S. L. HARWOOD.

PASTE DISPENSING DEVICE.

APPLICATION FILED DEC. 6, 1919.

1,353,747. Patented Sept. 21, 1920.

Fig. 1.

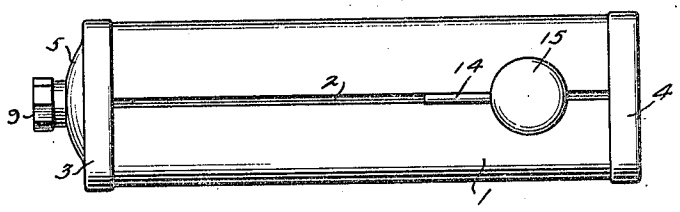


Fig. 2.

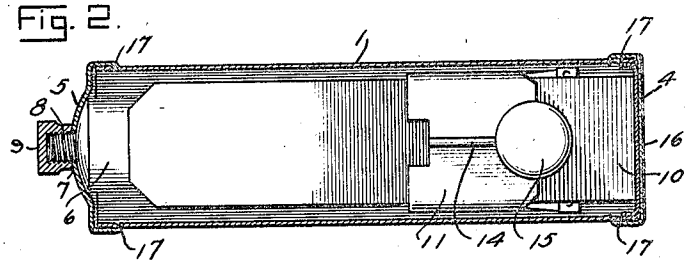


Fig. 3.

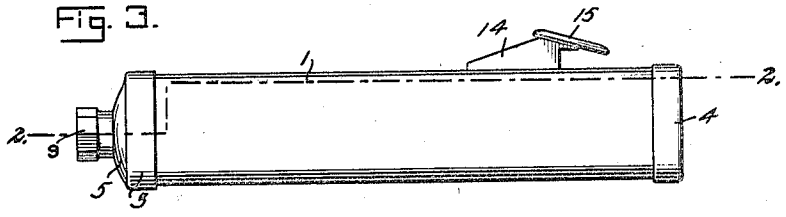


Fig. 4.

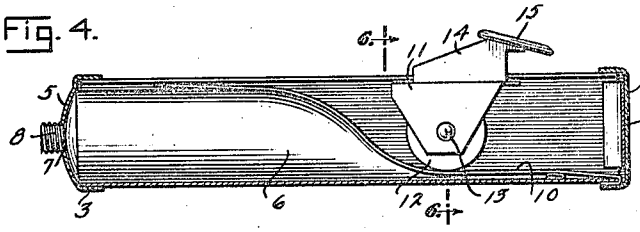


Fig. 7.

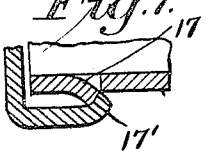


Fig. 5

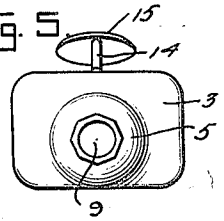
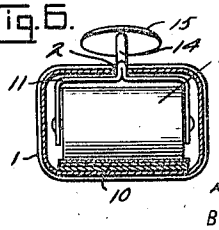


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

SUMPTER L. HARWOOD, OF UNIONTOWN, ALABAMA, ASSIGNOR OF ONE-HALF TO THOMAS R. LONG, OF UNIONTOWN, ALABAMA.

PASTE-DISPENSING DEVICE.

1,353,747. Specification of Letters Patent. Patented Sept. 21, 1920.

Application filed December 6, 1919. Serial No. 342,941.

To all whom it may concern:

Be it known that I, SUMPTER L. HARWOOD, a citizen of the United States, and a resident of Uniontown, in the county of Perry and State of Alabama, have invented a new and Improved Paste-Dispensing Device, of which the following is a full, clear, and exact description.

This invention relates to improvements in paste dispensing devices, an object of the invention being to provide a device which will receive any ordinary paste tube of proper size and thread and which can be operated to eject the paste in the desired quantity. The invention is, of course, adapted for the dispensing of any kind of paste or grease of proper consistency and is primarily intended for tooth paste, shaving soap, cold cream, and other similar material.

A further object is to provide a dispensing device which can be manufactured and sold at a reasonably low price, which will be ornamental and attractive in appearance, and which will economize material in that it will insure an almost complete emptying of the tube, and also provides a comparatively substantial receptacle for an article that is otherwise easily damaged.

With these and other objects in view the invention consists in certain novel features of construction, and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings—

Figure 1 is a plan view illustrating my improved device;

Fig. 2 is a view in longitudinal section on the line 2—2 of Fig. 3;

Fig. 3 is a view in side elevation;

Fig. 4 is a view in longitudinal section through the center of the device;

Fig. 5 is an end view;

Fig. 6 is a view in transverse section on the staggered line 6—6 of Fig. 4; and

Fig. 7 is an exaggerated fragmentary sectional view illustrating the manner of holding the ends on the casing.

