

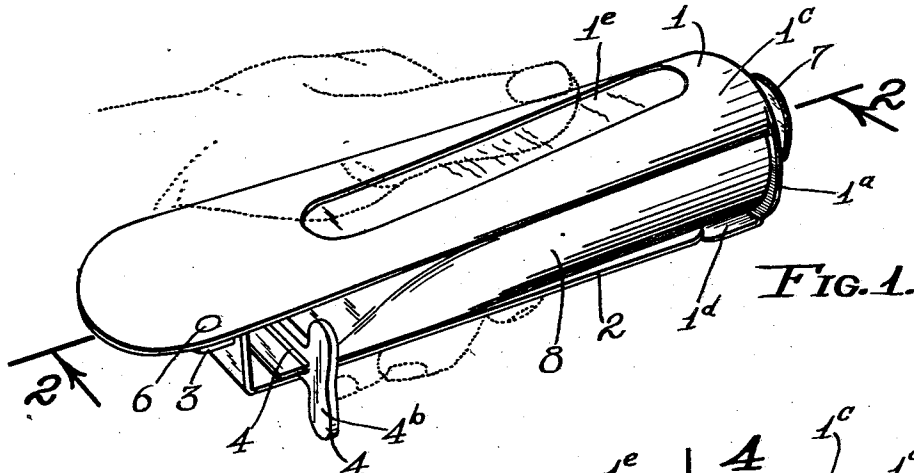
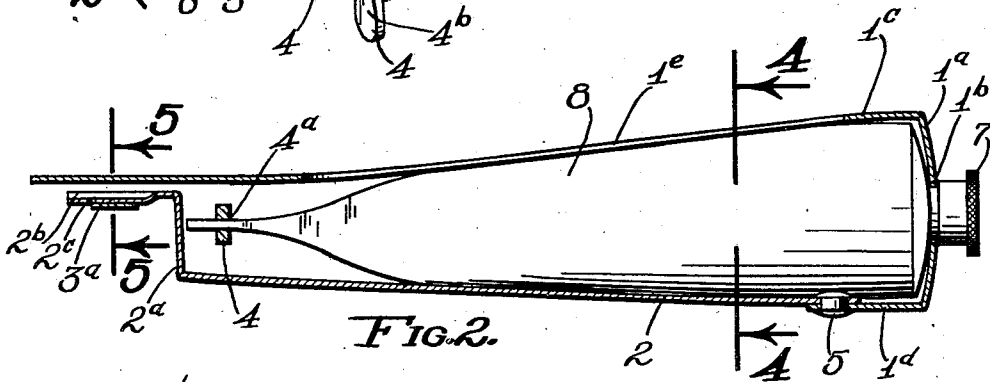
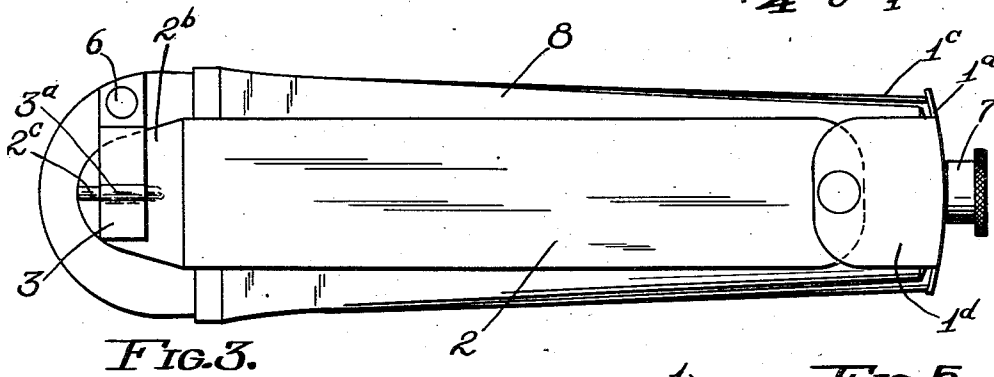
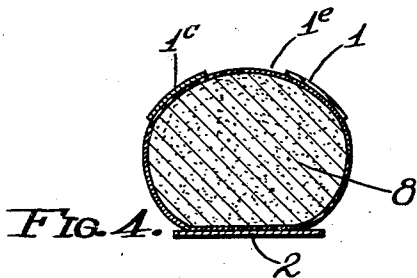
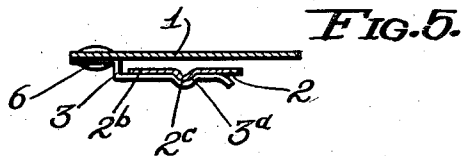
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## HOLDER FOR COLLAPSIBLE TUBES

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## UNITED STATES PATENT OFFICE

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## HOLDER FOR COLLAPSIBLE TUBES

Application filed May 25, 1931. Serial No. 539,710.

