Nov. 8, 1949 M. SCHAFFER 2,487,274

BOTTLE CAP WITH MEASURING MEMBER

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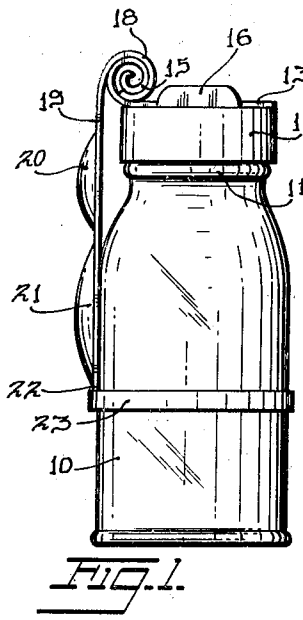


FIG. 1.

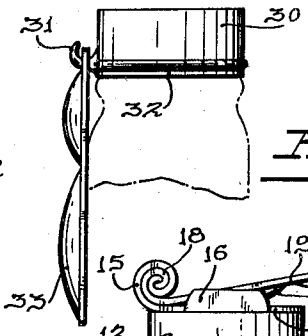


FIG. 7.

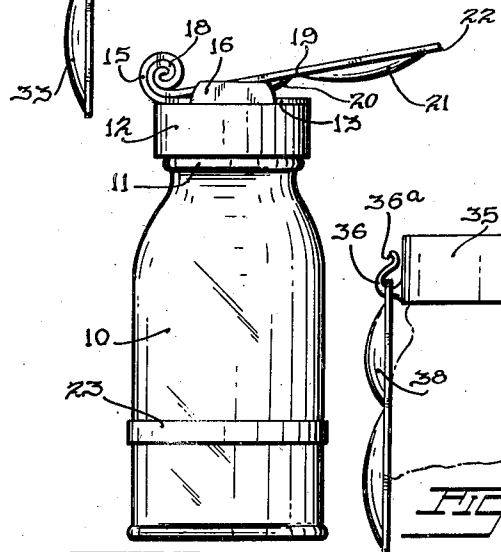


FIG. 2.

FIG. 8.

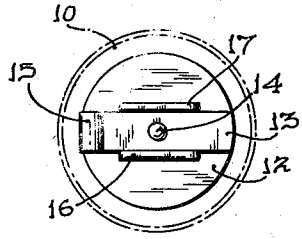


FIG. 3.

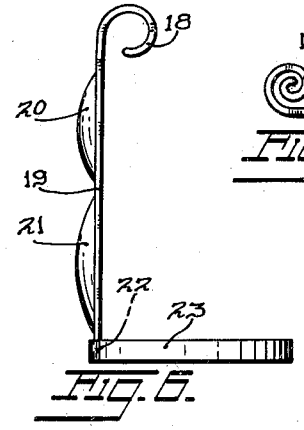


FIG. 6.



FIG. 5.

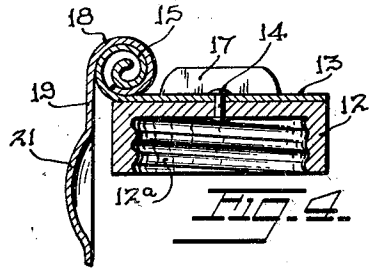


FIG. 4.

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BOTTLE CAP WITH MEASURING MEMBER

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9 Claims. (Cl. 215—46)

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This invention relates to an improved medicine bottle or container and means combined therewith for measuring the dosage of the medicine, which provides also means for securing and releasing the closure cap of the bottle or container.

One of the objects of the invention is to provide a medicine bottle with a cap which is detachably connected thereto, and a shank having a large spoon bowl and a small spoon bowl, and a detachable connection with the cap.

Another object of the invention is to provide a medicine bottle with a cap detachably secured thereto, and a dose measuring spoon detachably connected with the cap and adapted to swing over and against the cap to serve as a lever to assist in tightening the cap and in turning it to releasing position for complete removal, so that the contents of the bottle may be poured into the spoon after the cap has been completely separated from the closure cap.

A further object of the invention is to provide means on the bottle for restraining the dose measuring spoon from free movement on the bottle.

A still further object is to prevent contagion of any disease which an individual using the bottle of medicine may have. If the spoon is left attached to the bottle, it will never be used by any other member of the family but will be kept for the exclusive use of one person for one bottle of medicine.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a side elevation, showing the measuring spoon secured against the side of the bottle.

