

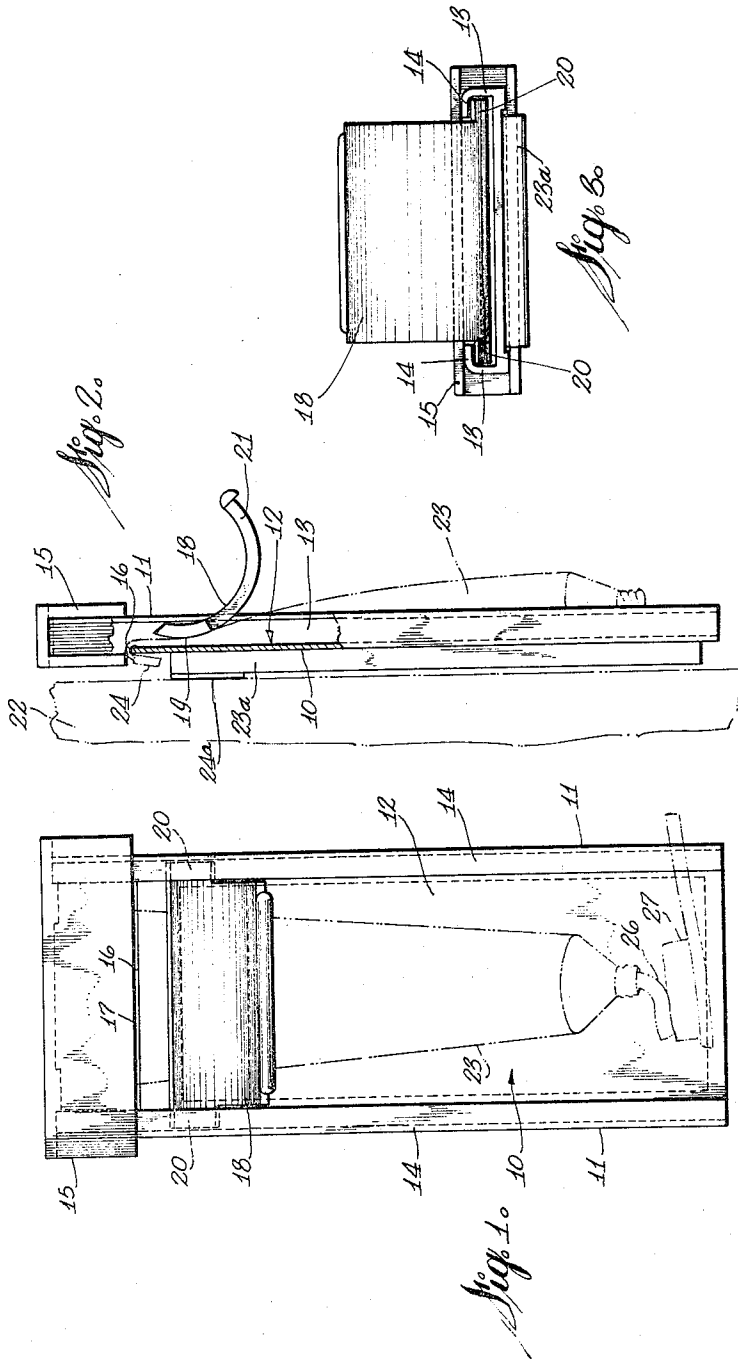
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DISPENSING DEVICE FOR COLLAPSIBLE CONTAINERS

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DISPENSING DEVICE FOR COLLAPSIBLE CONTAINERS

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ABSTRACT OF THE DISCLOSURE

This invention relates to a dispensing device for collapsible containers, such as tubes of toothpaste, shaving cream, and the like. The device comprises a base plate having a surface on which a collapsible container is adapted to be mounted. A member engageable with the container has a sliding path of movement along said surface, the plate having means guiding the member along such path. The member has an arcuate surface engageable with the container and is rockable with respect to the plate to apply collapsing action against the container. The member is movable outwardly from the plate surface a predetermined distance sufficient to permit passage between said surfaces of the collapsed portion of the container.

Many devices have heretofore been proposed for facilitating the economic and convenient ejection of required amounts of contents from collapsible tube type containers. While the advantages of a device for conveniently dispensing desired quantities of such contents and for ultimately dispensing the entire contents of such containers are well recognized, complicated structures and excessive costs have frequently prevented commercial acceptance of such devices.

The present invention seeks to provide an article for the purpose set forth, such article being of simple structure and low cost manufacture, convenient in operation, and fully effective in the economic use of the container contents.

