H. P. ROBERTS. MILK BOTTLE PROTECTOR. APPLICATION FILED DEC. 18, 1913

APPLICATION FILED DEC. 18, 1913. Patented Sept. 28, 1915. 1,154,656. Tig.6.
Witnesses:
H. B. Davis.
Edith M. Calot.

TTED STATES PATENT OFFICE.

HENRY P. ROBERTS, OF BOSTON, MASSACHUSETTS.

MILK-BOTTLE PROTECTOR.

1,154,656.

Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed December 18, 1913. Serial No. 807,472.

To all whom it may concern:

Be it known that I, Henry P. Roberts, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Milk-Bottle Protectors, of which the following is a specification.

This invention relates to an improvement

in milk bottle caps or protectors.

The object of the invention is to provide a cap provided with legs or fingers that spring over the top of the milk bottle, said cap having a round aperture therein through which the milk, or other contents of the 15 bottle, can be poured, and an additional cap or closure pivotally mounted on said cap, arranged to cover said aperture, said closure being preferably detachably connected to said cap or protector to enable it to be 20 readily detached and the entire cap thoroughly cleansed and sterilized.

The invention will be readily understood from an inspection of the accompanying

drawing, in which-

Figure 1 is a side elevation of the upper portion of a milk bottle with the protector in position thereon, Fig. 2 is a central vertical section of the same, Fig. 3 is a plan view of the same, showing the closure in 30 middle position, Fig. 4 is a similar view showing the closure in a position to be detached from the body of the protector, Fig. 5 is a vertical section taken on the line 5—5 in Fig. 3, Fig. 6 is a plan view of the blank .35 for the body-portion of the protector, and Fig. 7 is a plan view of the closure.

As illustrated in the drawing, the protector comprises a cap or body-portion 10, having a plurality of yielding clamping 40 members or legs 12, preferably four, which are shaped and adapted to spring over the bead 14 at the mouth of a milk bottle 15, to hold said cap tightly against the upper edge of the bottle. The body-portion 10 45 is formed with an aperture 16, preferably circular, through which the milk, or other contents of the bottle, can be poured. The body-portion 10 is provided with a lip 17, which projects beyond the bead 14 of the 50 bottle, to prevent the contents from running down the outside of the bottle when being poured out.

The aperture 16 is adapted to be closed by a closure or additional cap 18, which is pro-55 vided with an elongated slot 20 adapted to pass over the head 22 of a T-shaped pivot

pin projecting from the upper surface of the body-portion 10. The ends of the head 22 of the pin are adapted to extend over the sides of the slot 20, as shown in Figs. 3 60 and 5, to hold the closure 18 in place upon the body-portion 10, so that said closure may be swung to either side of the aperture 16, the movements of said closure being limited ordinarily by two stops 24, 25, 65 formed preferably by slightly upsetting the

material of said body-portion.

When it is desired to remove the closure 18, it is swung over onto either of the stops 24, 25 until the longitudinal axis of the head 70 22 coincides with that of the slot 20 in said closure, as shown in Fig. 4, whereupon said closure may be readily detached from said main cap or body-portion. Thus it will be seen that the parts can be readily detached 75 from each other and from the milk bottle, thus enabling them to be thoroughly cleansed and sterilized, there being no fixed hinges to collect dirt or germs. The parts are preferably made of sheet steel, although 80 any other suitable material may be employed.

By reference to Fig. 3 it will be observed that the head 22 extends at right angles to the slot 20, when the closure is in its middle 85 position, and the head enables an angular movement of said closure to either side of this position, so that the aperture 16 can be fully exposed, said closure at this time being in engagement with one or the other of the 90

stops 24, 25.

What I claim is:— 1. A closure for milk bottles and like receptacles, including a cap plate having an outlet opening therein, a T-stud projecting 95 from the cap plate at one side of the outlet opening, and a detachable closure plate for the outlet opening, said closure plate being formed with an elongated slot to receive the head of the T-shaped stud and said 100 head being normally disposed at an angle to the slot so as to engage the top of the closure plate and hold the said plate in a frictional engagement with the cap plate during a sufficient range of movement to 105 admit of the closure plate being swung over or away from the outlet opening, the closure plate being detachable from the cap plate when it is swung beyond the usual range of movement to bring the slot thereof into 110 alinement with the head of the T-shaped stud.

2. A closure for milk bottles, and the like, including a cap plate having an outlet opening therein, a T-shaped stud projecting from the cap plate at one side of the outlet opening, a closure plate formed of spring metal and pivotally mounted upon the base of the T-shaped stud so as to be swung over and away from the outlet opening of the cap plate, the closure plate being provided with an elongated slot adapted to receive the head of the T-shaped stud when swung into alinement therewith to admit of the closure plate being detached from the cap plate, and stops projecting from the cap plate to limit

the usual swinging movement of the closure plate in opening and closing the outlet of the cap plate, said closure plate being adapted to be sprung outwardly and swung over the top of one of the stops to bring the slot thereof into alinement with the head of the 20 T-shaped stud when it is desired to detach the closure plate from the cap plate.

In testimony whereof I have affixed my signature in the presence of two witnesses.

HENRY P. ROBERTS.

Witnesses:

GEORGE CLARENDON HODGES, CHAS. F. HOWE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."