Fig. 2 is a similar view, showing the measuring spoon disposed across the closure cap.

Fig. 3 is a top plan view of the bottle and closure cap, showing the valley through which the spoon will be disposed to act as an operating lever.

Fig. 4 is a sectional view through the cap, showing the hinge eye thereof and the hinge eye of the spoon engaged therewith.

Fig. 5 is a detail edge view of the hinge eye bar of the closure cap.

Fig. 6 is a detail edge view of the spoon and ring.

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Fig. 7 is a side elevation of a modified form.

Fig. 8 is a similar view of another modified form.

The medicine bottle, according to the first form of the present invention shown in Figs. 1 to 6, includes a container 10, in the form of a bottle, having a pouring neck 11, which is offset from a concentric relation to the container 10.

On the externally screw threaded neck 11 a closure cap 12 is coupled by its internal screw thread 12a, see Fig. 4. This closure cap is provided with a metal, plastic or the like bar 13, which is secured thereto, as by the rivet or fastener 14, which is centrally located on the cap. The bar 13 is formed on one end with a helical hinge coil 15, which is located near one side of the cap.

The cap 12 is provided or formed with parallel lugs 16 and 17, which engage the side edges of the flat bar 13, to enable the cap to be opened by relative turning movement between the two lugs adjacent the bar on the cap.

In its secured or closed position the cap holds the hinge eye or coil 15 near the outermost side of the eccentric neck 11. The helical hinge coil or eye 18 of the spoon or measuring member 19, is slidably interfitted with the hinge coil or eye 15, and is provided with a small dose measuring spoon bowl 20, and a larger dose measuring spoon bowl 21, spaced outwardly thereof.

The measuring member of spoon 19 is supported on the closure cap so that it will lie close against the outer surface of the portion of the container 10 directly under the hinge eye or coil 15. The outer end of the spoon or measuring member 19 is provided with a lip 22, which is engaged by a ring 23, which is slidably mounted on the container 10, and which serves to hold the spoon 19 snugly against the container. The measuring member or spoon 19 has a portion adjacent its pivoted end corresponding in width to the space between the lugs 16 and 17 which engages between the lugs when the measuring member or spoon is pivoted to a position onto the top of the cap 12, as shown in Fig. 2.

When it is desired to take some of the medicine or contents of the container 10, the ring 23 is forced downwardly so that the spoon or measuring member 19 can be swung upwardly and over the closure cap, and between the lugs 16 and 17, and then used as a lever for turning the closure cap 12 on the container 10 to completely release the cap from the container.

When the closure cap has been removed, the spoon or measuring member 19 may be slidably

detached from the closure cap, by shifting the hinge eye or helical coil **18** of the spoon or measuring member **19** out of the hinge eye or coil **15** of the bar **13**.

The medicine may then be poured into the spoon bowl which best serves the purpose of the user, or which is best suited to supply the correct dosage of the medicine.

The invention thus provides means always at hand for dispensing the correct dosage of the medicine, as prescribed by the directing physician, and also means for securing the closure cap so that there is no loss of strength of the medicine and of releasing the closure cap, so that a person rendered weak by illness will have no difficulty in removing the closure cap **12** and pouring the required dosage of the medicine.

The spoon may be made of plastic or metal, and the closure cap may be made of metal, glass or plastic or other suitable material.

The attachment of the spoon to the medicine container or bottle provides a safety measure for aiding the patient in taking the correct dosage, and avoiding the frequently dangerous error of taking an excess amount of medicine, or an insufficient amount. The attachment is also sanitary and hygienic because by attachment to the bottle, the utensils of a sick one are not combined with the utensils of the rest of the family, thereby avoiding contagion.

Fig. 7 shows a modified form of the present invention, wherein the closure cap **30** is provided with a hook **31**, which is formed integrally with a reinforcing rib **32** formed on the closure cap **30**. On the hook **31** the measuring spoon **33** is detachably mounted.

Fig. 8 shows another modified form of the present invention, wherein the closure cap **35** is provided with a spring hook **36**, which is disposed against one side of the cap, and provided with an outwardly directed terminal **36a**. The spoon **38** is mounted on this hook and the terminal **36a** serves as a latch to prevent accidental displacement therefrom.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. The combination with a medicine bottle having an eccentric neck, a closure cap detachably engaged with the neck, a metal bar secured to the closure cap and provided on one end with a helical hinge coil, a spoon having a helical hinge coil on one end thereof slidably and detachably engaged with the hinge coil of the bar, and a ring slidable on the bottle for restraining the spoon against the side of the bottle.

