Sept. 6, 1932. W. G. COLLINS 1,876,489

TUBE HOLDER AND DISPENSER.

Filed March 30, 1931

Fig. 1.

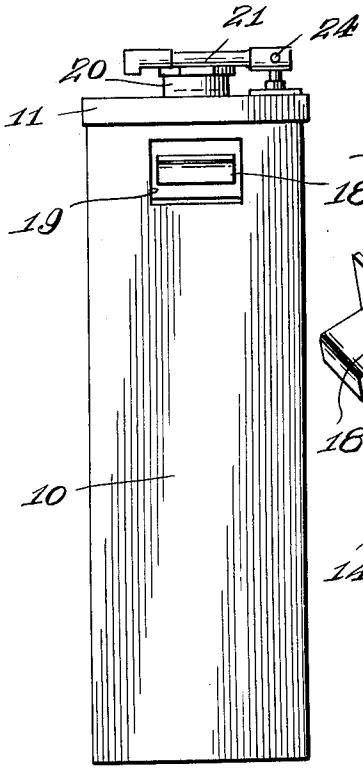


Fig. 2.

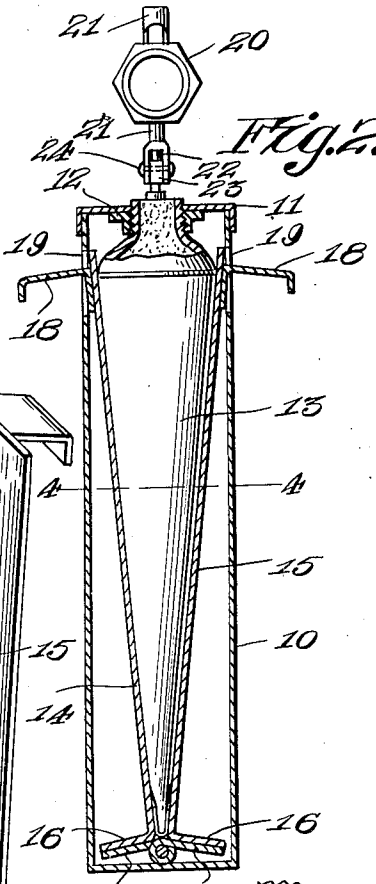


Fig. 3.

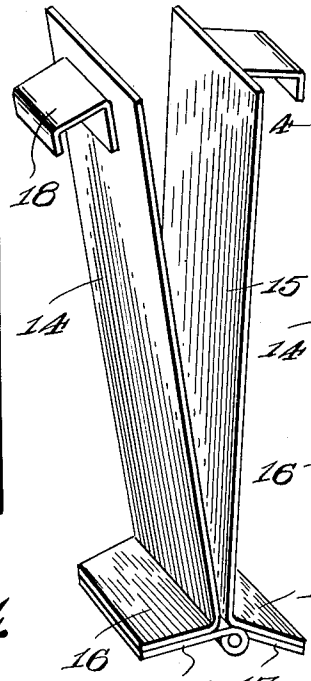


Fig. 4.

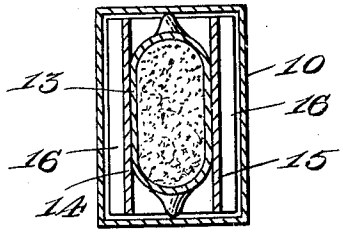
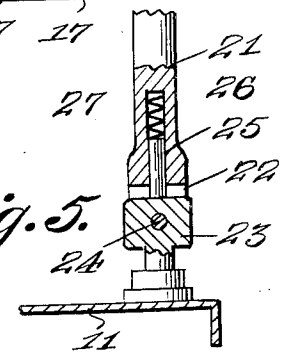


Fig. 5.



W. G. Collins,
INVENTOR

BY Victor J. Evans and Co.
ATTORNEYS

WITNESS:

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UNITED STATES PATENT OFFICE

WILLIAM G. COLLINS, OF HONOLULU, TERRITORY OF HAWAII

TUBE HOLDER AND DISPENSER

Application filed March 30, 1931. Serial No. 526,363.

This invention relates to dispensing or ejecting devices primarily designed for use and in conjunction with collapsible tubes for the discharge of the contents thereof.

One of the principal objects of the invention consists of a housing designed for the accommodation of a tube of this character and to project the discharge end of the latter through one end wall thereof.

