

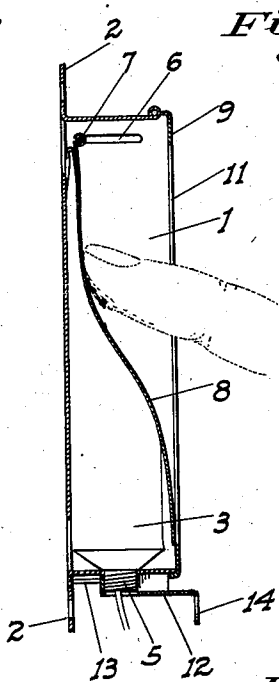
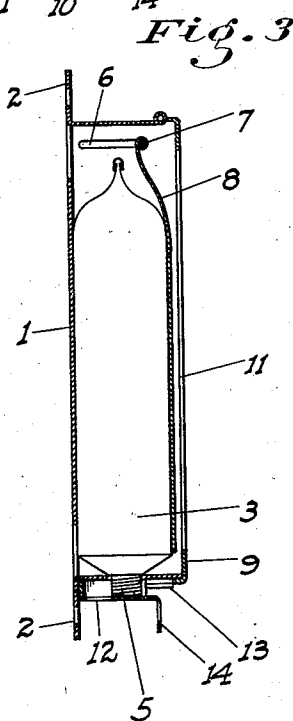
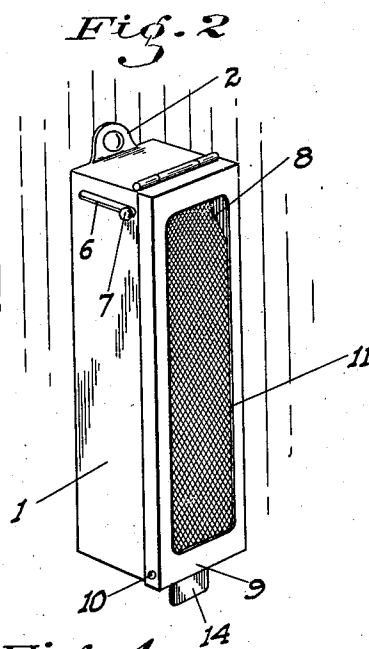
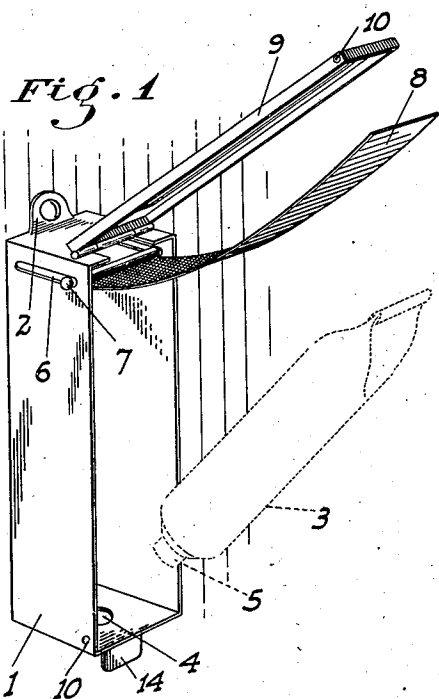
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TUBE EVACUATOR

Filed Aug. 13, 1928



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TUBE EVACUATOR

Application filed August 13, 1928. Serial No. 299,234.

This invention relates to devices for dispensing the contents of flexible tubes, especially those in which tooth paste, shaving cream, and similar plastic materials are marketed.

The principal object of my invention is to provide a casing in which the tube is permanently mounted as long as it retains any of its contents, and means mounted in connection with the casing for enabling a squeezing pressure to be easily exerted against the tube at any point of its length and for the full width thereof so that the contents will be evacuated from the mouth of the tube. By means of this device the tube is always in a certain definite location when wanted and the contents may be dispensed without the manual and uncertain squeezing of the tube as is now commonly done.