2. The combination with a medicine bottle having an eccentric pouring neck, a closure cap detachably coupled to the pouring neck, said closure cap having parallel lugs on the upper side thereof, a metal bar secured to the closure cap between the lugs thereof, said metal bar having a helical coil on one end thereof, a spoon having a helical coil on one end thereof slidably and detachably engaged with the helical coil of the bar and provided with a lip on the other end thereof, and a ring slidable on the bottle to overlap the lip of the spoon and hold the same against the bottle.

3. In a medicine bottle having a removable screw cap, a bar extended diametrically across the top of the cap and fixedly secured thereto, said bar being of a width less than the diameter of said cap, vertical lugs extending from the top of the cap along opposite sides of said bar intermediate the ends thereof, and a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to one end of said bar, said measuring member having a portion adjacent its pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting said measuring member to be used as a lever for tightening and loosening the cap.

4. In a medicine bottle having a removable screw cap, a bar extended diametrically across the top of the cap and fixedly secured thereto, said bar being of a width less than the diameter of said cap, vertical lugs extending from the top of the cap along opposite sides of said bar intermediate the ends thereof, and a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to one end of said bar, said measuring member having a portion adjacent its pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting said measuring member to be used as a lever for tightening and loosening the cap, said measuring member being formed with dose measuring bowls of different sizes.

5. In a medicine bottle having a removable screw cap, a bar extended diametrically across the top of the cap and fixedly secured thereto, said bar being of a width less than the diameter of said cap, vertical lugs extending from the top of the cap along opposite sides of said bar intermediate the ends thereof, and a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to one end of said bar, said measuring member having a portion adjacent its pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting said measuring member being formed at one end with a hinge coil, said measuring member being formed at its top end with a hinge coil interengaged with the hinge coil of said bar forming the pivotal attachment of said measuring member on said bar.

6. In a medicine bottle having a removable screw cap, a bar extended diametrically across the top of the cap and fixedly secured thereto, said bar being of a width less than the diameter of said cap, vertical lugs extending from the top of the cap along opposite sides of said bar intermediate the ends thereof, and a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to one end of said bar, said measuring member having a portion adjacent its pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting

said measuring member to be used as a lever for tightening and loosening the cap, and means for retaining said measuring member in position alongside of the bottle.

7. In a medicine bottle having a removable screw cap, a bar extended diametrically across the top of the cap and fixedly secured thereto, said bar being of a width less than the diameter of said cap, vertical lugs extending from the top of the cap along opposite sides of said bar intermediate the ends thereof, and a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to one end of said bar, said measuring member having a portion adjacent its pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting said measuring member to be used as a lever for tightening and loosening the cap, a ring slidably engaged about the bottle, and a lip formed on the lower end of said measuring member and engaged by said ring for holding said measuring member in position alongside the bottle.

8. In a medicine bottle having a removable screw cap, spaced vertical lugs formed on the top of the cap with adjacent sides facing one another, said lugs being extended parallel to each other, a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to the side of the cap at a point along a plane extended midway between said lugs, said measuring member having a portion adjacent its top pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said

portion engaged between said lugs permitting said measuring member to be used as a lever for tightening or loosening the cap.

9. In a medicine bottle having a removable screw cap, spaced vertical lugs formed on the top of the cap with adjacent sides facing one another, said lugs being extended parallel to each other, a measuring member extended vertically along the side of the bottle and having its top end pivotally attached to the side of the cap at a point along a plane extended midway between said lugs, said measuring member having a portion adjacent its top pivoted end corresponding in width to the space between the adjacent faces of said lugs, whereby said measuring member may be pivoted to a position overlying the cap with said portion engaged between said lugs permitting said measuring member to be used as a lever for tightening or loosening the cap, and means for retaining said measuring member in a position extended along the side of the bottle.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
D. 22,407	Hinde	May 9, 1893
315,768	Goodwin	Apr. 14, 1885
350,499	Noe	Oct. 12, 1886
375,468	Wilson	Dec. 27, 1887
1,703,759	Ament	Feb. 26, 1929

FOREIGN PATENTS

Number	Country	Date
354,133	Great Britain	Aug. 6, 1931