

July 12, 1938.

E. W. KAHN

2,123,731

CONTAINER

Filed Nov. 14, 1935

Fig. 1.

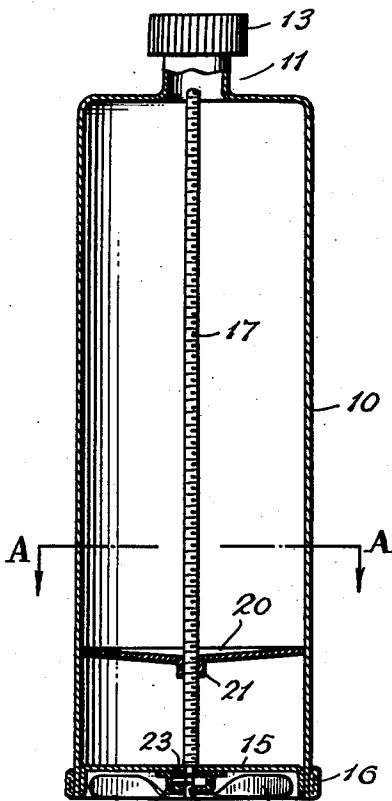


Fig. 2.

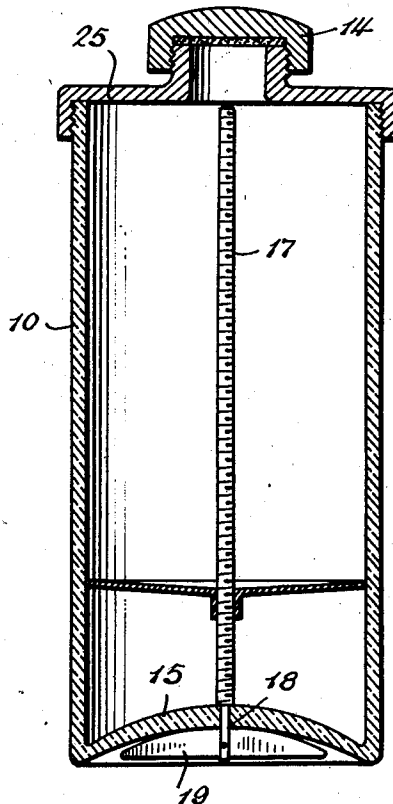


Fig. 3.

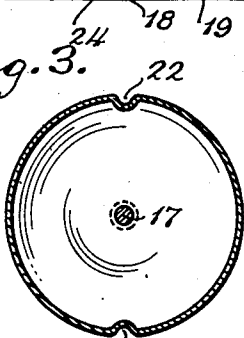


Fig. 4.

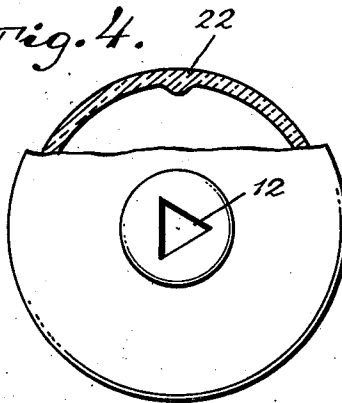


Fig. 6.

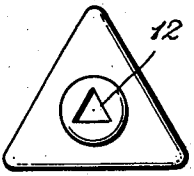
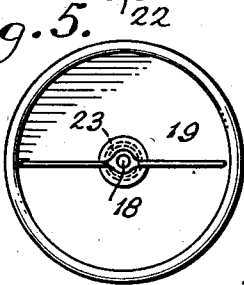


Fig. 5.



INVENTOR.  
EUGENE W. KAHN  
BY  
*Richardson & Seier*  
ATTORNEYS

# UNITED STATES PATENT OFFICE

2,123,731

## CONTAINER

Eugene W. Kahn, New York, N. Y.

Application November 14, 1935, Serial No. 49,655

### 1 Claim. (Cl. 221-79)

This invention relates to containers and the like and particularly to containers of the dispensing variety.

One object of the invention is to provide a non-collapsible container for shaving cream, tooth paste and cosmetics from which the contents may be easily projected without distortion of the tube.

Another object is to provide a sanitary and attractive dispensing device for cosmetics and the like.

A further object is to provide means within the container for projecting the contents and which means are operated from the outside of the container.

Still a further object is to provide a combination rigid container and dispensing device for shaving cream, tooth paste, cosmetics and the like, of simple, practical and compact construction.

The above and other objects may be carried out by fitting a plate or a disc within the container of any desired shape. This disc supports the contents of the container and is reciprocally mounted therein so that it may be advanced towards the aperture or nozzle of the container, thus forcing the material within the container to any height desired. The device may be operated by any convenient means, for instance, by reciprocating the disc on a central screw-threaded or notched member extending through the container. Although this construction is a preferred embodiment, the invention in no way is limited thereto.

This novel construction eliminates the necessity of making a dispenser tube or container collapsible, which fact has been a serious drawback to this type of device in view of the unsightly and untidy appearance that it presents after a short use. Consequently, it never found its way to a lady's dressing table, but had to be hidden away in a drawer or a cabinet out of sight.

Furthermore, the collapsible container heretofore used had to have a round or oval cross-section, since a tube of any other cross-section would hardly submit to the ordinary squeezing operation or, if it did, considerable waste of the material which it contained would be the result.