My invention relates to holders for collapsible tubes, such as tubes containing tooth paste, shaving cream, and many other plastic substances.

The objects of this invention are: first, to provide a holder of this class of rigid or semi-rigid construction whereby the holder may be firmly gripped and the tube easily held while the contents are being extracted; second, to provide a container, holder, or frame into which a collapsible tube may be easily and quickly inserted or placed and from which the tube may be easily and quickly removed; third, to provide a device of this class which conforms substantially to the contour of the tube so that the tube, contained therein, is held against transverse and longitudinal movement with respect thereto; fourth, to provide a relatively long holder having a long and wide slot or opening at one side through which the advertising on the collapsible tube may be exposed and through which the thumb or other finger of the hand may be projected for manually compressing the tube for extracting a portion of the contents thereof as desired; fifth, to provide a device of this class having a key in connection therewith whereby the contents of the tube may be subjected to greater force when desired or whereby the contents may be forced toward the discharge end of the tube to facilitate the extraction of the contents with the fingers of the hand; sixth, to provide a device of this class having a pair of legs secured with respect to each other at one end but separable at the opposite ends thereof to facilitate the insertion of a collapsible tube, but in which the free ends of the legs are so latched together that the same are not of themselves separable when the tube is expanded by the key, or for any other reason; seventh, to provide as a whole a novelly constructed holder for collapsible tubes; eighth, to provide a device of this class which is very simple and economical of construction, which may be made of inexpensive materials, such as pressed paper, light metal, or the like, so that a holder may be furnished with each tube, and a device of this class which is durable, and which will not readily deteriorate or

get out of order; and, ninth, to provide a device of this class which forms a substantially permanent means of advertising for destructible collapsible tubes of plastic substances, or the like.

With these and other objects in view as will appear hereinafter, I have devised a collapsible tube holder having certain novel features of construction, combination and arrangement of parts and portions, as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawing and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a perspective view of my collapsible tube holder in its preferred form of construction, showing a collapsible tube held therein, and the device held by a hand, shown by dotted lines; Fig. 2 is a longitudinal sectional view thereof taken through 2—2 of Fig. 1; Fig. 3 is a full length view of the under side of the device; Fig. 4 is a transverse sectional view thereof taken through 4—4 of Fig. 2; and, Fig. 5 is a transverse sectional view thereof taken through 5—5 of Fig. 2.

Like characters of reference refer to similar parts and portions throughout the views of the drawing.

My holder, illustrated in the drawing, consists essentially of two frame members 1 and 2, a catch 3, and a key 4.

The frame member 1 of my holder consists of a circular head 1a which is concave at its inner side and provided with a central hole 1b, and is provided with legs 1c and 1d extending to one side of the head, namely, the concave. The leg 1c forms one side of the holder and is of a length considerably greater than the length of the collapsible tube to be held by the holder. The end of the leg 1c is secured, preferably integrally, to the head 1a, is curved to conform to the curvature or transverse contour of the collapsible tube, and merges from this curved portion into a substantially flat cross section at the opposite or extended end of the leg 1c. Thus the leg 1c conforms substan-

tially to one side of the commercial collapsible tube when filled.

The frame member 2 forms the opposite side or opposite leg of the holder. The member 2 is preferably flat and is pivoted at one end, by means of a rivet 5, to the inside of the leg 1*d* of the frame member 1, the leg 1*d* being relatively short and flat. The axis of the pivotal connection between these members is substantially perpendicular to both long legs. The opposite end of the frame member 2 is offset inwardly or toward the leg 1*c*, as indicated by 2*a*. The end of the offset portion, indicated by 2*b*, is adapted to be positioned substantially close to the inner side of the leg 1*c*, and is provided with a lug or ridge 2*c* which is adapted to fit into a correspondingly shaped notch or recess 3*a* in the catch 3. This catch consists merely of a strap offset intermediate its ends and secured at one end, preferably by means of a rivet 6, to the inner side of the extended end of the leg 1*c*. In order to latch the member 2 with respect to the free end of the leg 1*c*, the former is depressed toward the leg 1*c*, when the former is in an angular position with respect to the latter, and then the member 2 is shifted about its pivotal axis until the free end of the member 2 is below the free end of the catch, with the lug or ridge 2*c* in the groove 3*a*.

When desiring to place a full tube into the holder, the member 2 is shifted to one side about its pivotal axis. The cap 7 of the collapsible tube 8 is then removed from the reduced neck of the tube. The tube is then placed against the inner side of the leg 1*c* and inserted with its neck through the opening 1*b*. The cap 7 is then screwed over the neck and the member 2 is then shifted to its latch position.

