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CONTAINER WITH SAFETY CAP

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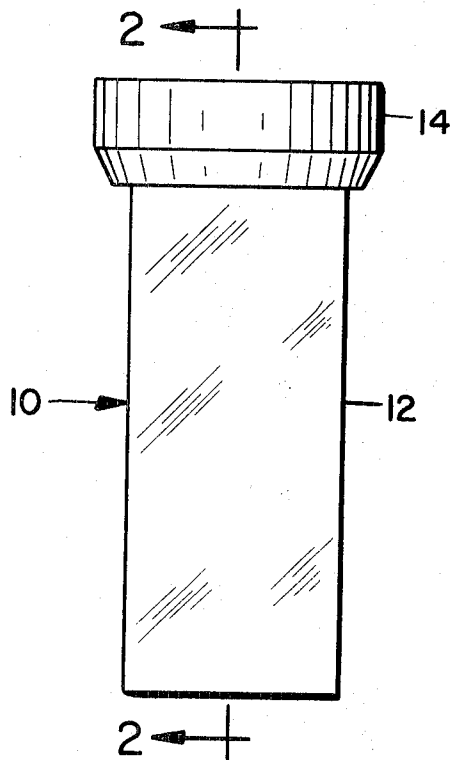


Fig. 1

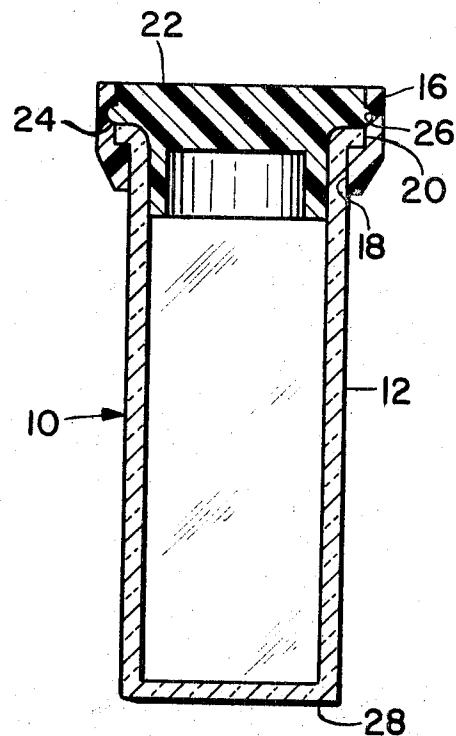


Fig. 2

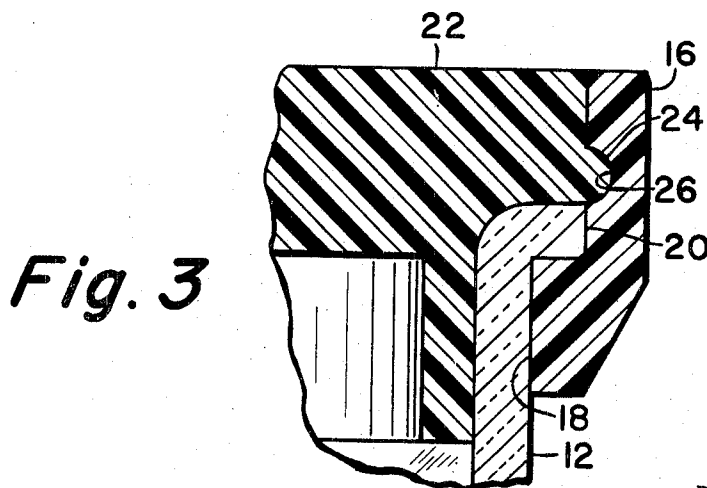


Fig. 3

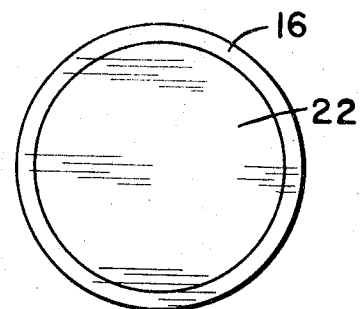


Fig. 4

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CONTAINER WITH SAFETY CAP
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4 Claims

ABSTRACT OF THE DISCLOSURE

A container for such things as medicine, the container being in the form of a receptacle having a closure member over its mouth, the closure member having an outwardly projecting flange. A collar surrounds the closure member and has a circumferential groove in its inner surface into which the flange on the closure member projects in snap-fit relationship. The receptacle has an outwardly projecting flange in the vicinity of its mouth located between the closure member and an inwardly projecting portion on the collar. The container is openable by movement of the collar in the direction of the main body of the receptacle.

