Sept. 27, 1927. 1,643,381

I. T. KAHN

CONTAINER FOR COLLAPSIBLE TUBES

Filed Aug. 9, 1926

Fig. 1

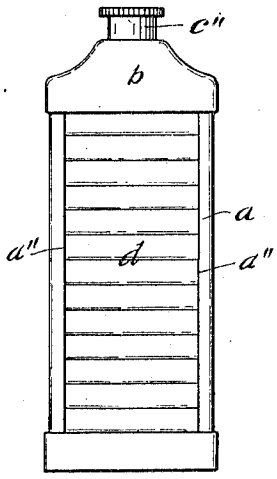


Fig. 2

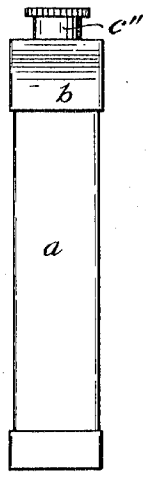


Fig. 3

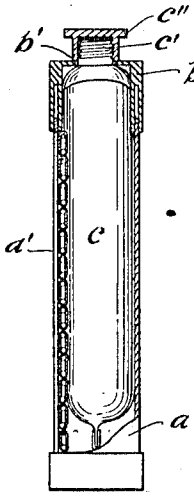


Fig. 4

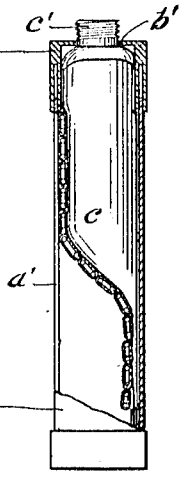


Fig. 5

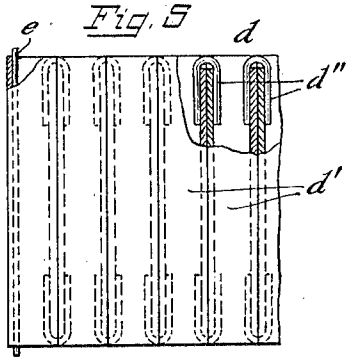
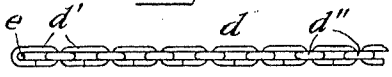


Fig. 6



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UNITED STATES PATENT OFFICE.

ISAAC T. KAHN, OF CLEVELAND, OHIO.

CONTAINER FOR COLLAPSIBLE TUBES.

Application filed August 9, 1926. Serial No. 128,276.

My invention relates to improvements in container for collapsible tubes, and has for its object the provision of means for holding and expressing the contents of collapsible tubes without waste or loss of such contents.

Modern methods of merchandising have adopted the collapsible metallic tube as a container for a wide variety of toilet articles, foods, pigments, and the like. Possibly the widest use thereof exists with respect to dentifrices, toilet and shaving creams which insures undeniable convenience and advantage, coupled with certain disadvantages, such as loss of the contents through excessive or poorly controlled expulsion thereof from the tube, or a failure to expel the entire contents. Moreover, a partly used collapsible tube commonly becomes untidy and it is inconvenient to care for it on a dressing table or, the like.

Accordingly, it has been my further object to provide a suitable operating container for collapsible tubes, which will be handy for use, neat in appearance, and insure the gradual expression of the contents of an inserted tube, without waste or loss. This, almost of necessity, must be actuated with one hand, while it is obvious that the article must be simple, cheap to manufacture, and attractive in appearance. These features will be found adequately combined in the embodiment of my invention illustrated in the accompanying drawings, wherein:

Figure 1, is a view of said device or container in front elevation.

Fig. 2, is a side elevation thereof.

Fig. 3, is a vertical section showing the inserted tube.

Fig. 4, is a similar sectional view, showing, in addition, the partly collapsed tube, and indicating the mode by which its contents may be evenly and completely expressed.

Fig. 5, is an enlarged fragmentary view, partially broken away and in section, showing the flexible expressing member of my improved container, and

Fig. 6 is a view thereof in side elevation.

Throughout the several figures of the drawings I have employed the same character of reference to indicate similar parts.

The container, as shown, comprises a metallic body portion *a*, open at the front *a'*, and provided with a removable cover *b*. When the cover is removed, the collapsible tube *c* may readily be inserted within the container so that its threaded neck *c'* protrudes through a circular opening *b'* provided in said cover. When the cover is in place, the screw cap *c''* may be adjusted upon the top of the tube to protect its contents until wanted for use.

Although the container securely protects an inserted collapsible tube, and the contents might be manually expressed by inserting the thumb to apply pressure through the front opening, I prefrerably provide means for gradually and evenly applying such pressure. The particular means shown consists of a readily flexed member *d*, made up of flattened metallic tubular sections *d'*, terminally united by the U-shaped links *d''*, so that said members may readily move with respect to each other and insure flexibility for the expressing member, as a whole.

Said expressing member is supported rearwardly of the opening in the casing by a transverse pin *e*, so that it hangs as a flexible closure rearwardly of the opening *a'*, with its edges laterally engaged by the side pieces *a''*. Thus, member *d* affords sufficient rigidity, vertically, to transmit applied pressure evenly and effectively to the front of the tube, beginning from the bottom up, so that it may be gradually but completely collapsed, just as the contents are required for use.

This operation may be accomplished by the thumb pressure of one hand, so that the tube *c* finally is completely collapsed as a flat metallic ribbon, excepting only a negligible portion at the upper extremity of said tube. The flexibly mounted tubular links or sections *d'*, it will be seen upon referring to the lower portion of Fig. 4, evenly transmit the applied pressure to the body of the collapsible tube *c*, so that all of the contents gradually is displaced without loss or waste and under the complete control of the user in a manner not obtainable with the fingers alone. It is seen that the body of the tube becomes flatly compressed between the parallel faces of member *d* and the rear wall of the container *a*, as they are approximated.

While I have shown particular means for accomplishing the desired results, it will be appreciated that the container, and particularly the flexible member, may be constructed differently and cooperatively adapted to each other, without departing from the spirit of my invention, as defined in the appended

claims, hence I do not wish to be understood as limiting the same to the details of construction herein set forth as embodying my instant improvements.

Having now described an appliance embodying the preferred or typical form of my invention, I claim as new, and desire to secure by Letters Patent, the following:

1. In a device of the class described, the combination with a protective casing having an opening for accommodating the neck of a collapsible tube and a longitudinal opening approximately the length of the tube, of means comprising a flexible closure member secured at its upper end to the casing and substantially coextensive with said longitudinal opening and the length of an inserted tube for applying graduated pressure evenly to the tube as initially applied to said flexible member and gradually completing its collapse.

2. In a device of the class described, the combination with an elongated protective casing affording a top opening through which the neck of a collapsible tube may be protruded and a longitudinal opening approximately the length of the tube, of flexible means supported within the casing positioned before the latter opening adjacent to a contained tube and substantially coextensive therewith and adapted to transmit applied pressure externally applied evenly thereto and successively complete its collapse.

3. In a device of the class described, the combination with an elongated protective casing provided with a longitudinal opening approximately the length of a collapsible tube which it is designed to hold, of a cover having an opening for the protrusion of the tube-neck therethrough, and a flexible member supported rearwardly of said opening within the casing and closing the longitudinal opening, comprising pivotally connected sections in different horizontal planes adapted successively to transmit pressure externally applied to a contained tube evenly across its width and gradually complete its collapse.

In testimony whereof I do now affix my signature.

ISAAC T. KAHN.