Feb. 9, 1926. 1,572,505

J. D. RAYMOND

SCREW CAP RETAINER AND GUIDE

Filed March 2, 1925

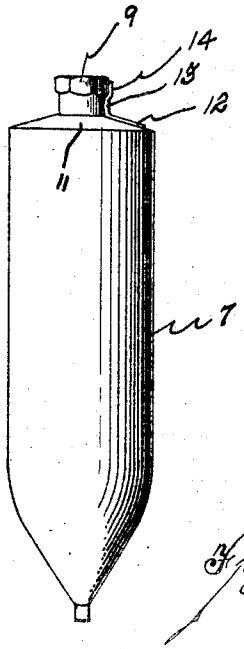


Fig. 1

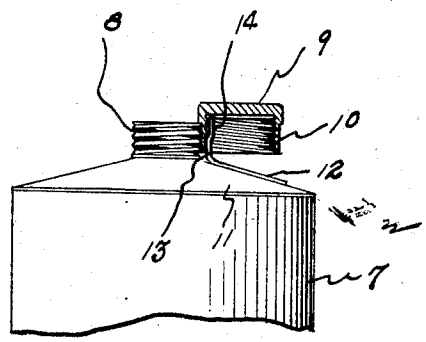


Fig. 2

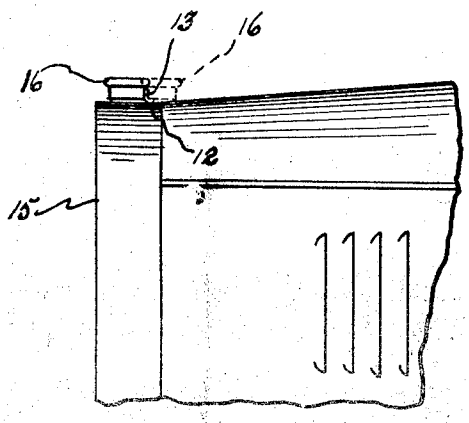


Fig. 3

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Patented Feb. 9, 1926. 1,572,505

UNITED STATES PATENT OFFICE.

JOHN D. RAYMOND, OF DETROIT, MICHIGAN.

SCREW-CAP RETAINER AND GUIDE.

Application filed March 2, 1925. Serial No. 12,470.

To all whom it may concern:

Be it known that I, JOHN D. RAYMOND, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Screw-Cap Retainer and Guide, of which the following is a specification.

My invention relates to a new and useful improvement adapted for mounting on a container having an exteriorly threaded neck surrounding the opening leading into the container and provided with a screw threaded cup shaped cap adapted for threading on the neck to serve as a closure. The invention is adapted for use generally for such a container having such a neck and is particularly useful for mounting on tubes adapted for containing tooth paste and shaving cream or painters' oils, colors and the like. It is the object of the invention to provide a means for mounting on such a container which will serve to retain the cap when removed from closing position attached to the container readily accessible for use again as a closure so that the cap will not be mislaid or lost in the interim between the time of opening the container and the time of desire to close it.

Another object of the invention is to provide an attachment of this class which will serve as a guide so as to facilitate the placement of the cap upon the neck.

Another object of the invention is the provision of the spring holder and guide of the class described which will be simple of structure, economical of manufacture and highly efficient of use.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood from a reference to the accompanying drawings which form a part of this specification and in which,

Fig. 1 is a side elevational view of the tube embodying the invention.

Fig. 2 is a fragmentary side elevational view of the tube showing the cap in section held by the retainer.

Fig. 3 is a fragmentary side elevational view of an automobile radiator showing the invention applied.

As shown in the drawing the container or tube comprises a main body 7 having an exteriorly threaded neck 8 surrounding the opening formed therein. An interiorly threaded cup shaped cap 9 having the threads provided on the inner surface of the side walls 10 adapted for threading on the neck 8 serves as a closure. Secured to the upper wall 11 of the tube is a resilient piece of metal 12 having an angularly turned upwardly directed portion 13 flared outwardly from the neck 8 at its end 14. The upwardly turned portion 13 is positioned in close relation to the neck 8 so that when it is desired to thread the cap 9 on the neck 8, this portion serves as a guide to facilitate the proper registering of the cap with the neck so as to expedite the threading of the cap upon the neck. When the cap is removed from the neck the side wall of the cap is positioned between the neck and its upwardly directed portion 13 as clearly seen in Fig. 2. When the wall 10 of the cap is positioned between the outer surface of the neck 8 and the upwardly directed portion 13, this member 13 is flexed outwardly slightly from the neck 8 against the tension of the upwardly directed member 13 which is provided with sufficient resiliency to permit this flexing so that the wall 10 will be clamped between the neck 8 and the member 13. When the device is used for retaining the cap in the position shown in Fig. 2 the surface of the member 13 will engage against the threads on the inner surface of the cap and this member 13 will press the outer surface of the cap into engagement with the threads on the neck 8 so that these threads serve to assist in affording a tight gripping of the cap.

In Fig. 3 I have shown the invention applied to the automobile radiator 15, having a screw cap 16 adapted for threading on the spout of the radiator. The mountings and use of the invention on the radiator is similar to the mounting and use already described for the tube 7.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is set out in the accompanying claims, and I do not wish to limit myself to such structure as shown but desire to avail myself of such variations and modifications as come within the scope of the claims.

What I claim is:

1. In combination with a container having an exteriorly threaded neck and provided

with an interiorly threaded cap for threading on said neck as a closure, a guide and retainer for said cap projecting in close proximity to said neck adapted for guiding said cap upon its initial positioning on said neck for a closure and adapted for engaging the side walls of said cap and clamping the same against the exterior of said neck for retaining said cap in fixed relation on said neck when in inoperative position as a closure on said neck.

2. In combination with a container having an exteriorly threaded neck provided with an interiorly threaded cap adapted for threading on said neck as a closure, a retaining member comprising a resilient stem projecting along side of said neck in spaced relation thereto, the space separating said stem and said neck being normally less than the thickness of said cap, said stem being adapted for clamping said cap in close engagement with said neck when positioned between said stem and said neck.

3. In combination with a container having a threaded neck surrounding an opening formed therein and provided with a cap adapted for threading on said neck as a closure for said opening, a resilient retaining stem projecting along side of said neck in spaced relation thereto, the space normally separating said stem and said neck being less than the thickness of the side walls of said cap, said stem being adapted for clamping the side wall of said cap into close engagement with said neck upon the positioning of the side wall of said cap between said stem and said neck, the free end of said stem being flared outwardly slightly from said neck for assisting in guiding said cap in its initial threading upon said neck.

4. In combination with a container having an opening formed therein and a threaded neck surrounding same adapted for the reception of an interiorly threaded cap for a closure for said opening, an L-shaped member mounted on said container and having one end thereof projecting upwardly in close proximity to said neck in spaced relation thereto, the space normally separating said stem and said neck being less than the thickness of said side walls of said cap, said stem being adapted for clamping the side wall of said cap into close engagement with said neck upon the positioning of the side wall of said cap between said stem and said neck, the free end of said stem being flared outwardly slightly from said neck for assisting in guiding said cap in its initial threading upon said neck.

In testimony whereof I have signed the foregoing specification.

JOHN D. RAYMOND.