

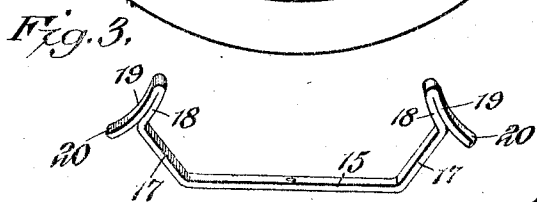
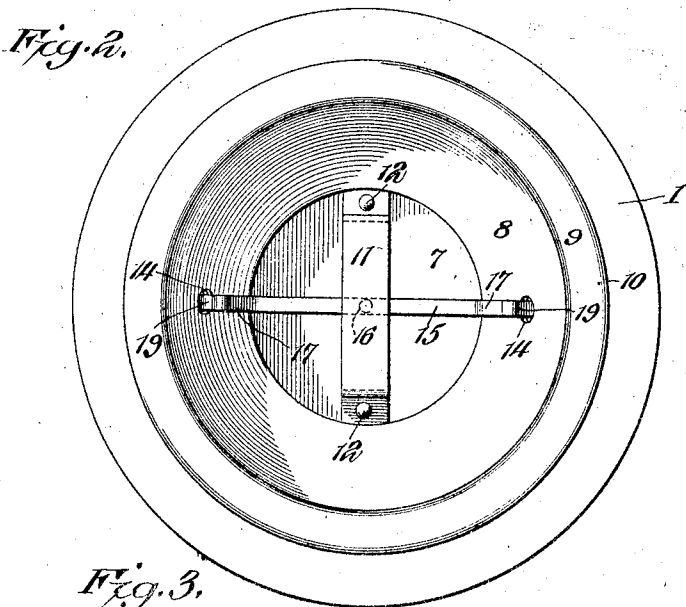
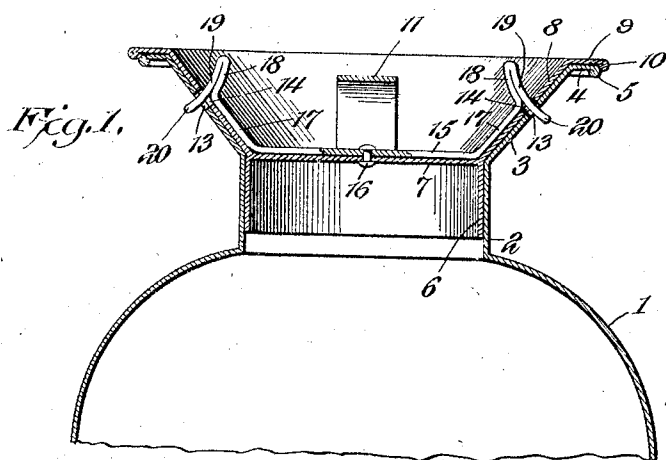
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L. E. DRAKE

LID FASTENER FOR MILK CANS

Filed Feb. 28, 1923



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LID FASTENER FOR MILK CANS.

Application filed February 28, 1923. Serial No. 621,832.

To all whom it may concern:

Be it known that I, LEMUEL E. DRAKE, a citizen of the United States, residing at Modesto, in the county of Stanislaus and State of California, have invented a new and useful Improvement in Lid Fasteners for Milk Cans, of which the following is a specification.

This invention relates to means for fastening the lids of milk cans or like containers.

The object is to provide simple means which may be easily applied to lids of milk cans or the like as constructed without the necessity for any alteration therein, said means being permanently secured to and carried by the lid and ready at all times to coact with the mouth of the can for fastening the lid securely therein to prevent leakage or spilling.

Another object is to provide fastening means for this purpose which is housed entirely within the hollow or concave lid, there being no parts projecting far enough to be accidentally struck to release the lid from the neck of the can, the diametrically opposite locking members of the fastener being readily grasped by the fingers of one hand to effect such release.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawing forming a part of this specification, it being understood that while the drawing shows a practical form of the invention, the latter is not confined to strict conformity with the showing thereof, but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention, as specifically pointed out in the appended claims.

In the drawing in which similar reference characters designate corresponding parts throughout the several figures:

Figure 1 is a vertical sectional view through the upper portion of an ordinary milk can showing the improved fastener locking the lid or cover in position;

Figure 2 is a plan view thereof;

Figure 3 is a detached perspective view of the improved fastener.

Referring to the drawing there is shown in Figure 1 the upper portion of a milk can having the usual rounded shoulder 1, pro-

vided with an upstanding, cylindrical neck 2, which is joined to an outwardly flaring, funnel-shaped mouth 3 terminating in a flat, horizontal, annular ring 4, having its marginal edge strengthened by a peripheral bead 5. While this is the ordinary manner of forming milk cans, it will, of course, be understood that any other shape may be employed.

