June 7, 1927. 1,631,275

A. G. LEAKE

COLLAPSIBLE TUBE HOLDER

Filed March 17, 1926

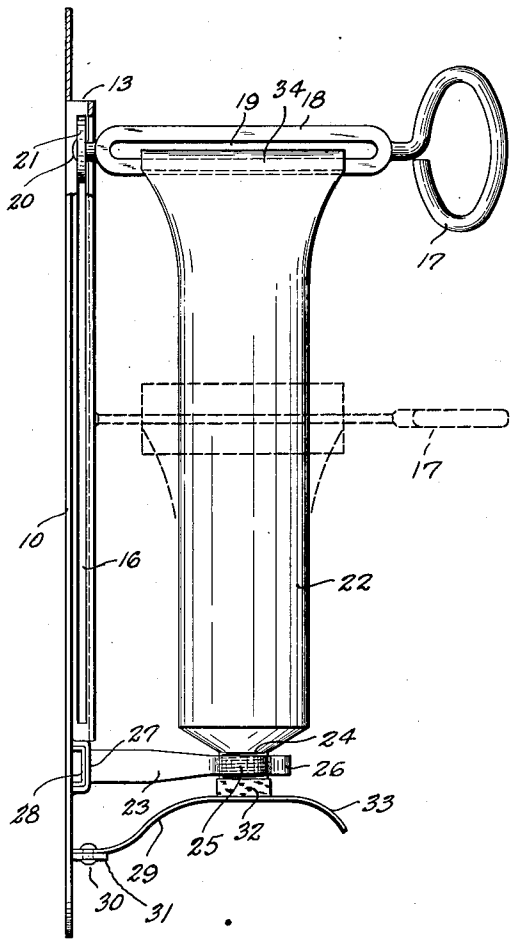


Fig. 1.

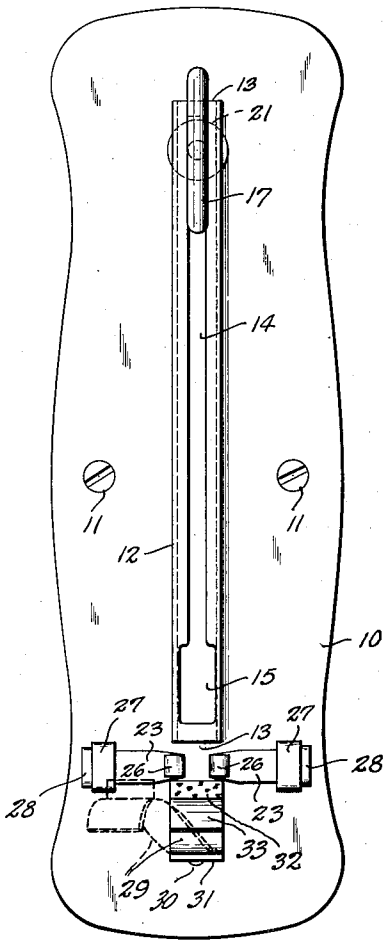


Fig. 2.

Inventor

Arthur G. Leake,

By Wooster & Davis

Attorneys.

Patented June 7, 1927. 1,631,275

UNITED STATES PATENT OFFICE.

ARTHUR G. LEAKE, OF BRIDGEPORT, CONNECTICUT.

COLLAPSIBLE-TUBE HOLDER.

Application filed March 17, 1926. Serial No. 95,228.

This invention relates to a holder for collapsible tubes such as are used for toothpaste, shaving cream, cold cream and the like, and has for an object to provide a holder for this type of devices which will have mechanical means for pressing the paste from the tube for use, making it more convenient and easy to secure the paste, and will also make the use of these types of devices more sanitary.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawing forming a part of this specification, similar reference characters being employed throughout the various figures to indicate corresponding elements. In this drawing,

Fig. 1 is a side elevation of my improved holder showing a collapsible tube mounted therein, a portion of the upper part of the bracket being broken away to more clearly show the construction, and

Fig. 2 is a front elevation of the device with the collapsible tube removed.

The holder comprises a bracket preferably comprising a sheet metal plate 10 of any desired shape and adapted to be mounted on a wall or other support by screws 11. This plate is provided with a longitudinally extending rib 12 raised from the front wall thereof. This rib is provided by pressing a portion of the wall of the plate laterally, and if desired the wall may be first slit as shown at 13, adjacent the opposite ends of the plate to facilitate this operation. In the front walls of the rib is a longitudinally extending slot 14 with an enlarged opening 15 adjacent the lower end thereof. The side walls of the rib are also provided with guide slots 16. This rib and the slots form guides for the pressing device of the tube. This comprises a key 17 which may be of a piece of wire bent to shape and having a flattened body portion 18 provided with a slot 19. The key has an extension 20 passing through the slot 14 and riveted in a supporting member 21 which may be a flat washer or similar device, and this support is of a size to pass through and be guided in the slots 16 in the opposite sides of the rib. The key and the support is placed in position by inserting it through the enlargement 15 at the lower end of the rib. This is so proportioned that one edge of the support 21 may be passed through the enlargement into its slot sufficient to allow the other side to pass through the enlargement, and then by bringing the key back to the center and into the slots 14 this member is centered in the rib and is retained in the slots 16 so as to be guided and supported thereby.