A further object of the invention is to provide a device of this character so constructed as to work equally well with tubes of different diameters and lengths within, of course, certain limitations.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a perspective elevation of my improved evacuator showing the cover and the presser strip raised to permit the insertion or removal of a tube.

Fig. 2 is a similar view showing the cover closed.

Fig. 3 is a cross section of the device showing a full tube in place.

Fig. 4 is a similar view showing the tube partly emptied.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 denotes a rectangular casing which is open on the front and provided with top and bottom ears 2 at the back for the reception of screws to hold the casing against a wall or other supporting surface in a vertical position.

The dimensions of the casing are such as to enable it to receive any tube 3 within the range of the usual standard sizes in which the particular products previously mentioned are put out. The bottom of the casing is provided with a centrally disposed opening 4 to receive the neck or mouth 5 of the tube there-through. Above the tube the sides of the casing are provided with horizontal slots 6 in which a pin 7 is slidable and turnable. Fastened on this pin and depending therefrom is a strip 8 of spring steel having considerable flexibility longitudinally but rigid transversely. The strip is at least as wide as the tube and depends lengthwise of the casing to about the bottom of the same. Hinged on top of the casing is a lid 9 extending down the open front of the casing, there being friction catch means 10 between the casing and the side flanges of the lid at the lower end thereof. This lid has a longitudinal slot 11 of lesser width than the strip 8 but of sufficient width to readily accommodate a finger of the operator. When the tube is in place and the lid is closed thereon, the side edges of the strip will be concealed, the tube will be invisible and the device will present an extremely neat and attractive appearance.

In operation it is only necessary for the operator to press the strip 8 inwardly, which will exert a pressure against the tube for the full width thereof and cause the contents to be discharged from the mouth projecting below the casing. The strip being rigid transversely and as wide as the tube insures that the latter will be flattened simultaneously over its entire width so that no pockets are

formed from which the contents will not be evacuated. If, then, the strip is manipulated so as to first flatten the tube at its upper end and the finger pressure is exerted so as to gradually cause such pressure to work down the entire length of the tube, it will be seen that the entire contents of the tube will be evacuated without any waste.

Owing to the use of the slot and pin arrangement to which the spring strip is attached, the latter is permanently mounted in place while it can be easily raised to enable a tube to be inserted or removed, and may also be pressed freely toward the back of the casing as the adjacent end of the tube becomes flattened without bending or straining the strip at its fastened end. The use of the slotted lid besides giving the device a neat appearance prevents the lower end of the strip from moving outwardly of the casing when pressure is exerted on the strip above such end, as indicated in Fig. 4.

If desired or found necessary, a slidable cap or cover 12 supported by guides 13 mounted on the bottom of the casing, may be provided to normally close the open mouth of the tube. A depending finger piece 14 enables this cover to be readily moved to or from its mouth closing position.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. A tube evacuator including an open-front casing to support a tube, a flexible presser strip disposed in the casing in front of the tube, a transverse pin on one end of the strip, the sides of the casing adjacent one end having horizontal slots into which the ends of the pin project.

2. A tube evacuator including an open-front casing to support a tube, and having an opening in one end for the projection of the neck of the tube, a flexible strip disposed in front of the tube, and connection means between the strip and casing at the end thereof opposite to the neck-opening; the free end of the strip being vertically spaced from the corresponding end of the casing a sufficient distance to enable said end being pressed inwardly just beyond the portion of the tube adjacent the neck.

3. A tube evacuator including an open-front casing to support a tube, and having an opening in one end for the projection of the neck of the tube, a flexible strip disposed in

front of the tube, pivot connection means between the strip and casing at one end to enable said strip to be swung outwardly of the casing, and a lid for the front of the casing outwardly of the strip pivoted on the casing at the same end as the strip and having a longitudinal opening of lesser width than the strip to normally prevent outward movement of the same.

In testimony whereof I affix my signature.
EDWARD S. GRIGSBY.

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