Nov. 16, 1937. K. N. BROWN 2,099,595

COLLAPSIBLE REFILL JAR

Filed Nov. 17, 1936

Fig. 1.

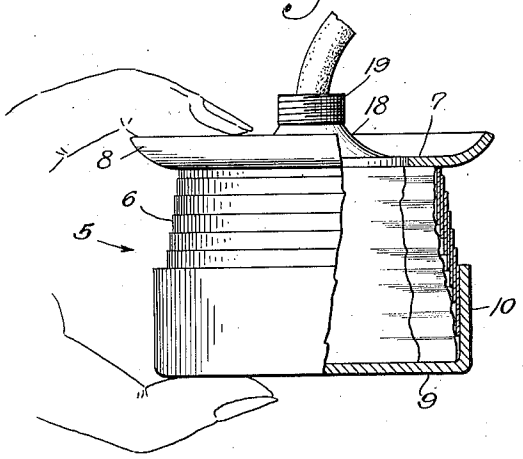


Fig. 2.

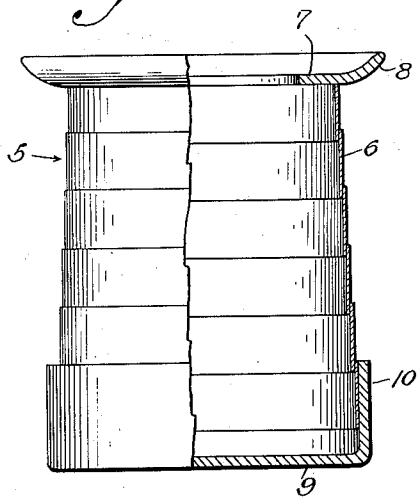


Fig. 3.

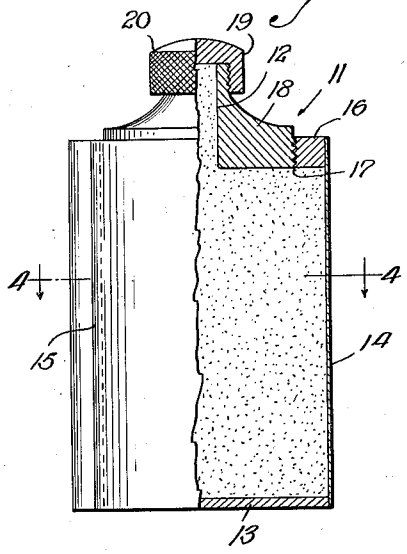
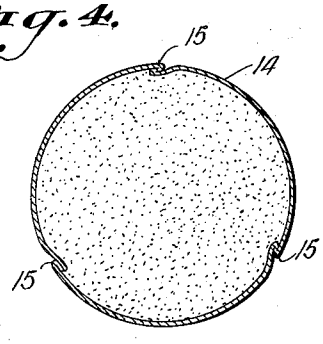


Fig. 4.



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COLLAPSIBLE REFILL JAR

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Application November 17, 1936, Serial No. 111,290

2 Claims. (Cl. 221—78)

The present invention relates to devices for dispensing plastic substances such as toothpastes, cosmetic creams and the like and more particularly to devices of this character having a refill cartridge therein for convenience in replacing the contents.

The invention has for its general object the provision of a collapsible container for cosmetic creams and similar products, the container affording a convenient means for the dispensing of its contents and presenting a jar-like structure of neat attractive appearance although the major portion of the contents be removed.

Another object of the invention is to provide a device of this character including a refill cartridge for use therewith, the novel arrangement of the latter affording particularly economic manufacture, being fabricated substantially of paper or like material so as to obviate the waste resulting from the use of more expensive containers.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawing which forms part of the application.

In the drawing:

Fig. 1 is an elevational view partly broken away in section illustrating the container and refill cartridge therein in use in dispensing a plastic substance.

Fig. 2 is an elevational view partly broken away in central section showing the contractable casing of the device without the refill cartridge.

Fig. 3 is an elevational view partly broken away in central section of the refill cartridge apart from the device; and

Fig. 4 is a transverse sectional view taken on line 4—4 of Fig. 3.

Referring now to the drawing for a more detailed description thereof, the numeral 5 indicates generally an end-wise contractable casing having a cylindrical wall 6 composed of a series of telescopic sections. To the uppermost section of the cylindrical wall 6 is secured an inwardly projecting collar 7 including an upwardly flared flange 8 thereon. The lowermost section of the wall 6 is provided with a closure member 9 preferably in the form of a cup, the upstanding flange 10 of which frictionally engages the mentioned section of the wall 6.

The preferred embodiment of a refill cartridge to be employed in conjunction with the contractable casing 5 is illustrated substantially in Fig. 3. The refill cartridge comprises an upper end wall 11 having a nozzle 12 therein. The lower end of the refill cartridge is closed as by a rigid disc 13 forming the bottom of the cartridge. The end walls 11 and 13 are connected by a cylindrical wall 14 the same being fabricated of a collapsible material such as paper or the like, the cylinder so formed being attached at each end to the walls 11 and 13.

To provide for circumferential expansion of the refill cartridge the cylindrical wall 14 thereof is formed in a plurality of folds 15, see Fig. 4, extending substantially lengthwise of the cylinder 14. The folds 15 are preferably formed in a zig-zag formation, the flat members of the fold being pressed into close association with each other so as to present a substantially even outer surface to the cylindrical wall 14.

The end wall 11 of the refill cartridge is preferably formed to provide convenient means for charging the cartridge and comprises a ring 16 attached to the cylindrical wall 14 and being threaded internally as indicated at 17 to receive a removable plug 18 therein. The plug 18 includes the mentioned nozzle 12, the latter being threaded at 19 to removably retain a closure cap 20 thereon.

In use, the refill cartridge shown in Fig. 3 is inserted end-wise into the contractable casing 5 by removing the cup-shaped closure 9 from the end thereof, the collapsible wall 6 being fully extended, the ring 16 being disposed against the flange 7. After replacement of the closure 9, pressure is applied by the fingers of the user substantially as illustrated in Fig. 1 during which the flared flange 8 serves as a convenient finger grip. It is to be noted that during the initial contraction of the casing 5, the cylindrical wall 14 is caused to expand circumferentially until same contacts the interior of the wall 6, at the same time retaining its association with the end walls 11 and 13. As the cylindrical wall 14 expands the folds 15 thereof are distorted thereby facilitating the end-wise contraction of the refill cartridge so that the entire contents thereof may be dispensed during further application of pressure to the casing 5.

It is to be understood that this improvement is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed as new is:

1. A dispenser of the character described comprising in combination, an end-wise contractable casing, a refill cartridge fitting into said casing and comprising rigid end walls, and a cylindrical wall of collapsible sheet material joining said end walls, one of said end walls including a threaded ring secured to said cylindrical wall and a plug having a nozzle therein, for engagement in said threaded ring.

2. A dispenser of the character described comprising in combination, an end-wise contractable casing, a refill cartridge fitting into said casing and comprising rigid end walls including a nozzle at one end, and a cylindrical wall of collapsible sheet material joining said end walls, and having longitudinal folds therein to permit circumferential expansion of said cartridge within said casing.

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