1 represents a casing which comprises a metal plate bent into rectangular form with its ends spaced apart providing a slot 2, and has on its opposite narrower sides at proper distance from extremities outwardly pressed tongues 17. This plate 1 is held in shape by means of ends 3 and 4 which fit snugly over the same and constitute the ends of the casing. The flanges on the ends pass over the tongues 17 and have inwardly bent edges 17′ which engage the ends of the tongues and hold the ends 3 and 4 against accidental displacement, hence it will thus be seen that when the ends are placed in position that same cannot be removed without compressing the slot to a closed position. The back cap 4 is to be permanently secured in position and is accomplished in the following manner, the flexible metal tongue 10 (the object of which will be more fully described hereinafter) is bent under the casing in U shape as shown before being shoved in position in Fig. 4, and after being placed the slot in plate 1 is pressed together and cap 4 installed.

The slot at back end is then permanently held in open position by means of a flanged partition 16, Fig. 2. The flanges before being installed are at an obtuse angle with regard to the base and when in position are at right angles, exerting a pressure against the side walls that prevents the jarring loose of the partition.

The end 3 has a domelike curved projection 5 to receive the curved end of a paste-tube 6 when the latter is in the casing 1. This curved portion 5 is provided with a threaded opening 7 through which the threaded nipple 8 on the paste tube is projected and projects far enough to wear the cap 9, and it is to be understood that there is a close fit between the opening 7 and the nipple 8, so close, in fact, that it is necessary to screw the nipple through the opening.

9 is an ordinary screw threaded cap on the end of the paste tube which is located outside of the end 5. 10 represents a metal tongue which is sufficiently flexible to follow the contour of the paste tube as the latter is compressed, and this tongue 10 is secured at its rear end to the casing and at its forward end is free, as shown clearly in Fig. 4.

A fork-shaped frame 11 is located within the casing 1 and supports a roller 12 which has rotary mounting at its ends therein, as shown at 13. This rotary mounting may consist of a pin extending through the roller, as indicated, or may be otherwise provided. The intermediate portion of the

frame 11 constitutes a web 14 which projects through the slot 2 and is provided with a button 15 on its outer end. To prevent collapse of the casing when the end 4 is forced into place, I may provide a transverse partition 16 which is located in the end of the casing and holds the casing extended sufficiently to prevent the contraction of the walls of slot 2.

In operation, when the cap 9 is removed, the roller 12 may be forced longitudinally of the casing by pressure on the button 15 and in this movement the roller will compress the paste tube and eject the paste in such quantity as may be desired. When the paste tube is empty, the end 5 can be removed from the casing and with it the empty tube, and after the empty tube is screwed out of the opening 7, a new tube can be inserted, and when the end 5 is replaced, the device is ready for operation.

As shown in Fig. 6, the roller carrying frame 11 and the web 14 may be formed of a single piece of metal bent into shape, and this is a cheap and convenient structure, but it is obvious that the invention is not limited to the exact structure.

Various slight changes may be made in the general form and arrangement of parts described without departing from the invention, and hence I do not limit myself to the precise details set forth but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. A paste dispensing device, comprising a longitudinally slotted casing, a roller on the frame for compressing the paste tube in the casing, a web on the frame projecting through the slot, and a finger engaging device on the outer end of the web.

2. A paste dispensing device, comprising a longitudinally slotted casing, ends removably connected to the casing, one of said ends having an opening therein adapted to receive the nipple of a paste tube when the latter is in the casing, a roller in the casing adapted to compress the paste tube, a frame carrying the roller, a web on the frame projecting through the slot, and a push button on the web.

3. A paste dispensing device, comprising a longitudinally slotted casing, a paste tube engaging tongue of flexible material located in the casing, a roller engaging said tongue, a frame carrying the roller, a web on the frame projecting through the slot of the casing, and a push button on the web.

4. A paste dispensing device, comprising a longitudinally slotted casing, removable ends on the casing, one of said ends having an opening therein, a paste tube in the casing having its nipple projecting through said opening, a tongue of flexible metal connected at one end to the casing and located against the tube, a forked frame in the casing, a roller carried by the frame and engaging the tongue, a web on the frame projected through the slot, and a button on the outer end of the web.

5. A paste dispensing device, comprising a longitudinally slotted casing, a paste tube engaging tongue of flexible material located in the casing, one end of said tongue bent around the edge of the casing, a cap on the end of the casing over the bent end of the tongue, and a partition in the casing end frictionally held by said cap.

SUMPTER LEA HARWOOD.