It will be here noted that since the leg 1*c* is substantially channel shaped and conforms substantially to one side of the collapsible tube, this leg substantially holds the collapsible tube against transverse movement with respect to the holder.

It will be further noted that the leg 1*c* and the member 2 converge toward their extended ends and thus conform further to the shape of the tube. This converging of the leg 1*c* and the member 2 holds the head of the tube against the head of the holder, that is, holds the collapsible tube against longitudinal movement with respect to the holder even though the cap 7 is removed from the collapsible tube.

One of the legs of the holder, and preferably the leg 1*c* of the frame member 1, is provided with a long and relatively wide longitudinally extending slot or opening 1*e* through which the advertising on the collapsible tube may be exposed and through which the thumb or any other finger of the hand of the user is thrust for compressing the col-

lapsible tube and thus extracting a portion of the contents of the tube as desired. This method of extraction of the contents may be resorted to until substantially the whole of the contents is extracted.

In order to facilitate the extraction of the contents of the tube, particularly when the tube is considerably compressed by the fingers of the hand, or when the contents have hardened to any extent, I have provided the key 4 above mentioned. This key is provided with a longitudinal slot 4*a* which is adapted to receive the flat collapsible end of the tube, as shown in Figs. 1 and 2. The key is provided with a transverse handle portion 4*b* at one end for rotating the key and thus winding the flattened end of the collapsible tube upon the key and forcibly extracting the contents thereof when the cap 7 is removed, or forcing the contents against the head end of the tube so that a portion of the contents may again be extracted by the fingers.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

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

1. In a holder, a substantially rigid frame comprising a rigid head and a pair of spaced apart relatively long legs extending from one side of the head at the opposite edges thereof, one of said legs being hinged to said head and the other rigid therewith and means for connecting the extended ends of the legs together, the holder being adapted to receive a collapsible tube, having a reduced neck, longitudinally between the legs thereof, said head having a hole for receiving the neck of the tube, one of the legs having a longitudinal slot adapted to receive a finger of the hand to facilitate the extraction of the contents of the tube.

2. In a holder, a substantially rigid frame comprising a rigid head and a pair of spaced apart relatively long legs extending from one side of the head at the opposite edges thereof, and relatively shiftable edgewise means for connecting the extended ends of the legs together, the holder being adapted to receive a collapsible tube, having a reduced neck, longitudinally between the legs thereof, said head having a hole for receiving the neck of the tube, one of the legs having a longitudinal slot adapted to receive a finger of the hand to facilitate the extraction of the contents of the tube, and a key shiftable between said legs for the end of the tube oppo-

site the neck thereof for compressing the tube.

5 3. In a holder of the class described, a frame comprising a head having a pair of separable legs extending from the head and forming a channel therebetween for receiving and retaining a collapsible tube transversely, and shiftable edgewise relatively to each other, one of the legs having a longitudinal slot intermediate its sides for receiving a  
10 finger of the hand to facilitate the extraction of the contents of the tube.

4. In a holder of the class described, a frame comprising a head having a pair of separable legs extending from the head end  
15 forming a channel therebetween for receiving and retaining a collapsible tube transversely, one of the legs having a longitudinal slot for receiving a finger of the hand to facilitate the extraction of the contents of the tube, and a  
20 key positioned between the legs and over the end of the tube between the legs for compressing the contents of the tube.

5. In a holder of the class described, a frame member comprising a head having a  
25 long leg extending to one side thereof at one edge and having a short leg extending to the same side at the opposite edge, a second frame member pivotally connected at one end to the short leg and adapted to be positioned  
30 in opposed and spaced apart relation with respect to the long leg for receiving a collapsible tube therebetween, the second frame member being shiftable to one side with respect to said long leg to facilitate the insertion and  
35 removal of the tube therein and therefrom, the head having a hole for receiving a reduced neck of the tube, and means for detachably connecting the long leg and the free end of the second frame member together.

40 6. In a holder of the class described, a frame member comprising a head having a long leg extending to one side thereof at one edge and having a short leg extending to the same side thereof at the opposite edge, a second frame member pivotally connected at one  
45 end to the short leg, forming a second long leg in opposed and spaced apart relation with respect to the first long leg for receiving a collapsible tube therebetween, the pivotal connection being on an axis substantially perpendicular to the two long legs, and a catch secured to the free end of one of the long legs  
50 and open at one side and adapted to receive the free end of the other leg from the open  
55 side of the catch by the shifting of the two long legs about their pivotal axes.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 23rd day of May 1931.

60 ERNEST E. CULLEN.