The lid or cover comprises a cylindrical neck 6 having an external diameter to snugly fit within the neck 2 of the can, the latter neck being somewhat greater in height than the said neck 6, which is joined to the marginal edge of a closure plate 7. The lid is also provided with an outwardly flaring wall 8 arranged at an angle to coincide with the funnel-shaped mouth 3 of the can, and having its lower edge joined to the peripheral edge of the closure plate 7 and adapted to lie against the upper face of the said mouth, the upper edge of the wall 8 being extended outwardly to provide an annular ring 9, adapted to rest upon the ring 4 and provided around its marginal edge with a strengthening bead 10, which preferably overhangs and bears against the first-named bead 5 and aids in maintaining a tight joint between the can and the lid or cover. An ordinary handle 11 is arranged diametrically across the lid in spaced relation to the closure plate 7, the said handle, which is located below the level of the annular ring 9, having leg and foot portions, the latter being secured to the plate 7 by rivets 12.

As thus far described, the parts are of the usual construction and no claim is made thereto, as it will be seen that the improved fastener as hereinafter described may be applied to other shapes of cans or containers and lids therefor equally as well.

The funnel shaped mouth 3 of the can is provided with diametrically opposite openings 13 about midway of its length, and the flaring wall 8 of the lid is also provided with opposite openings 14 which are in a horizontal plane with and adapted to be brought into register with the openings 13, these openings being provided in most of the ordinary cans as now used, and intended to receive some suitable sealing means to prevent removal of the lid except by authorized persons. The openings 13 and 14 are taken advantage of in the present instance to receive the locking ends of the improved fast-

ener, so that it will be seen that no alteration has been necessary in the formation of the can and lid to apply the fastener and to use the same thereon.

5 Transversely of the handle 11 is arranged a bar or rod 15 preferably flat, though the same may be round and adapted to lie flat against the upper face of the plate 7, said rod being pivoted at its center by a rivet
10 16 traversing the closure plate exactly at the center thereof. The outer end portions of the rod 15 are inclined upwardly and outwardly, as at 17, and lie normally flat against the inner or upper face of the wall 8 of the
15 lid, the said portions 17 having a normal tendency to bear against the same through the spring of the metal. The upper ends of the portions 17 are bent inwardly on a slight curve as at 18, and thence returned
20 upon themselves, as at 19, to form handles or projections within the lid to be grasped by the thumb and finger of the hand to effect the removal of the lid, the outer terminals 20 of the member projecting through
25 the alined openings 13 and 14 when the lid is fastened in place.

To apply the lid or cover to the can, it is only necessary to force the handles 19 towards each other, as the lid is introduced
30 into the flaring mouth of the can. This action brings the terminals 20 towards the center of the lid and in position to be passed through said alined openings, as the flaring wall of the lid comes to rest upon the flaring
35 wall of the mouth of the can. By releasing the hold on said handles 19, the terminals spring outwardly through the openings, when it is impossible for the lid to be accidentally dislodged from its seat, and the
40 aforesaid sealing means may also be applied to the alined openings, either one or both pairs. When it is desired to remove the lid, it will be seen, that it is only necessary to grasp the handles 19 to bring the terminals
45 inwardly and through the openings, or nearly so, when it is preferable to give the lid a twisting or turning movement to force

the rounded ends of the terminals to disengage themselves from the openings of the can.

From the foregoing it will be seen that a simple, strong and durable fastener has been provided for can lids and that the same may be easily applied to ordinary lids already on the market and that by a simple
55 movement of one hand the said lid may be applied in position or removed from the can.

What is claimed is:—

1. The combination with a milk can having a flaring mouth provided with opposite openings therethrough, and a lid adapted to fit therein and having openings registering with the first-named openings, of a fastener comprising a bar centrally pivoted on the upper surface of the lid, said bar having
65 upwardly and outwardly extending, compressible end portions having upstanding projections forming handles to force the ends towards each other, the terminals of the bar extending downwardly and outwardly from the handles and adapted to
70 spring into the aforesaid registering openings to lock the lid in the mouth of the can.

2. The combination with a milk can having a flaring mouth provided with diametrically arranged openings, and a lid having a flaring wall to fit upon the flaring mouth of the can, said flaring wall being provided with openings to register with the openings in the can mouth, of a fastener comprising
80 a bar secured on the outer face of the lid below the flaring wall and having its ends inclined upwardly and outwardly to lie flat against the outer face of said flaring wall, the ends of the bar being bent upwardly and
85 then returned to form handles which are arranged within the flaring wall of the lid, the terminals of the bar being adapted to project through the alined openings of the lid and can to hold the lid to the can.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

LEMUEL E. DRAKE.