May 28, 1957 H. LEWIS 2,793,777

SAFETY CAP

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Fig. 1

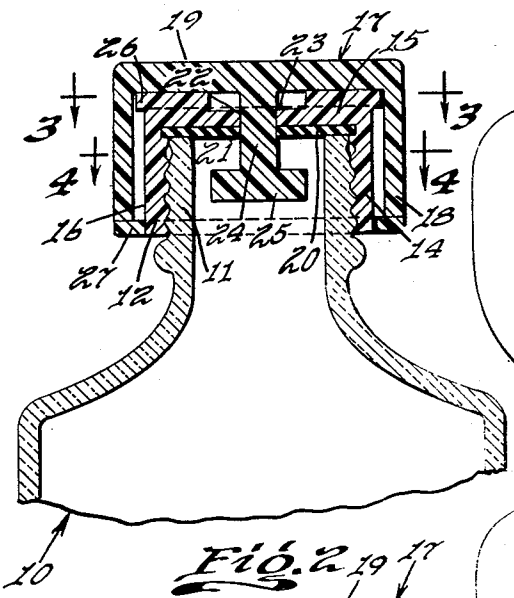


Fig. 3

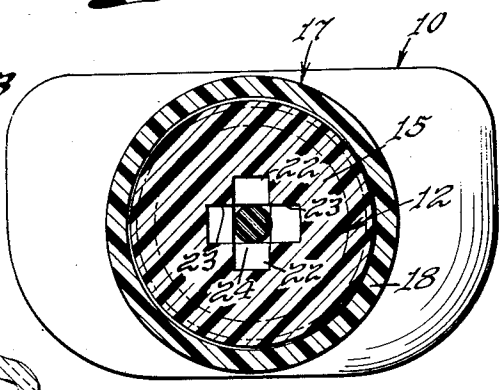


Fig. 4

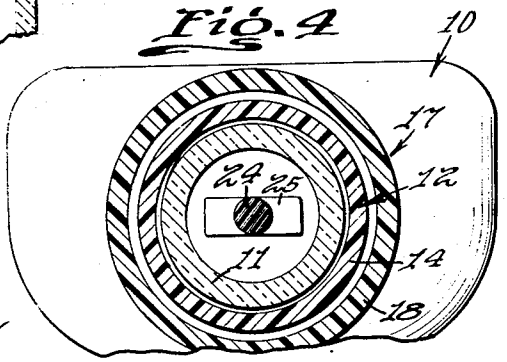


Fig. 2

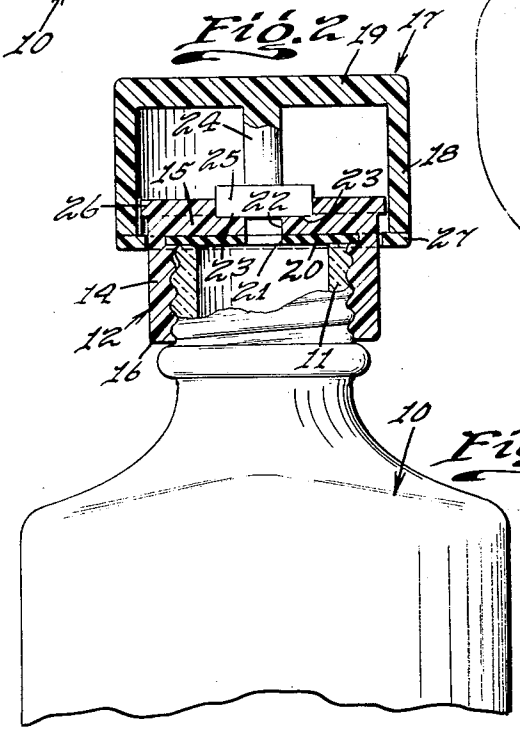
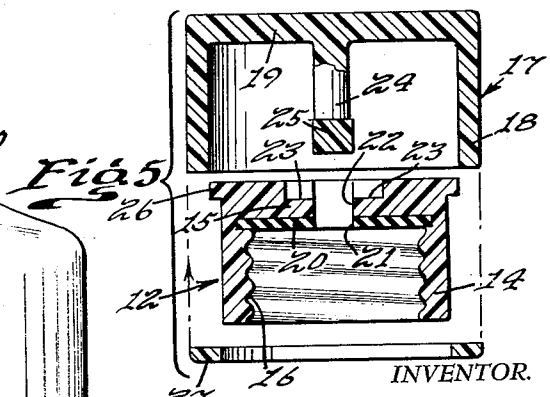


Fig. 5



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SAFETY CAP

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2 Claims. (Cl. 215—9)

This invention relates to a cap or closure, and more particularly to a safety cap for a container such as a bottle.

The object of the invention is to provide a safety cap which is constructed so that children can not accidentally or readily partake of the contents of the container, as when the container holds poison, medicine or the like.

Another object of the invention is to provide a safety cap which can be readily manipulated so as to permit the contents of the container to be removed therefrom, and whereby the cap can be moved to a closed position so that a child or the like cannot accidentally remove the contents of the container.

A further object of the invention is to provide a safety cap which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a vertical sectional view illustrating the present invention mounted on a bottle or container, and with parts of the container broken away, and showing the cap in closed position.

Figure 2 is a view similar to Figure 1, but showing the sleeve in open position so that the body member can be removed from the container.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Figure 5 is a sectional view showing the parts of the safety cap disassembled or separated.

Referring in detail to the drawings, the numeral **10** designates a container which may be a bottle or the like, and the container **10** is provided with a neck **11** of reduced diameter, and the neck **11** is threaded exteriorly.

