

June 27, 1933.

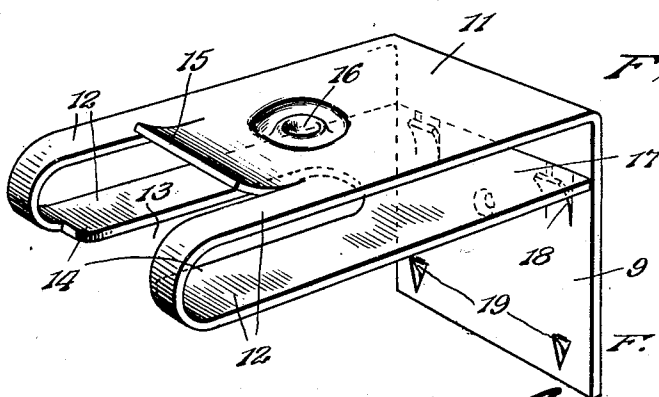
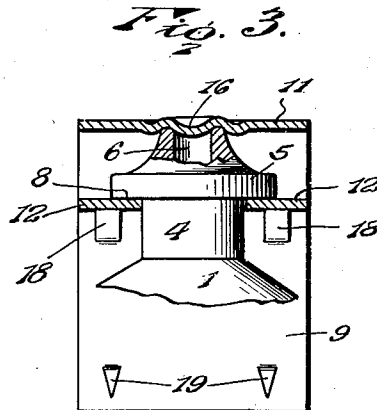
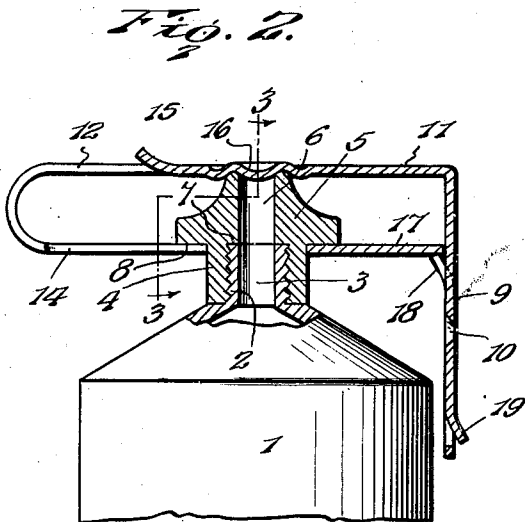
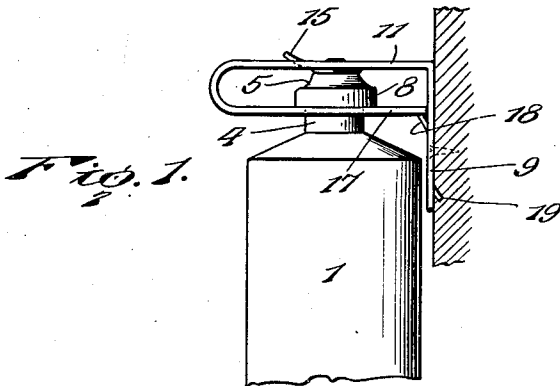
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1,915,671