These obstacles have been overcome by the present invention which may be made from any suitable material, pliable or non-pliable, such as tin, aluminum, glass, porcelain and wood, and may be molded into different designs embodying a round, rectangular, triangular or any other cross-section.

By giving the tube or container a cross-section other than the conventional round or oval one,

the material from which it is made may be thinner and lighter, since the walls will support each other and maintain the rigidity of the tube. Thus the production cost may be reduced.

The collapsible or pliable characteristic of the device heretofore known made the use of a lead compound practically necessary. The presence of lead often affected the contents which in turn infected the tissues with which it came into contact.

The rigid characteristic of the present invention eliminates the necessity of using a lead compound.

The above and other objects will appear more clearly from the following detailed description, when taken in connection with the accompanying drawing, which illustrates a preferred embodiment of the inventive concept.

In the drawing:

Figure 1 is a longitudinal section of a non-refillable container embodying my invention.

Figure 2 is a longitudinal section of a refillable container.

Figure 3 is a cross section along the line A—A of Figure 1.

Figure 4 is a top plan view showing a part of the container in cross section.

Figure 5 is a bottom view of the device illustrated in either Figure 1 or Figure 2.

Figure 6 is a top plan view of a container embodying my invention having a triangular cross-section.

Throughout the drawing, the same numbers indicate the same or corresponding parts.

Referring to Figures 1 and 2, 10 is the body portion of the tube or container; 11 is the nozzle having an aperture 12 (shown in Figs. 4 and 6). The nozzle may be plain or threaded and covered with an ordinary cap 13 or a screw cap 14 as shown in Figures 1 and 2, respectively.

The bottom 15 of the body portion may be flat or concave as shown in Figures 1 and 2, respectively, and may be pressed into contact with the sidewalls in the usual manner forming a depending circumferential bead 16 serving as a support as shown in Figure 1, or molded in one piece therewith as in Figure 2.

A screw-threaded plunger 17 extends from the nozzle 11 through the body portion 10. The non-threaded portion 18 penetrates the bottom 15. The portion penetrating the bottom may be reduced in order to secure a more stable connection.

A wing-nut 19 or some similar member is attached to the non-threaded portion 18 of the

screw-threaded plunger 17 and whereby the latter may be rotated.

A disc or a plate 20 is fitted snugly within the container and carried by the screw-threaded plunger 17. The disc may be provided with a collar 21 in order to re-enforce the connection.

The interior of the body portion may be provided with longitudinal ribs 22 which engage corresponding notches in the disc or plate 20 whereby rotation of the disc is prevented, thus forcing the same to be reciprocated in a longitudinal direction when the screw-threaded plunger 17 is rotated.

The disc 20 is preferably flexible and cupped or saucer-shaped as shown in the drawing in order to facilitate insertion and present a greater resistance to the contents. Thus, when the disc is pressed against the contents, the force will tend to straighten it out establishing a snug fit whereby seepage between the edges of the disc is prevented. By virtue of this construction, the disc may be stamped from relatively thin and light material, whereby the weight of the device may be kept at a minimum.

In the modification shown in Figure 1, a slightly compressed spring 23 is situated within a housing 24 attached to the bottom 15. One end of this spring rests loosely in the housing whereas the other end is attached to the portion 15 of the screw-threaded plunger 17. When the wing-nut 19 is rotated in the direction which would tend to further compress the springs, the latter will rotate with it. On the other hand, when the wing-nut is turned in the opposite direction, the spring will expand and prevent further rotation. Thus the disc 20 may be made to move only in a direction towards the aperture, which characteristic adds to the nonrefillable feature of this container.

In the modification illustrated in Figure 2 of the drawing, the cover portion 25 is removable, which feature may be accomplished, for instance, by providing the top of the body portion and the cover with corresponding screw-threads. Thus, the container may be repeatedly refilled, after the original filling has been consummated.

Because of the cross-section given to the modification shown in Figure 6, the internal ribs 22 serving to keep the disc from rotating may be

eliminated. It is obvious that this plate will be held in place merely by the sidewalls. The same would be true relative to a rectangular, hexagonal, etc. cross-section.

It will be seen that the wing-nut 19 is completely covered by the bead 16 or fitted within the concave bottom shown in Figure 2 so that the container may stand in an upright position like any ordinary receptacle without the wing-nut showing.

The aperture 13 may be of any desired shape, but is preferably triangular in order to maintain the rigidity of the material after it has been projected. It is obvious that a triangular shape would give the projected material greater support and it would not bend and fall off the nozzle. Thus a small amount of shaving cream may first be projected outside the aperture and then the brush may be used to take it off. This operation does not require more manipulation than the conventional collapsible tube.

It is manifest that many variations of the above features may be resorted to without departing from the spirit of the invention.

What is claimed is:

A combination container and dispenser for shaving cream, salves, and the like, comprising, a body portion having side walls, a bottom and a top, said top being substantially flat on the inner side thereof and having a nozzle substantially in the center thereof, a shallow cone-shaped disc of flexible material transversely fitted in said body, the apex of said disc being on the lower side relative to said top and nozzle, the outer edge of said disc being slidably engaged with the inner side of said walls, said disc being reciprocable longitudinally in said body, and engageable with said top for ejecting substantially all of the contents thereof, threaded means in the center of said disc, and a threaded rod extending through said disc and threadedly engaged with said means, said rod extending longitudinally along the axis of said body, means on the lower end of said rod and extending externally of said body through the bottom thereof for manually rotating said rod to move said disc.

EUGENE W. KAHN.