

F. L. HOLDRIDGE.
MILK CAN LOCK.
APPLICATION FILED MAR. 30, 1911.

1,006,944.

Patented Oct. 24, 1911.

FIG. 1

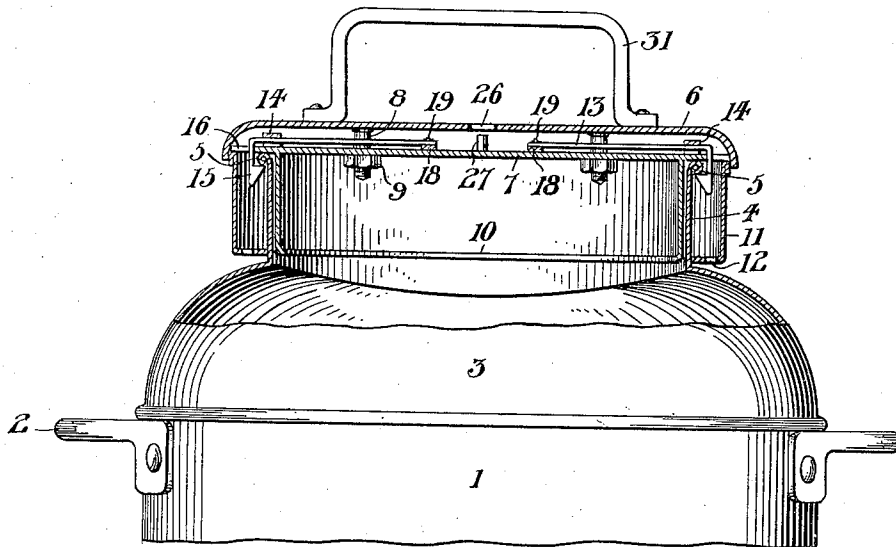


FIG. 2

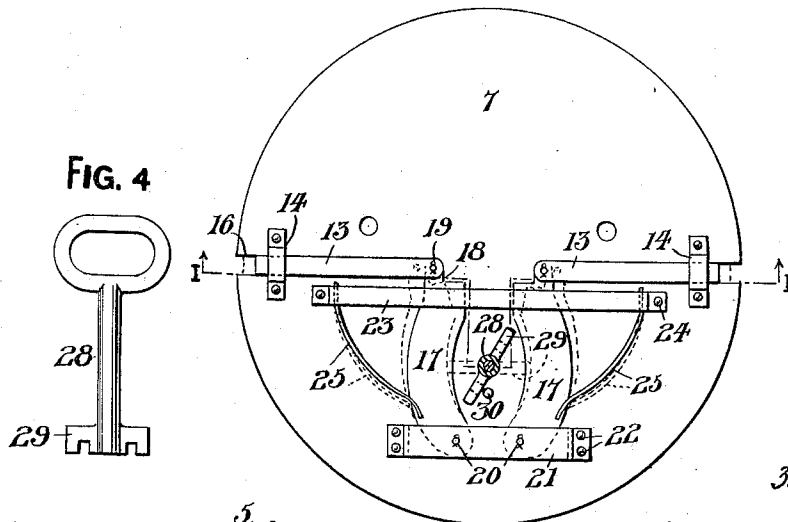


FIG. 4

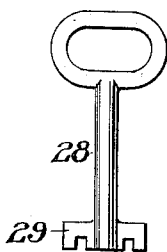


FIG. 5

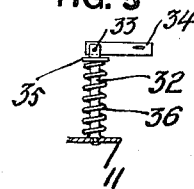
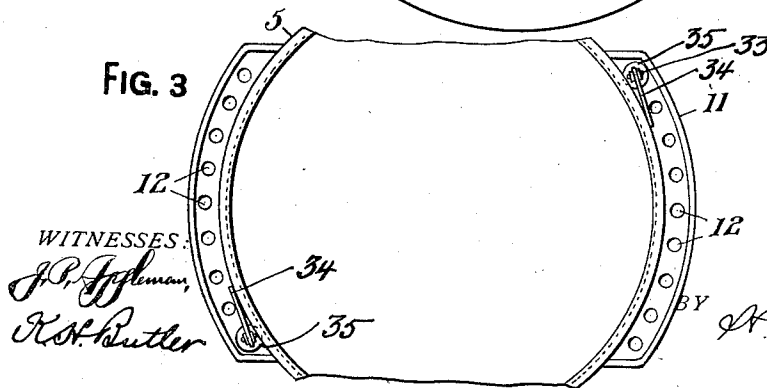


FIG. 3



WITNESSES:

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FRANKLIN L. HOLDRIDGE, OF TIDIOUTE, PENNSYLVANIA.

