March 10, 1925.

1,529,139

M. J. LYONS

CAP FOR MILK BOTTLES

Filed April 21, 1924

Fig. 1.

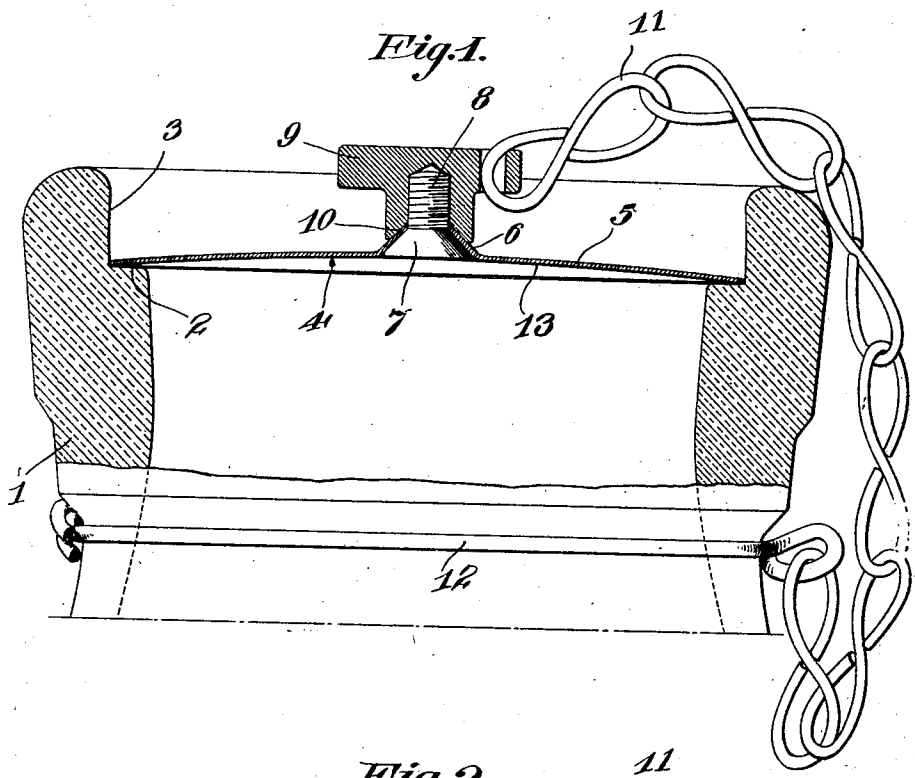
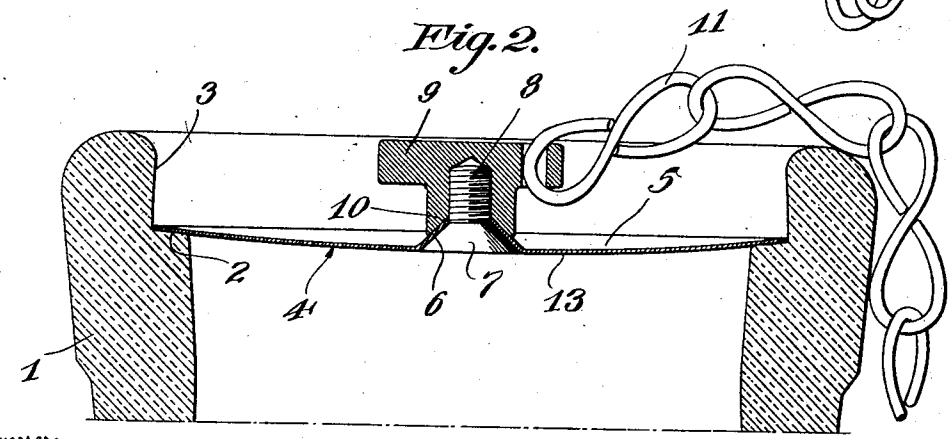


Fig. 2.



Witnesses:

Virgil L. Mares

George A. Gruss

Inventor

Michael J. Lyons

By Joshua R. H. Potts

His Attorney

Patented Mar. 10, 1925. 1,529,139

UNITED STATES PATENT OFFICE.

MICHAEL J. LYONS, OF PHILADELPHIA, PENNSYLVANIA.

CAP FOR MILK BOTTLES.

Application filed April 21, 1924. Serial No. 707,822.

To all whom it may concern:

Be it known that I, MICHAEL J. LYONS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Caps for Milk Bottles, of which the following is a specification.

My invention relates to caps for milk bottles and its object is to provide a cap which may be quickly applied to and removed from a milk bottle; which will efficiently seal the bottle; which will meet all sanitary conditions and which may be produced at low cost.

These objects, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawing in which—

Figure 1 is a fragmentary central section through a bottle and a cap constructed in accordance with my invention, and

Figure 2 a view similar to Figure 1 illustrating the cap in the sealing position.

Referring to the drawing, 1 indicates the neck of an ordinary milk bottle having an annular internal shoulder 2 and a wall 3 extending above the shoulder. My improved cap 4 rests on the shoulder and consists of a disk 5, of upwardly curved cross-section, having its center pressed into a conical boss 6 adapted to receive a counter-sunk head 7 of a securing screw 8 screwed into a knob 9 having a counter-sunk lower surface 10 engaging the upper side of the conical boss. Knob 9 is used for applying disk 5 to and removing it from the bottle. The knob is preferably connected to the bottle by a chain 11 and a wire band 12 secured around the neck of the bottle. The diameter of the disk is such that when the disk is placed on shoulder 2 as shown in Figure 1 the edges will abut the wall 3. Pressing the center of the disk downward into the position shown in Figure 2 causes the lower side 13 of the disk to engage shoulder 2 and the edge of the disk to be frictionally held by wall 3 against upward movement, thus producing a spring-like action in the disk which causes surface 13 to bear tightly against the inner edge of shoulder 2 and seal the bottle. The disk is made of suitable stiff material preferably metal which is not corroded by contact with the milk. The counter-sunk screw head 7, being flush with the surface 13 of the disk, may be easily cleansed. Attaching the knob 9 to the disk by screw 8 produces a rigid connection with the disk which may be easily made.

This cap may be used by dairies instead of the ordinary paper cap. When so used, it is attached to the neck of the bottle so that it will not be lost. When used by the consumer on a different bottle each day, it is not attached to the bottle. The cap may be easily removed from the bottle without spattering and squirting the milk as often occurs when removing the ordinary paper cap, and may be quickly placed on the bottle to form an efficient seal.

While I have described my invention as taking a particular form, it will be understood that the various parts may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

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

A bottle cap including a disk of curved cross-section having a conical boss; a screw having a counter-sunk head fitting within the boss, and a knob secured to the screw and engaging the upper side of the boss.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MICHAEL J. LYONS.

Witnesses:
CHARLES C. CREAMER, Sr.,
CLARENCE W. DRAKE.