HOLDER FOR CONTAINER TUBES

Filed April 22, 1932

2 Sheets-Sheet 1



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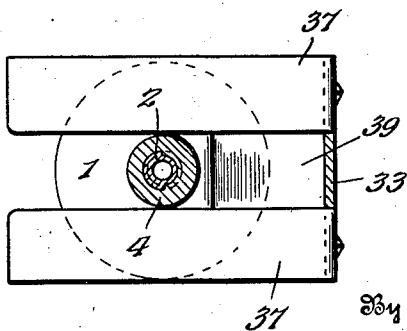
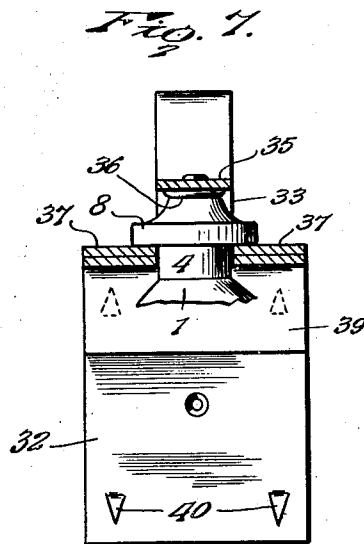
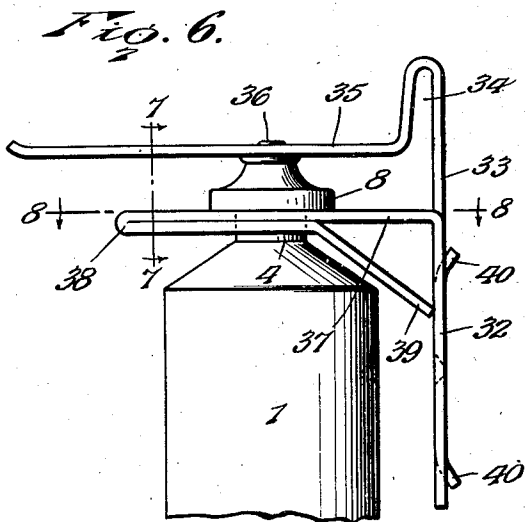
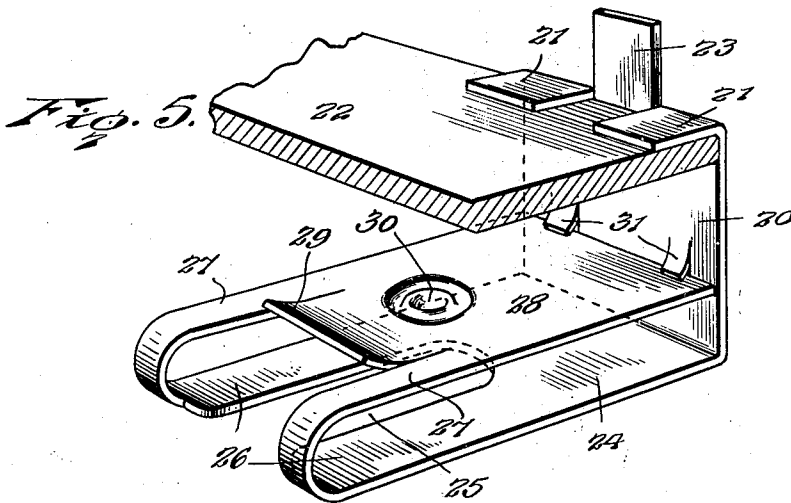
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UNITED STATES PATENT OFFICE

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HOLDER FOR CONTAINER TUBES

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At the present time many commodities of semifluid consistency are delivered in collapsible tubes which may be manipulated to expel a small portion of the contents whenever the use of the same is desired. As now generally constructed, a removable cap is fitted upon the mouth of the collapsible tube or container and must be removed and replaced every time the tube is used. The cap is frequently lost and thereupon the commodity which is in the tube will ooze out of the mouth of the tube and solidify thereon so that waste of the material occurs and the tube is given an unsightly and unsanitary appearance. The object of the present invention is to provide a cap or nozzle for collapsible tubes of such form that it may be readily engaged in a bracket or holder so that the tube will be supported in such a position that it may be easily grasped by the user when desired. It is also an object of the present invention to provide an inexpensive, easily produced and convenient bracket or holder for supporting the tube when it is not in use. The stated objects, and other objects which will appear incidentally in the course of the following description, are attained in devices such as are illustrated in the accompanying drawings, and the invention resides in certain novel features which will be particularly defined in the appended claims.

In the drawings, Figure 1 is an elevation of one form of the invention showing the tube suspended in the holder or bracket.

Fig. 2 is an enlarged view showing the bracket partly in section and also showing the nozzle or cap of the tube in section and properly engaged in the bracket.

Fig. 3 is a transverse section on the line 3-3 of Fig. 2.

Fig. 4 is an enlarged detail perspective view of the bracket free of the tube.

Fig. 5 is a perspective view of another form of bracket particularly adapted for engagement with the edge of a cabinet shelf.

Fig. 6 is a side elevation of a third form of bracket.

Fig. 7 is a transverse section on the line 7-7 of Fig. 6.

Fig. 8 is a horizontal section on the line 8-8 of Fig. 6.