MILK-CAN LOCK.

1,006,944.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed March 30, 1911. Serial No. 617,933.

To all whom it may concern:

Be it known that I, FRANKLIN L. HOLD-
RIDGE, a citizen of the United States of
America, residing at Tidioute, in the county
of Warren and State of Pennsylvania, have
invented certain new and useful Improve-
ments in Milk-Can Locks, of which the fol-
lowing is a specification, reference being
had therein to the accompanying drawing.

This invention relates to locks particularly
designed for milk cans, and the object of
the invention is to provide a simple, durable
and inexpensive lock that can be embodied
in the lid of a can for securing the lid in a
closed position upon the can.

My invention aims to lock a lid upon a
can whereby the contents of the can cannot
be surreptitiously removed during the
transportation of the can; further, to pro-
vide a can and cover that can be shipped
by the consumer in an unlocked condition
and after being filled, locked by the pro-
ducer without the aid of a key (only the
consumer needs a key) and to prevent dirt
and other matter from accumulating upon
the upper edges of the can, thereby prevent-
ing contamination of the milk when poured
from the can. To this end I have devised
a lock that is embodied in the lid of the can,
in such manner as not to come in contact
with the contents, and insuring the milk
being delivered in the same condition as
consigned to the consumer, the lock being
sufficiently concealed to prevent it from be-
ing tampered with.

The invention will be hereinafter speci-
fically described and then claimed, and refer-
ence will now be had to the drawing, where-
in like numerals of reference designate cor-
responding parts throughout the several
views, in which:—

Figure 1 is a side elevation of a portion
of the can, partly broken away and partly
in section showing the lid of the can in a
locked position thereon, the section through
the lock mechanism being taken on the line
I—I of Fig. 2, Fig. 2 is a bottom plan of a
locking mechanism, Fig. 3 is a plan of a
portion of the neck of the can, Fig. 4 is an
elevation of a key used in connection with
the lock, and Fig. 5 is a side elevation of an
auxiliary device carried by the can for per-
mitting the placing of the lid on the can
without locking thereof when desired.

The reference numeral 1 denotes a portion
of a can having handles 2, a breast 3, and

a neck 4, provided with a wire annular
edge 5.

6 denotes a lid of the mushroom type and
this lid has a horizontal partition 7 sup-
ported in the lid by depending bolts 8 and
nuts 9.

10 denotes a depending annular shell car-
ried by said partition and adapted to fit in
the neck 4, and 11 denotes segment shaped
casings carried by the outside of said neck,
and having the upper edges thereof in a
horizontal plane with the wire edge 5 of
the neck 4, said casings having the bottoms
thereof provided with openings 12, which
prevents water and other matter from accu-
mulating in the casings. Secured to the bot-
tom of each casing 11 is a post 32 and piv-
otally mounted in the upper end of the post
by a pin 33 is a lever 34, and movably
mounted upon the post adjacent to the lever
is a washer 35. Encircling the post 32 be-
tween the washer 35 and the bottom casing
11 is a coiled compression spring 36. These
arms 34 are adapted to be moved on their
pivots 33 into a vertical position where they
will constitute supports for the lid, holding
the latter elevated, and preventing same
from locking until the arms 34 are turned
down to the horizontal position shown in
Figs. 3 and 5.

13 denotes diametrically opposed latch-
arms slidably mounted upon the partition
7, said arms being mounted to slide in keep-
ers 14 secured to said partition. The outer
ends of the arms are provided with depend-
ing hook-shaped latches 15 extending
through slots 16, provided therefor in the
partition 7, said latches engaging under the
wire edge 5, when the lid is locked upon the
can. The casings 11 prevent the latches
from being tampered with.

