July 29, 1924. 1,503,176

J. H. WARING

COLLAPSIBLE TUBE HOLDER

Filed Sept. 18, 1922

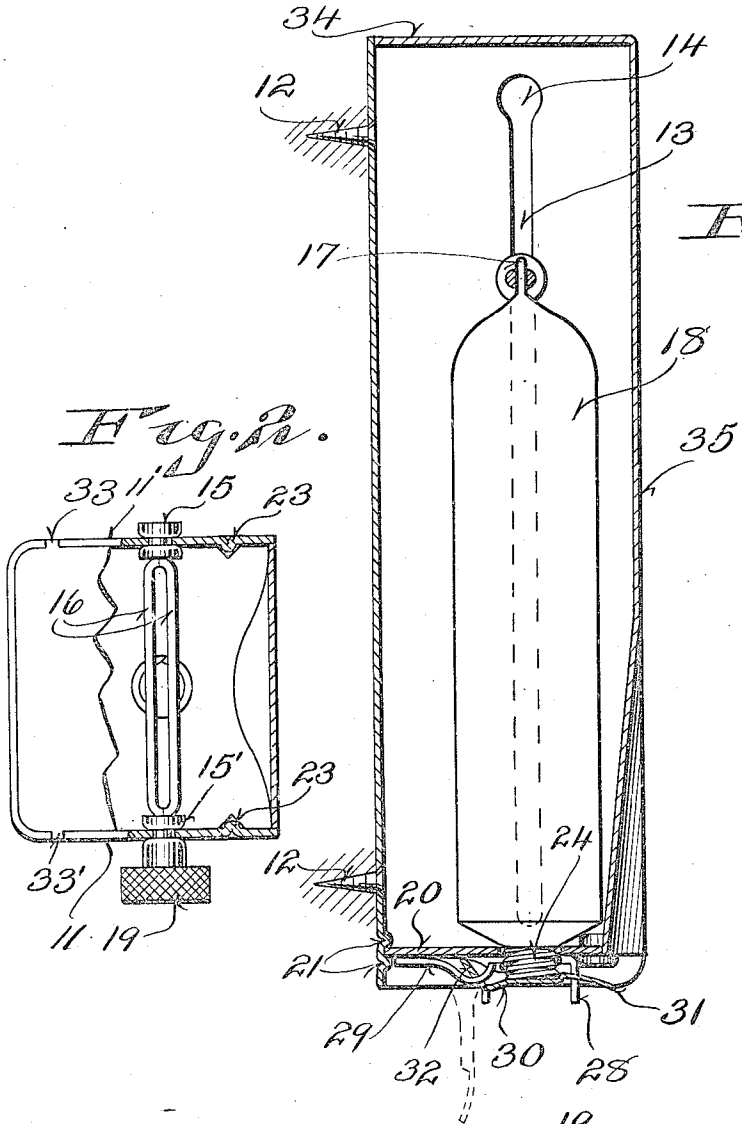
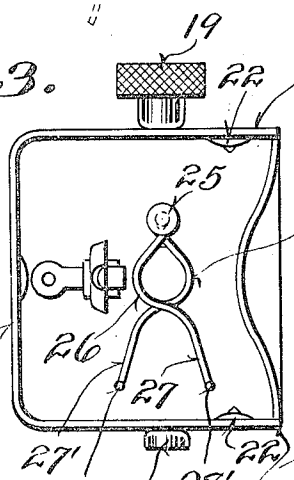


Fig. 1.

Fig. 2.

Fig. 3.



Inventor
James H. Waring

Witness:
G. P. Britt

Witness:
W. Horney Jr.

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UNITED STATES PATENT OFFICE.

JAMES H. WARING, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO GEORGE E. ZIRKELBACH, OF MILWAUKEE, WISCONSIN.

COLLAPSIBLE-TUBE HOLDER.

Application filed September 18, 1922. Serial No. 588,915.

To all whom it may concern:

Be it known that I, JAMES H. WARING, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Collapsible-Tube Holders; and I do hereby declare that the following is a full, clear, and exact description thereof.

The general object of this invention is the provision of a holder for that form of toilet commodities which is usually packed in collapsible tubes, and having the holder adapted so that the tube may be collapsed for ejecting therefrom the contents of the tubes in desired quantities.

It is well-known that many toilet commodities such as tooth paste, shaving creams, vaseline and the like, are sold in collapsible tubes, which tubes are made of a flexible sheet material and are adapted to be compressed, so as to eject the contents from a nozzle provided thereon. It frequently occurs that a person unaccustomed to using these tubes, compresses the same at the middle thereof, and the result is that the contents not only is ejected from the nozzle but is also directed through fractures which occur in the body of the tube, by virtue of the internal pressure; thus the paste easily becomes unfit for use. Another disagreeable feature by the use of collapsible tubes, is that the cap thereof often becomes lost, and the uncovered paste usually becomes contaminated.