The present invention is directed to a safety cap which is adapted to be mounted on the neck **11** so that children or the like will be prevented from accidentally gaining access to the contents of the container **10** as when the container **10** holds medicines, poisons or the like.

The safety cap of the present invention includes a body member **12** which can be made of any suitable material such as plastic, and the body member **12** includes a cylindrical side wall **14** and an end wall or top wall **15**, Figure 2. The side wall **14** is threaded interiorly as at **16** for engagement with the threaded exterior portion of the neck **11**.

The cap of the present invention further includes a bushing or sleeve **17** which includes a cylindrical side section **18** and a top section **19**.

Snugly seated within the body member **12** and abutting the end wall **15** and secured thereto is a washer **20** which may be made of yieldable material, and the washer **20** is provided with a slot **21** that registers with a slot

22 in the end wall **15**. The upper surface of the end wall **15** is provided with a recess **23** which is arranged at right angles with respect to the slot **22**, the slots **21** and **22** registering with each other. Depending from the top section **19** and secured thereto or formed integral therewith, is a shank or stem **24** of cylindrical shape, and secured to the lower end of the shank **24** or formed integral therewith is a transverse rib **25**. The rib **25** is adapted to seat in the recess **23** when the parts are in the position shown in Figure 2. However, by rotating the bushing **17**, the rib **25** can be passed through the registering slots **22** and **21** as when the bushing is being moved to the position shown in Figure 1.

Projecting outwardly from the top of the body member **12** and secured thereto or formed integral therewith is an annular flange **26**. A disc or ring **27** is adapted to be secured to the lower edge of the bushing **17** after the bushing has been mounted on the body member **12**, and the ring **27** is adapted to abut the flange **26** so as to prevent the bushing **17** from being pulled all of the way off of the body member **12**. The ring **27** can be secured to the lower end of the bushing **17** in any suitable manner, as for example by means of a suitable adhesive or glue.

From the foregoing it is apparent that there has been provided a safety cap which will help prevent children or the like from harming themselves by gaining access to contents of containers or bottles such as the container **10** which may hold poison or medicine therein. In use, when the container is not being used the parts can be arranged as shown in Figure 1. Then, when it is desired to remove some of the contents from the container **10**, it is necessary to rotate the bushing **17** so that the rib **25** registers with the slot **21** and slot **22**. Then, the bushing **17** can be moved upwardly away from the body member **12**, since the rib **25** will pass through the registering slots **21** and **22**. After the bushing **17** has been moved to its raised position it can again be rotated slightly so that the rib **25** seats in the recess **23** in the top wall **15**. With the rib **25** seated in the recess **23** as shown in Figure 2, the bushing **17** will be maintained in its raised position. Then, the person's fingers can be arranged in engagement with the side wall **14** of the body member **12** so that the body member **12** can be readily rotated to disengage the body member from the container **10**. Since it is necessary that the bushing **17** be rotated to a particular angular position so that the rib **25** registers with the slots **21** and **22**, then it will be extremely difficult if not impossible for a child to accomplish this movement, although of course it is to be understood that an adult can readily figure out the proper position to move the bushing **17** so as to permit the fingers to be arranged in engagement with the body member **12**. After the desired quantity of material has been removed from the container **10**, the body member **12** can be screwed on the neck **11** and then the bushing **17** can be returned from the position shown in Figure 2 to the position shown in Figure 1 so that the container is again safely left in the home, medicine cabinet or the like. With the present invention tragedies in the home will be prevented since children will be unable to accidentally swallow medicine or poison or the like. The body member **12** serves to close the container **10**, while the bushing **17** acts as a safety feature. The yieldable washer **20** insures that there will be an air or water tight connection between the parts. With the bushing **17** in the position shown in Figure 1, the bushing **17** rotates freely on the body member **12**. The device can be made of any suitable material and in any desired shape and size. The container may hold medicines, insecticides, pills, alcohol, or other material.

I claim:

1. In a safety cap for a container of the type provided with an exteriorly threaded neck, a body member including a cylindrical side wall provided with interior threads engaging the neck of said container, an end wall extending across the top of said side wall, there being registering rectangular slots in said end wall and in a washer snugly seated within said body member, there being a recess in the upper portion of said end wall communicating with and arranged at right angles with respect to the slot in said end wall, a bushing including a cylindrical side section surrounding the side wall of said body member, a top portion extending across the top of said side section, a cylindrical shank depending from said top portion and projecting through the slot in said washer and end wall, and a transverse rib secured to the lower end of said shank and projecting beyond the periphery of said shank, said rib being mounted for movement into and out of engagement with said recess and whereby by rotating the bushing, the rib can be passed through the registering slots.

2. In a safety cap for a container of the type provided with an exteriorly threaded neck, a body member including a cylindrical side wall provided with interior threads engaging the neck of said container, an end wall extending across the top of said side wall, there being registering rectangular slots in said end wall and in a washer snugly seated within said body member, there being a

recess in the upper portion of said end wall communicating with and arranged at right angles with respect to the slot in said end wall, a bushing including a cylindrical side section surrounding the side wall of said body member, a top portion extending across the top of said side section, a cylindrical shank depending from said top portion and projecting through the slot in said washer and end wall, and a transverse rib secured to the lower end of said shank and projecting beyond the periphery of said shank, said rib being of a size permitting its passage through said slots and permitting it to fit within said recess, said rib being mounted for movement into and out of engagement with said recess and whereby by rotating the bushing, the rib can be passed through the registering slots, a disc secured to the lower end of said bushing for at times abutting a flange extending outwardly from the upper portion of said body member.

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