17 denotes horizontally-disposed curved
actuating members having reduced ends 18
pivotaly connected, as at 19, to the inner
ends of the arms 13, the opposite ends of
said members being pivotaly mounted, as
at 20 between a strap 21 and the partition
7, said strap being secured, as at 22, to said
partition. The members 17 are guided in
their movement by a guide strap 23, se-
cured to the partition, as at 24. Mounted in
the guide strap 23 are flat compression
springs 25, engaging the members 17 and
normally retaining said members in a re-
tracted position.

26 denotes a key opening in the lid 6, and

the partition 7, directly beneath the opening 26, has a key stud 27 adapted to receive the lower cylindrical end of a key shank 28, said shank having diametrically opposed lugs 29, adapted to engage the confronting sides of the members 17.

30 denotes wards carried by the partition 7 to prevent an ordinary key from being used to open the lock, and 31 denotes a handle carried by the lid 6, to facilitate the removal of the same from the neck of the can.

In use, when the supporting arms 34 are in a vertical position, they will engage with the plate 7 should the lid be placed on the can neck, and therefore will hold the lid elevated in such position as to prevent locking thereof. When however, it is desired to lock the lid on the can, the arms 34 are turned down to a horizontal position so that the shell 10 can enter the can neck, the beveled faces of the latches 15 riding over the bead or edge 5, and snapping thereunder through the action of springs 25, securely locking the lid on the can. To unlock the lid, the key 28 is inserted in the key-hole 26 and engaged over the stud 27. When turned, in either direction the words 29 engage the confronting faces of members 17, which, swinging on their pivots 20 move latch-arms 13 and latches 15 outwardly so that when a pull is exerted on handle 31, the latches will clear the bead or edge 5. When the lid has been removed or elevated far enough to disengage the catches 15 from locking engagement with the bead 5, the arms 34 may be turned up to vertical position to support the lid and prevent same from being accidentally forced into locked position. It will be evident that the springs 25 automatically restore the arms 13 and latches 15 to their normal position, and that the use of the key is not required to re-lock the lid.

What I claim is:—

1. The combination with the neck of a milk can, casings carried thereby, a lid, a partition arranged in said lid, and a depending shell carried by said partition and adapted to enter the neck of said milk can, of latch-arms movably mounted upon said partition, depending latches carried by the outer ends of said arms and adapted to enter said casings and engage the neck of said milk can, spring pressed actuating members pivotally mounted upon said partition and

pivotally connected to said arms, said lid having a key opening to receive a key for engagement with said members to shift the arms.

2. In a milk can lock, the combination with a can neck having a bead at its upper end, a lid, a partition within the lid having a depending shell to enter the can neck, said partition having slots at opposite sides thereof, latch-arms mounted to slide on the partition and having latches on their outer ends depending through said slots in the partition and engaging the bead on said can neck, latch arm actuating members pivotally-connected at one end to the inner ends of the latch arms and at their other ends to the partition, and springs bearing against said actuating-members for normally holding the latch arms in locked engagement with the bead of the can neck, said lid having a key-opening to receive a key for engagement with the actuating members to shift the latch arms to unlocked position.

3. In a milk can lock, the combination with a can neck, a lid, and locking mechanism carried by the lid for engagement with the can neck, of casings carried by the can neck at opposite sides thereof, posts mounted in said casings, supporting-arms pivoted at one end in the upper ends of said posts, and springs on the posts between the pivoted ends of the arms and the bottom of the casings, said supporting arms when swung on their pivots to vertical position acting to support the lid against movement to locking position.

4. In a milk can lock, a can neck, a lid for closing said neck, a partition carried by said lid, arms movably mounted upon said partition, latches carried by the outer ends of said arms and adapted to engage said neck, key-operated spring pressed pivoted members arranged upon said partition and adapted to shift said arms and the latches thereof, casings carried by the neck of said can and inclosing said latches, and a device arranged in said casings and adapted to prevent said lock from locking until said device is shifted.

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

FRANKLIN L. HOLDRIDGE.

Witnesses:

MAX H. SROLOVITZ,
K. H. BUTLER.