The collapsible tube or container 1 may be of any approved form and is shown as provided with an externally threaded neck or nozzle 2 having an axial bore 3 through which the contents of the container may be discharged when desired. According to the present invention, there is provided a cap having a tubular base portion 4, which is threaded onto the neck or nozzle 2 of the container, the body 5 of the cap, above the basal portion, having a bore 6 therethrough which aligns with the bore 3 of the nozzle 2, as clearly shown in Fig. 2, when the cap is assembled on the container. The bore 6, above its threaded portion, is preferably of the same form as the bore 3, an annular shoulder 7 being provided within the body to bear upon the edge of the neck 2 and limit the movement of the cap onto the body and thereby prevent premature collapse or deformation of the body around the neck. This shoulder 7 may be utilized to retain a thin sealing strip or washer, which may be easily punctured or removed, so that the contents of the container will be protected against evaporation or other outside influences during storage or transportation. This washer is not shown in the drawings but may be a thin disk of paper, cellophane or similar material. The body 5 of the cap is so shaped as to provide an external annular shoulder or flange 8 around the basal portion which is adapted to rest upon a supporting bracket or holder, as will presently appear, and thereby suspend the container in a vertical position so that it may be easily grasped by a user when its use is desired. The body of the cap tapers upwardly from the shoulder or flange 8 to the mouth of the bore 6 and its edges around the mouth may be curved, as clearly shown in Figs. 2 and 3. While the cap may be made separately from the tube, as shown and described, in order that it may be applied to tubes now in existence, it should be understood that the end of the tube may be extended and given the shape illustrated for the cap so that an integral structure will be produced which may be readily engaged with

the holding bracket. It should also be understood that the thin removable sealing strip need not be disposed between the neck 2 and the shoulder 7 of the cap but may be applied over the mouth of the cap if preferred. Illustration of this sealing strip is deemed unnecessary, however, inasmuch as its use is a well-known expedient.

The invention includes a holding bracket which comprises a pair of parallel arms between which the neck of the tube or the base of the cap is inserted and upon which the annular external flange or shoulder may rest so as to suspend the tube therefrom. In Figs. 1 to 4, the bracket is shown as formed from a single integral blank of sheet metal so formed as to provide a back plate 9 which may be disposed against a wall or the back of a cabinet or other support and may have an opening 10 therethrough to permit the insertion of a screw or other fastening device into the support, as will be understood. From the upper edge of the back plate 9, a top plate 11 extends at an angle thereto, preferably a right angle, and this top plate projects a sufficient distance to extend over the upper end of a tube of maximum standard dimensions. The top plate is formed with a notch or slot extending longitudinally thereof whereby side arms 12 are formed and these side arms curve downwardly and then extend backwardly to meet the back plate 9, as clearly shown in Figs. 1, 2 and 4. The notch or slot 13 extends between the arms 12 a sufficient distance to permit the engagement of any tube or container and it is of a less width between the lower portions of the arms than between the upper portions thereby defining ledges 14 upon which the shoulder or flange 8 will rest when the tube is engaged in the holder. Between the upper portions of the side arms 12, a tongue 15 is formed and this tongue is curved slightly upwardly so that the top of the cap or end of the tube may readily pass thereunder and be held thereby upon the lower arms 12. In the top plate 11, adjacent the base of the tongue 15, a boss or corrugation 16 is formed to bear upon the mouth of the cap or the tube and seal it against the entrance of air and thereby protect the contents of the tube. In the drawings the boss or corrugation is circular and fits into the mouth of the cap or tube but it may be of any specific form, and need not enter the mouth if it fits with sufficient snugness around the end of the cap. At the rear of the lower arms 12 the blank of the bracket is integral so as to provide an end member 17 which is adapted to rest upon tongues 18 struck from the back plate 9 and thereby firmly support the shelf or holding portion of the bracket. Other tongues 19 are struck rearwardly from the back plate, near the lower end thereof, to

engage in the support and aid the previously mentioned fastening device in supporting the bracket and also preventing it turning about said securing device. When the tube or container is to be placed in the bracket, it is merely slid inwardly with its shoulder or flange 8 resting upon the ledges 14 until the neck of the container or the base of the cap meets the rear end of the slot or notch 13. At this time, the corrugation or boss in the top plate will automatically engage over and seal the mouth of the cap or the tube, as shown in Figs. 2 and 3. When the container is to be used again, it is merely drawn out from between the ledges 14, the tongue 15 and the corrugation or boss 16 readily yielding to the moving force.