The invention may be defined as a dispensing device for collapsible containers which comprises a rectangular base plate having a forward container-receiving surface, a container-engageable member having a sliding path of movement along said surface, said plate having means guiding said member along said path, said member having an arcuate surface in confronting relation to said container-receiving surface, said member being movable to permit spacing of said surfaces a predetermined distance apart, said member having limited rocking movement about the axis of said arcuate surface with relation to said plate surface.

The invention will be described with reference to the accompanying drawing, in which:

FIGURE 1 is a front elevation of a device in accordance with the invention,

FIGURE 2 is a side elevation, and

FIGURE 3 is an end view.

The device of the present invention may be formed of rigid material such as metal, plastic composition, or the like.

The device comprises a rectangular plate 10 having at each longitudinal edge a channel 11 projecting forwardly of the front face or surface 12 of the plate. As shown, each channel is formed by a wall 13 extending perpendicularly from face 12 and a wall 14 overhanging face 12.

The channels 11 extend beyond one end of the plate and the projecting end portions of the channels may be enclosed by means of a removable U-shaped cap 15. One edge of cap 15, when in place on the channels, forms with the adjacent end edge 16 of the plate a transverse slot 17.

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A tube-collapsing member 18 is slidably mounted on the face 12 of the base plate. Member 18 has an arcuate surface 19 confronting face 12 and at each end thereof a lug 20 extending loosely into a channel 11. It will be apparent that the lugs 20 serve to retain the member 18 on the surface 12 while permitting sliding movement thereof in a longitudinal path. Thus, the channels 11 constitute guiding means for such sliding movement.

The loose fitting engagement of the lugs 20 with the wall of channels 11 permits limited rocking movement about the axis of the arcuate surface 19 with relation to surface 12. The member 18 is movable outwardly away from the surface 12 to a position wherein there is a limited space between surface 12 and the opposed portion of surface 19. In this position, the lugs 20 are in engagement with the inner surfaces of channel walls 14, as shown in FIGURE 2.

A portion 21 of member 18 extends forwardly beyond channels 11 to constitute a manually engageable handle for imparting movement to the member 18. Member 18 may be separated from the base plate by moving it out of the ends of the channels 11.

In use, the base plate 10 is adapted to be mounted on a vertical wall 22 (FIGURE 2). While any suitable means may be employed for the purpose, in the modification illustrated, a mounting pad 23a is fixed to the rear surface of the plate, and an adhesive strip 24a secured to the pad fixes the plate to the wall. Thus, the plate, in use, is adapted to be fixed with its surface 12 and channels 11 in vertical position, the projecting ends of the channels being in uppermost position.

With cap 15 and member 18 removed, a collapsible tube 23 is placed upon surface 12 with the closed bottom end portion 24 thereof doubled over edge 16. Collapsing member 18 is then inserted in channels 11 from the upper ends thereof and placed with its arcuate surface 19 in engagement with the tube. Cap 15 is now placed over the projecting ends of channels 11, in which position one edge thereof engages the bottom end portion of the tube to retain it in suspended relation upon surface 12.

It will be apparent that, with the conventional cap of the tube removed from the mouth 25 thereof, rocking movement may be manually applied to member 18 to collapse the engaged portion of the tube and extrude paste 26 therefrom onto, for instance, a toothbrush 27, as shown.

I claim:

1. A dispensing device for collapsible containers which comprises a rectangular base plate having a forward container-receiving surface, a container-engageable member having a sliding path of movement along said surface, an open-ended channel extending along each longitudinal edge of said plate and integral therewith, said plate and channels being of uniform cross-section throughout the lengths thereof, each said channel having a wall overlying said forward surface, said member being arcuate in cross-section and having a pair of end edges, a pair of longitudinal edges, and a convex surface in confronting relation to said container-receiving surface, said member having a lug projecting from a minor portion of each end edge thereof adjoining one of said longitudinal edges, each said lug being constituted by a coplanar continuation of said member of minor extent and having a convex surface in coplanar relation with said convex surface of said member and in confronting relation with said forward surface, said lugs being receivable in said channels for guiding movement therealong, said lugs having limited movement in a direction perpendicular to said channel walls to permit limited rocking movement about the axis of said arcuate surfaces with relation to said forward plate

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surface, said lugs having a position in said channels where-
 in said lugs are in engagement with said channel walls
 and a portion of said convex surfaces are in pressure
 applying relation to said forward plate surface, said mem-
 ber in said position having its major portion including
 the other longitudinal edge thereof lying forwardly of
 said forward surface and said channels and constituting
 the handle portion, each said channel having a portion
 projecting beyond one end edge of said plate, and a cap
 removably mounted on said channel end portions, said
 cap having a position in seated engagement with the end
 edges of said channel end portions and an edge in opposed

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spaced parallel relation to said plate end edge to form
 therewith a container-receiving slot.

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