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G. S. TURNER

PUNCTURING ATTACHMENT FOR COLLAPSIBLE TUBES

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Fig. 1.

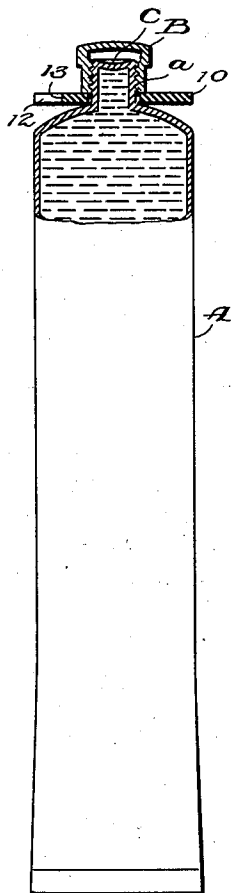
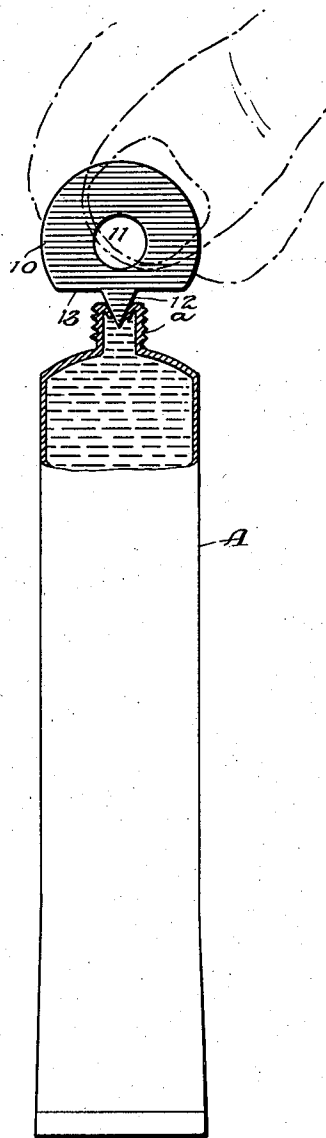


Fig. 2.



WITNESSES

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PUNCTURING ATTACHMENT FOR COLLAPSIBLE TUBES.

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To all whom it may concern:

Be it known that I, GEORGE S. TURNER, a citizen of the United States, and a resident of New Brunswick, in the county of Middlesex and State of New Jersey, have invented a new and Improved Puncturing Attachment for Collapsible Tubes, of which the following is a description.

My invention relates to collapsible tubes containing various substances and more particularly relates to the puncturing of the disk or seal closing the neck of the tube in the form in which the tube is sold.

The general object of my invention is to provide a puncturing attachment to be carried by the tube and held in position by the usual screw cap until required for use, a more specific object being to provide an attachment for the indicated purpose of such a character as to not detract from the appearance of the tube and so formed and arranged that the attachment will not constitute an obstruction or impediment in the ordinary handling of the tube.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a partly sectional elevation of a collapsible tube having my improved puncturing device applied thereto in a manner in which the tube is sold;

Figure 2 is a similar view with the screw cap of the tube removed and the puncturing device illustrated in position after puncturing the seal of the tube neck.

In the illustrated example the letter A indicates the well known collapsible tube, *a*, the neck thereof; B, the usual screw cap applied to the neck; and C, the seal of the closed end of the neck when the tube is placed on sale, said seal requiring to be punctured in order that the contents of the tube may be exuded.

In accordance with my invention I provide a puncturing device 10 in the form of a flat plate advantageously having a rounded edge for its major portion in the preferred form of the invention. Said plate 10 is formed with a central bore 11 to fit over the neck *a* and rest on the shoulder of the tube A at the base of said neck. At one side the plate 10 is formed with a V-shaped puncturing member 12 tapering to a point. Said puncturing member 12 is disposed centrally

on a straight side edge portion 14 of the plate 10.

The plate 10 is made of a size that when in position on the tube A the point of the puncturing member 12 will be within the lines of the shoulder of the tube A or at approximately said lines so as to afford no substantial obstruction for catching on adjacent objects or liable to have annoying contact with the fingers of the person handling the tube A.

In practice the tube A is sold with the plate 10 clamped in position on the tube by the cap B as in Figure 1. When the contents of the tube are required to be exuded the cap B is removed as well as the puncturing device 10 and the latter is grasped in the fingers so that the member 12 may be caused to puncture the seal C.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention, as defined in the appended claims.

Having thus described my invention, I claim:

1. As a new article of manufacture, a puncturing attachment for collapsible tubes consisting of a plate having a central bore to fit over the neck of a collapsible tube, said plate having a puncturing member projecting at a side thereof and pointed to penetrate the seal of the tube.

2. As a new article of manufacture, a puncturing attachment for collapsible tubes consisting of a plate having a central bore to fit over the neck of a collapsible tube, said plate having a puncturing member projecting at a side thereof and pointed to penetrate the seal of the tube, said plate having a straight edge portion at the base of said puncturing member and having a rounded edge for the remainder of the plate.

3. As a new article of manufacture, an attachment for a sealed collapsible tube consisting of an element having a central bore to fit over the neck of the collapsible tube, whereby to be held in place by the cap, said element having means at the edge thereof for forming an opening in the seal of the tube.

GEORGE S. TURNER.