An additional object of the invention contemplates the provision and arrangement of pressure operable means disposed for engagement with opposite sides of the tube and to relieve all tension therefrom when released whereby the vacuum formed within the tube behind the contents thereof will be sufficient to retard further egress of the contents when the cover cap for the top end of the tube is removed.

A further object of the invention embodies a hinge connection for the pressure operable means whereby equal degrees of pressure may be exercised transversely of the tube by means of which the entire contents of the tube may be discharged.

More specifically stated the cover cap for the discharge end of the tube is provided with a supporting apparatus designed to yieldably retain same in its respective positions.

With the above and other objects in view, the invention further consists in the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

Figure 1 is an elevation of the present invention.

Figure 2 is a longitudinal sectional view taken therethrough with the cover cap removed.

Figure 3 is a perspective view of the pressure operable dispensing means.

Figure 4 is a horizontal sectional view taken on line 4—4 of Figure 2.

Figure 5 is an enlarged detail sectional view taken through the mounting for the cover cap support.

Referring to the drawing in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates generally a form of housing having a flanged telescopically associated closure 11 removably positioned upon one end thereof. A bushing 12 carried by the closure 11 is interiorly threaded to accommodate the threaded discharge neck of a collapsible tube, such as indicated at 13, now employed for tooth pastes, shaving creams, oil paints and the like. The body of the tube is wholly disposed within the confines of the housing, substantially as illustrated in Figure 2 of the drawing.

The pressure operable dispensing means, alluded to in the foregoing, resides in the provision and arrangement of complemental wall members 14 and 15 respectively having the lowermost ends thereof offset to provide attaching flanges 16. A hinge member has the leaves 17 thereof secured in the manner suggested in Figures 2 and 3 of the drawing to the under side of the attaching flanges 16 whereby the wall members 14 and 15 may swing from the connecting hinge barrel to squeeze and disengage the tube. It is obviously apparent from the illustrations that the body of the collapsible tube is interposed between the wall members 14 and 15. The character 18 denotes inverted U-shaped finger engaging portions having one limb thereof secured to the outer face of the complemental wall members 14 and 15 and the L portions thereof extend through the oppositely disposed openings 19 of the contour 10 and project therebeyond. It will be obvious that this construction of finger serves to provide the same with L-shaped portions lending to the convenience of the user in compressing the wall members when a predetermined quantity of the contents of the tube 13 is desired.

A closure cap, such as indicated at 20, constructed after the manner of the usual collapsible tube closure cap, is mounted upon a supporting arm 21 which is bifurcated, as at 22, to swingably accommodate a stationary member 23 carried upon the closure 11. A pivot pin 24, common to the aforementioned assembly, provides the axis upon and from which the support 21 is shifted to oc-

cupy the positions shown in Figures 1 and 2 of the drawing. A plunger pin 25, slidably accommodated within a longitudinal bore 26 within the arm 21, is yieldably induced by a compression spring 27 to frictionally engage the outermost projecting end thereof with the several facets of the stationary member 23 in order that the closure cap may be yieldably retained against accidental displacement when shifted to occupy either of its several positions.

From the foregoing it will be noted that I have provided a most efficient form of dispensing apparatus for receptacles or containers of the character described and which affords the highest degree of sanitation and cleanliness in that the yieldably positioned closure cap 20 will prevent the ingress of air and inert matter, keeping said contents free from pollution and hardening whereby the commodity may be dispensed in usable form when desired.

By reason of the fact that the wall members 14 and 15 are disposed in the manner suggested in Figures 2 and 3 of the drawing, the entire contents of the tube may be dispensed due to the fact that equal degrees of pressure are exercised transversely of the tube throughout its length.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:

A dispensing apparatus for collapsible tubes comprising a housing having an open end and a pair of oppositely disposed openings formed in the housing at a point adjacent the open end thereof, complemental wall members arranged within the housing in a downwardly, inwardly, and obliquely inclined position, an offset attaching flange formed on the lower end of each of said complemental wall members, a hinge within the container and mounted upon the bottom thereof and connected with the offset attaching flanges of the complemental walls, and inverted U-shaped finger engaging portions secured to the outer face of each of the complemental wall members and projecting outwardly through the oppositely disposed openings of the housing and extending therebeyond for compressing the said complemental wall members.

In testimony whereof I affix my signature.

WILLIAM G. COLLINS.