Suitable means is provided for supporting the collapsible tube 22. This is preferably a pair of spring clips 23 arranged to grip the opposite sides of the threaded neck 24 of the tube. These springs are provided with bowed portions 25 embracing this neck and clamped on the opposite sides thereof, and beyond this bowed portion with finger pieces 26 for separating these clamps to release the tube. A convenient and simple way of securing these clamps to the bracket or plate 10 is to slit the plate at two spaced points and force the material between the slits forwardly to provide the loops 27, and the clips 23 are provided with laterally extending feet 28 which are forced through these loops and will be securely held thereby. The feet 28 are preferably channel shape in cross section as shown in Fig. 1, to strengthen and stiffen them. Before mounting the tube in these clips or supports 23 the usual threaded cap is removed. However, the tube should be closed when not in use. I have, therefore, provided a spring support 29 pivoted at 30 to an ear 31 struck up from the plate 10, and a closure 32 is mounted on this support in position to be pressed against the open end of the tube under the spring action of the support. This closure may be a piece of cork or any other suitable material. The spring also extends forwardly of the closure to provide a thumb piece 33 for operation of the closure.

The operation of the device is as follows: After the cap or closure of the tube 22 is removed it is mounted in position as shown in the clips 23 and by which it will be supported in an inverted position. The flattened upper or closed end 34 of the tube is inserted in the slot 19 of the key, and it will be apparent that as the key is rotated the tube will be wrapped and wound around the key, and this wrapping operation will flatten and compress the tube and force the material from the tube. As the tube is wound on the key this key and its support 21 slide downwardly in the guide slots 14 and 16. Of course, before pressing material from the tube the closure 32 will be removed from

the open end thereof by pressing downwardly and then laterally on the thumb portion 33 as indicated in dotted lines in Fig. 2.

It will be apparent from the foregoing description that this device is of a very simple construction and can be manufactured at low cost, and also that it will effectively support the tube in a convenient manner for use and obviates the necessity of pressing the tube by hand, which after a short time becomes messy and unattractive in appearance. It also provides a convenient means for holding the tube so that it is not necessary to lay it on shelves, wash bowls and similar places.

Having thus set forth the nature of my invention, what I claim is:

1. In a collapsible tube holder of the character described, a bracket, means carried by the bracket to grip the discharge end of a tube to support the same, said bracket being provided with a longitudinal slot in its front wall, a rotatable key extending outwardly from the bracket for winding and compressing a tube and extending through the slot at its inner end, and a slidable support secured to the key at the rear of the plate and cooperating with the plate for slidably maintaining the key in said slot.

2. In a collapsible tube holder, a bracket comprising a plate adapted to be secured to a support, said plate being cut transversely at longitudinally spaced points and the metal between said cuts being forced forwardly to provide a raised rib, said rib being provided with longitudinal guide slots in the front and side walls thereof, means on the plate for holding the tube, a rotatable key for winding and pressing the tube extending through the front slot, and a support for the key mounted to slide in the side slots.

3. In a collapsible tube holder of the character described, a bracket comprising a plate having a slot in its front wall, means carried by the bracket to grip the discharge end of a tube to support the same, a rotatable key arranged to receive the flattened end of the tube to permit winding of the same about the key and projecting at one end through said slot, a slidable support secured to the key at the rear of the plate and cooperating with the plate for slidably mounting the key in said slot, a spring support pivoted to the bracket, and a closure for the tube mounted on said support, said support being provided with a finger portion for shifting the support and closure.

4. In a collapsible tube holder, a bracket comprising a plate adapted to be secured to a support, said plate being provided with a longitudinally extending rib projecting forwardly and provided with a slot in the front wall thereof, means on the bracket for supporting a tube, a rotatable key projecting through the slot and arranged for winding and compressing a tube, and a support for the key slidably mounted in the rib.

5. In a collapsible tube holder, a bracket comprising a plate adapted to be secured to a support, said plate being provided with a longitudinally extending rib projecting forwardly and provided with guide slots in the front and side walls thereof, means on the bracket for supporting a tube, a rotatable key projecting through the front slot and arranged for winding and compressing a tube, and a support for the key guided for sliding movement in the side slots.

In testimony whereof I affix my signature.

ARTHUR G. LEAKE.