

E. WAGNER.
 LOCK LID CONTAINER.
 APPLICATION FILED SEPT. 9, 1918.

1,300,899.

Patented Apr. 15, 1919.
 2 SHEETS—SHEET 1.

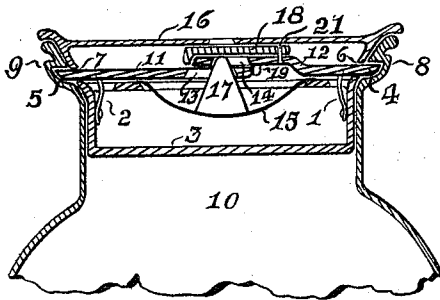


Fig. 1.

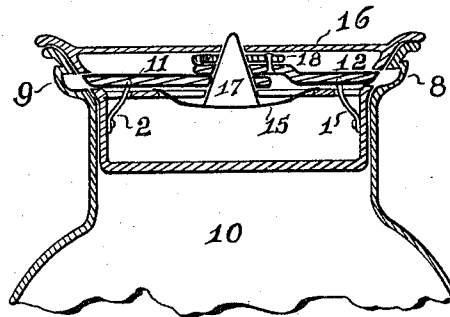


Fig. 2.

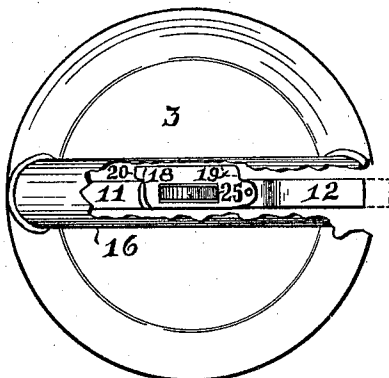


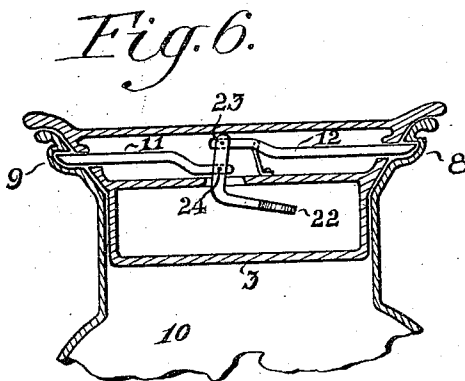
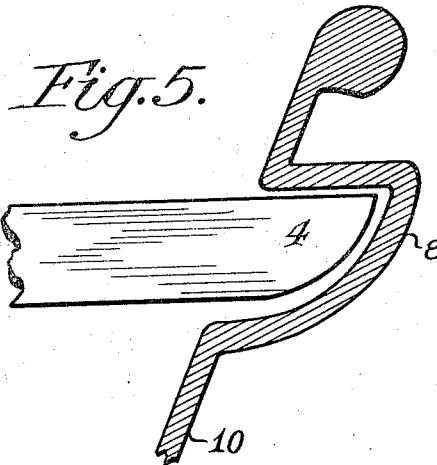
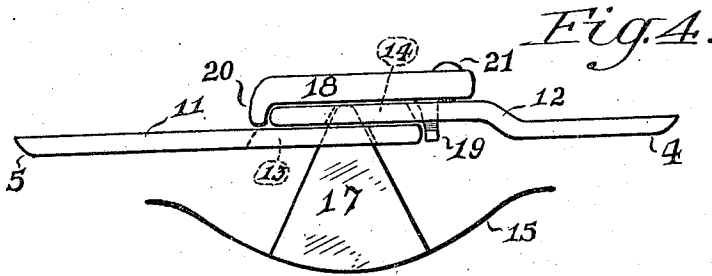
Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWIN WAGNER, OF COVE ORCHARD, OREGON.

LOCK-LID CONTAINER.

1,300,899.

Specification of Letters Patent.

Patented Apr. 15, 1919.