In Fig. 5 is shown a form of the holding bracket or support in which the back plate 20 is provided at its upper end with forwardly projecting lips 21 adapted to engage over the rear edge of a shelf 22 in a cabinet, an extension or tongue 23 projecting upwardly between the lips 21 to facilitate handling and placing of the bracket and resist any tendency of the device to swing around the edge of the shelf. The holding plate 24 projects forwardly from the lower edge of the back plate and is constructed with a central slot or notch 25 thereby forming supporting arms 26, the outer ends of which extend upwardly and merge into upper side arms 27 which are integral with a connecting top plate 28, a tongue 29 and boss or corrugation 30 being formed in the top plate and corresponding to the tongue 15 and boss 16 in the first-described form. Stop lugs or tongues 31 are struck from the back plate and the end of the top plate 28 is engaged under these lugs so as to be firmly held against release from engagement with a cap or tube supported upon the arms 26 within the notch 25.

In Figs. 6, 7 and 8, there is shown another form of bracket in which the back plate 32 has a tongue 33 extending upwardly at the center of its upper edge and this tongue is doubled upon itself, as shown at 34, to extend downwardly a short distance and then project forwardly to form a somewhat elongated resilient tongue 35 under which the end of the cap or tube will be engaged when the cap is supported by the bracket, a sealing boss 36 being formed on said tongue. At the sides of the extension 33, side arms 37 extend from the upper edge of the back plate 32 and these side arms project forwardly a sufficient distance to accommodate and firmly support the cap or neck of the tube, as will be understood upon reference to Figs. 6 and 7. The arms 37 are doubled upon themselves at their outer ends, as shown at 38, and the under plies of the arms extend backwardly in contact with the arms, as

shown clearly in Figs. 6 and 7, so that rigidity will be imparted thereto and the tube will be firmly suspended. The under plies are connected at their inner or rear ends by a downwardly turned web 39 which extends to and impinges against the back plate to serve as a brace for the supporting arms or shelf. Tongues 40 are struck from the back plate to engage in a wall or other support and thereby aid in holding the bracket in its place.

In all forms of the invention, the container tube will be firmly supported from the bracket or shelf and the mouth thereof will be effectually sealed so that the commodity within the container will be kept in a proper sanitary usable condition. The bracket or supporting device may be very readily stamped from a sheet metal blank, so that it may be produced at an exceedingly low cost.

Having thus described the invention, I claim:—

1. A bracket for supporting a tubular container comprising a back plate, a slotted shelf extending forwardly from the back plate and supported thereby and adapted to span the neck of a container and support the same, a top plate spaced from the shelf and connected therewith at its outer end, a tongue on the top plate having its free end turned upwardly whereby to guide the mouth of a container onto the shelf, and a boss at the base of the tongue to engage the mouth of the container and seal the same.

2. A holder for containers comprising spaced plates having their inner ends provided with means for engagement with a support and their outer ends connected and longitudinally slotted to provide a rest on one of said plates for engagement with a container, and a spring tongue on the other plate adapted to engage over the mouth of the container.

3. A holder for containers comprising spaced substantially parallel plates having their inner ends provided with means for engagement with a support and their outer ends connected and longitudinally slotted to provide a rest on one of said plates for engagement with a container, the metal at the slot in the other plate being bent upwardly to form a resilient tongue adapted to engage over the mouth of said container.

4. A holder for containers comprising a back plate, spaced upper and lower plates extending laterally from the back plate and having their outer ends connected and longitudinally slotted, the lower plate forming a shelf adapted to receive and support a container, and a sealing tongue carried by the upper plate and adapted to engage over the mouth of the container supported by the shelf.

5. A holder for containers formed of a

single sheet of metal, one end of which is bent to provide a back plate for engagement with a support and the other end thereof bent at substantially right angles to the back plate to form a top plate and thence bent downwardly and rearwardly to form a bottom plate bearing against the back plate, there being a longitudinal slot formed in the outer ends of the top and bottom plates, the slot in the bottom plate defining oppositely disposed longitudinal ledges adapted to receive and support a container and the slot in the top plate defining a resilient tongue adapted to bear upon and seal the mouth of the container.

6. A holder for containers comprising a back plate having attaching tongues extending from the rear face thereof for engagement with a support and supporting tongues extending from the front face thereof, a top plate projecting laterally from the upper end of the back plate and having its outer end bent downwardly and rearwardly to form a bottom plate resting on the supporting tongues, said top and bottom plates having their outer ends longitudinally slotted, the slot in the bottom plate defining oppositely disposed ledges adapted to receive and support a container and the slot in the top plate defining a resilient tongue having a boss at the base thereof adapted to bear upon and seal the mouth of the container.

In testimony whereof I affix my signature.
FRANK P. HYER.

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