body receiving groove so that when the closure cap is slipped into position on the end of a container body the first-mentioned flange frictionally contacts the outer wall of the container body and the other flange the inner wall thereof, and a sifter nozzle receivable in said openings secured to both cap members at the edges of the openings.

2. In combination, a paper container body, a combined slip and friction type cover for the top end of the body and including two sheet metal parts and a sifter nozzle secured to the said parts and holding them against separation.

3. A sheet metal cover for a paper container body including a pair of spaced shirt flanges projecting in opposite directions, and between which skirt flanges the top portion of the paper container body is gripped to hold the cover in place, and means for securely locking the two sheet metal parts together as a unit.

4. A sheet metal cover for a paper container body including two parts each of which has a downwardly projecting skirt flange so arranged as to provide an annular space having an enlarged mouth to receive one end of the paper container body, and means for securely locking the two parts together as a unit.

5. A sheet metal cover for a paper container including two parts, one of which parts has a downwardly projecting flange and the other of said parts having an upwardly inclined flange and between which flanges the top edge of the paper container is gripped to hold the cover in place.

6. A sheet metal cover for a paper container body including two centrally connected closure parts, one of said parts having a downwardly projecting skirt flange, the other of said parts having an upwardly and outwardly projecting skirt flange, and said skirt flanges serving together to provide a paper container body wall receiving space having an enlarged mouth.

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