Application filed September 9, 1918. Serial No. 253,187.

To all whom it may concern:

Be it known that I, EDWIN WAGNER, a citizen of the United States, residing in the city of Cove Orchard and State of Oregon, have
5 invented new and useful Improvements in Lock-Lid Containers, of which the following is a specification, reference being had to the accompanying drawings.

This invention pertains to lock lids for
10 containers of various kinds, and is especially adapted as a lock lid for milk cans and similar containers, and the primary object of the invention is to provide a lid of this character which will automatically lock in position
15 when placed in the can, thereby preventing the accidental displacement of said lid.

Another object is to provide such a lid which will at the same time afford a convenient handle for the container as a whole.

20 A further object is to provide such lid in a simple, practical and efficient form.

With these objects in view, attention is called to the accompanying drawings constituting a part of this specification, and
25 wherein—

Figure 1 represents a sectional side elevation of a can equipped with this improved lid, and showing the lid locked in place;

30 Fig. 2, a similar view showing the lid with the locking mechanism withdrawn and the lid ready to be raised;

Fig. 3 shows a top plan view of a lid, a part of the surrounding casing being broken away to reveal the working elements;

35 Fig. 4 is a detail of the locking mechanism showing the method of locking the lid in place;

40 Fig. 5 is a detail showing the method of engagement of the locking dogs with the edge of the container.

Fig. 6 is a view showing a modified form of construction of the locking mechanism.

Referring more particularly to the drawings, my invention consists of two lock
45 springs 1 and 2 mounted vertically upon opposite sides of the depressed lid 3 and upon the interior face thereof, said springs being bent to conform to the shape of the lid. These lock springs are rigidly joined to the
50 inner face of said lid 3 from their lower ends, leaving their upper ends free. Upon these upper ends are mounted the lock dogs 4 and 5, and same are adapted normally to protrude through the ports 6 and 7 cut
55 through the lid 3. The action of the springs 1 and 2 is such as to normally hold said

lock dogs in their outermost extended position when protruding through said ports 6 and 7. In the top of the container 10 itself, I form corresponding ears 8 and 9 adapted
60 to engage the protruding lock dogs 4 and 5 aforesaid when said lid 3 is forced into position in the top of said container 10. At the upper end of each lock spring 1 and 2 as aforesaid, I rigidly join the transverse lock
65 bars 11 and 12, same being adapted to meet centrally across the top of the lid 3 and to overlap one another for purposes which will hereinafter appear. Substantially, the lock
70 dogs 4 and 5 constitute the terminals of the lock bars 11 and 12, and so may be formed integral therewith.

These overlapping ends of the lock bars 11 and 12 are provided with elongated slots
75 13 and 14, one being superimposed immediately above the other when said lock bars are in proper position. Immediately below said lock bars 11 and 12, I mount the flat curved lock spring 15, same being supported from
80 its ends by the hollow handle 16, which surrounds and supports the entire locking mechanism. This handle 16 also acts as a handle to raise the lid or raise the entire container when the lid is locked in position thereupon.

Said lock spring 15 is normally adapted
85 to protrude downwardly through the handle 16 so as to be easily manipulated by the fingers. Upon the upper side of said lock spring 15, I rigidly mount the flat triangular lock lip 17 adapted to play through the
90 elongated slots 13 and 14 aforesaid, and being so related to said slots that upon the upward motion of said lock spring 15, the beveled edges of said lock lip 17 will play
95 against the respective interior ends of said slots, so as to cause said lock bars 11 and 12, and said lock dogs 4 and 5 to be withdrawn from the lock ears 8 and 9, thereby
unlocking the lid.