The above described disagreeable features are obviated by my invention which consists of a container or holder which may be secured to a wall or suitable support, and is adapted to securely hold a tube of toilet cream or the like, and further, is provided with a handle or key for winding up the tube so that the contents thereof will be ejected from the bottom or nozzle, and further is provided with means for capping the tube when not in use.

A more specific object of the invention is the provision of a structure, the parts of which are easy to manufacture and readily assembled. The casing is provided with key-hole slots for the reception of the key which may be quickly placed in operative position, and which operates as a brace or spacer preventing separation of the walls of the casing. The bottom is retained in position by pairs of ears struck out of the walls of the casing, and the cover is retained in position by a pair of laterally extending lugs which are received in notches in the casing. All of the parts are simple and easy to manufacture.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

Figure 1 is a vertical section thru the casing showing the tube in position.

Figure 2 is a plan showing the cover broken away and bringing out the key construction.

Figure 3 is a bottom plan.

The casing comprises a rear wall 10 and sides 11—11′ integral therewith and outwardly directed with respect thereto. The rear wall is provided with openings thru which screws 12 are directed for securing the device to a suitable support. In the sides 11—11′ are vertically extending slots 13 terminating at their upper ends in enlarged eyes 14, so that they are substantially key-hole shaped. The key is adapted to be placed in position by being inserted thru the eyes 14. It is provided with trunnions 15—15′, having annular slots therein. From one trunnion to the other extend a pair of parallel bars 16, which are adapted to grip therebetween, the end 17 of a flexible tube 18. The key is provided with a knurled knob 19 adapted to be manually rotated. The edges of sides 11—11′ are received in the annular slots of the trunnions and the key operates to maintain the sides in definite spaced relation preventing separation thereof.

A separable bottom 20 is provided, adapted to be slid into position; its inner edge is

received between elongated parallel ears 21 struck inwardly from the rear wall of the casing. The side edges of the bottom are maintained in place by similar pairs of ears 22. Between each of the pairs of ears 22 is an inwardly directed minor projection 23 adapted to fit in notches in the bottom to prevent outward movement thereof. These ears and projections are easily made, so that the assembly of the bottom is effected conveniently, yet the construction is strong and durable. The bottom is provided with an opening through which the nozzle 24 of the tube is adapted to project. A retainer is provided to hold the nozzle in fixed position. It is secured to the bottom by means of rivet 25 about which the retainer is looped. It is formed of wire and extends from rivet 25 in semi-circular portions 26—26′ adapted to grip the nozzle. Beyond these portions, arms 27—27′ extend provided with downwardly directed fingers 28—28′, adapted to be compressed manually to effectuate a release of the retainer, or to open the retainer for the reception of a nozzle 24. One end of a spring 29 is also riveted to the bottom 20, the other end being received in an opening in a cap 30 adapted to cover the nozzle 24 and provided with a lip 31, adapted to be moved by the hand. A leg 32 of the cap 30 contacts with the bottom, and the pressure of spring 29 tends to maintain the cap 30 in position. The cap is moved downwardly into the position shown in dotted lines when it is desired to use the contents of the tube, and when the movement of the cap is sufficiently far, the point of contact of the leg 32 with the bottom is in such a position with respect to the point of contact of the leg with spring 29 that the cap is retained in downward position, the spring exerting no action tending to restore the cap to closed position. In ejecting the contents of tube 18, knob 19 is merely rotated which winds up the upper end of the tube on the key decreasing the capacity of the tube, the key traveling downwardly in slots 13. Sides 11—11′ of the casing are provided with notches receiving lugs 33—33′ extending laterally from the top 34 of a cover which forms a front 35 for the casing, and is provided, adjacent its lower end, with a longitudinal deformation, the end of which is in contact with the outer edge of a bottom 20, the bottom being cut away at this point. Obviously the cover may be assembled very quickly with respect to the casing, the ears 33—33′ are formed integrally with the top 34, a construction which is simple and easy to manufacture.

I claim:

1. In a device of the class described, the combination of a casing having a rear wall and side walls rigid with said rear wall, and a bottom, said casing being provided with a plurality of pairs of ears retaining said bottom slidably in position.

2. In a device of the class described, the combination of a rear wall having a pair of ears spaced slightly apart, side walls rigid with said rear wall and extending forwardly therefrom, a pair of ears on each of said side walls inwardly extending therefrom, a projection inwardly extending between each of said last mentioned pairs of ears, and a bottom retained in position with its edges gripped by all of said pairs of ears, said bottom having notches for the reception of said projections.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

JAMES H. WARING.