BACKGROUND OF THE INVENTION

This invention relates to containers of the type frequently used to package and store medicines.

In the storing of medicines, it is frequently necessary to ensure that small children will not have ready access to the medicines, which may be harmful if ingested by the children. Various methods have been used to limit the access of children to such medicines. Among these have been storage in locked cabinets, or in cabinets located at heights not easily reached by small children. Although such expedients have been helpful, they are sometimes inconvenient, and there is the constant danger of the accidental failure of the medicine to be returned to its proper place of storage.

Accordingly, it is the object of the present invention to provide a container for medicines or the like which, although easily openable by an adult, is of such construction that, when inadvertently left at a location to which children have access, it is not likely to be opened by such children.

SUMMARY OF THE INVENTION

In accordance with the invention there is provided a container in which a receptacle is provided with a cap which, rather than being removable in the conventional manner by movement away from the mouth of the container is removable only by exerting substantial force on a peripheral collar of the cap in the direction of the main body of the receptacle in order to remove the collar from snap-fit engagement with a closure member over the mouth of the receptacle. Movement of the collar in a direction away from the receptacle is prevented by interaction between an outwardly projecting portion on the receptacle and an inwardly projecting portion on the collar.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a side elevational view of a container according to the invention.

FIG. 2 is a sectional view taken on line 2—2 of FIG. 1.

FIG. 3 is an enlarged view of a portion of FIG. 2.

FIG. 4 is a top plan view of the container of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In accordance with the invention, container 10 comprises receptacle 12 and cap 14. Cap 14 includes a collar

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16 having an inwardly projecting flange 18 which abuts against outwardly projecting flange 20 on receptacle 12 and acts as a stop means to prevent movement of the collar in a direction away from the main body of the receptacle (upwardly in FIG. 2). A closure member 22 closes the mouth of the receptacle and is held in sealing relationship with the mouth of the receptacle by means of snap-fit engagement between rounded circumferential tongue 24 and circumferential groove 26 in collar 16.

It is conventional to remove caps from containers by either rotating the cap or by pulling the cap in a direction away from the main body of the container. It will be seen that rotation of the cap of the present container will have no tendency whatsoever to effect removal of the cap, inasmuch as all components of the container are in the form of bodies of revolution about the centerline of the container. Since the top of the cap in its assembled form is virtually flat and smooth it is impossible to open the container by pulling closure member 22 away from the container, and removal of collar 16 by pulling the collar directly away from the main body of the receptacle is prevented by the interaction between flange portions 18 and 20. The only practical way to open the container is by pressing collar 16 in the direction to the main body of the receptacle. Due to the fact that tongue 24 and groove 26 are rounded and in snap-fit relationship, the collar can be moved in this direction. The collar can either be slid partly along receptacle 12 or completely removed therefrom by sliding over the base portion 28 of the receptacle. Closure member 22 can then be pulled away from engagement with the mouth of the container by manual engagement of tongue 24. It thus can be seen that the present container resists the natural tendency of a child to attempt to separate parts by pulling them directly apart.

The container may be formed of any conventional material as long as either closure member 22 or collar 16 is of sufficient resilience to permit snap-fit engagement therebetween. For example, the collar and the closure member may be formed of a plastic, such as polyethylene, while receptacle 12 may be formed of glass.

Inasmuch as the foregoing description has been provided solely as that of a preferred embodiment of the invention, it is intended that the scope of the invention be limited only by the scope of the appended claims.

I claim:

1. A container comprising a receptacle having an open mouth, a collar surrounding said receptacle in contact with side portions thereof in the vicinity of said open mouth and movable toward the main body of said receptacle,

stop means preventing removal of said collar from said receptacle by movement directly away from the main body of said receptacle,

a closure member projecting within said open mouth for closing said mouth,

said closure member and said collar being in snap-fit engagement and terminating in a common upper plane,

whereby said closure member can be removed from said mouth subsequent to disengagement from said collar due to movement of said collar in the direction of the main body of said receptacle.

2. A container according to claim 1 in which said stop means comprises an external flange on said receptacle and an internal flange on said collar, said flanges engaging one another to prevent movement of said collar away from the main body of said receptacle.

3. A container according to claim 1 in which one of said closure member and said collar is provided with tongue means and the other of said closure member and

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said collar is provided with groove means, said tongue means and said groove means being in snap-fit relation.

4. A container according to claim 1 in which said stop means comprises an external flange on said receptacle and an internal flange on said collar in engagement therewith, said closure member is provided with an external tongue in snap-fit engagement with an internal groove on said collar, and said collar and said closure member together form a substantially flat cap.

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5 GEORGE T. HALL, Primary Examiner

U.S. Cl. X.R.

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