Upon the upper surface of the lock bar 12, immediately over said slots 13 and 14, is
100 pivotally mounted the lock lever 18, same turning upon the pivot 21. The lock lever 18 carries a slot 25 adapted to aline with the slots 13 and 14, and is so mounted that when
105 it is swung into alinement with the lock bars 11 and 12, the lock lip 17 will be depressed, thereby permitting the lock springs 1 and 2 to move outwardly, forcing the lock dogs
110 4 and 5 into engagement with the lock ears 8 and 9; but when said lock lever 18 is turned sidewise out of alinement as afore-

said, the slots 25, 13 and 14 all fall into alinement, and the lock lip 17 is permitted to press upwardly through the slots 13, 14 and 25, thereby withdrawing said lock bars 11 and 12, as aforesaid, and unlocking the lid.

Suitable end wings 19 and 20 rigidly mounted upon the lock lever 18 are adapted to swing into engagement with the exposed ends of said lock bars 11 and 12 when the lock lever 18 is drawn around into alinement therewith, thereby effectually locking said lock bars in place, and locking the lid of the can into position upon the container.

The handle 16 is hollow and rigidly attached at opposite points from the interior surface of the lid 3, and covers and supports the working elements of the mechanism above described, and also serves as a handle, as aforesaid.

A modified form is shown in Fig. 6, wherein instead of the triangular lock lip 17, a lever 22 is substituted, said lever being attached at the points 23 and 24 to the lock bars 11 and 12, so that when said lever is forced upward, it will have the same effect as the upward pressing of the lock lip 17.

The operation of the device has been fairly described in the preceding specification. The lid 3 being pressed into place in the top of the container 10, the lock dogs 4 and 5 automatically engage with the lock ears 8 and 9, thereby locking the lid securely in place. To release the lid, all that is necessary is to press upward with the fingers at the lower side of the lock lip 17 or the lever 22, which automatically releases the lock dogs, and the lid may be readily taken off.

While I have herein described a certain specific manner and method of constructing the elements of my invention, it is understood that I may vary from the same in minor details, not departing from the spirit of my invention, so as best to construct a practical device for the purpose intended, as defined in the appended claims.

What I claim to be new and patentable is:

1. A lock lid for containers, comprising the lid proper; two ports cut in opposite sides thereof; two flat springs mounted interiorly adjacent said ports and set to normally thrust outwardly; a lock dog attached to the free end of each spring and adapted to protrude through the ports aforesaid; a lock lever attached to each lock dog and extending inwardly and overlapping; slots formed through the overlapping ends of said

lock bars, said slots being offset as to one another so that the inner ends of the slots approach one another; a lock spring mounted below said lock bars; a triangular lock lip mounted upwardly from said lock spring and adapted to engage the slots in the ends of the lock bars; a lock lever pivoted above said lock bars and slots, said lever having a slot adapted to receive the said lock lip when same is pressed upwardly; and a supporting handle for said elements.

2. A lock lid container, comprising a casing having an opening; a collar set in the opening; oppositely disposed slots cut through the collar wall; a lid having a collar adapted to fit slidingly within the collar of the casing; oppositely disposed slots cut through the lid collar and alined with the slots in the casing collar; flat springs mounted on the inner walls of the lid collar adjacent said slots; overlapping lock bars adapted to protrude through said slots and being held outwardly by said springs; slots so cut through the overlapping ends of said lock bars as to be approximately alined when the bars are withdrawn; a lock spring mounted beneath said lock bars; a triangular lock lip mounted on the upper side of said lock spring and adapted to engage the slots in the ends of the lock bars; a lock lever pivoted above said lock bars and slots and having a slot adapted to receive the upper end of said lock lip; and a supporting handle for said elements.

3. A lock lid container, comprising a casing open at one portion; a collar set in the opening; oppositely disposed slots cut through the collar wall; a lid having a collar adapted for interior sliding engagement with the casing collar; slots cut through the lid collar in alinement with the slots in the casing collar; overlapping lock bars transversely mounted across the top of the lid and in alinement with said slots; lock dogs formed at the outer ends of the bars and adapted for sliding engagement with said slots; means for normally holding said lock bars and dogs outwardly extended; means utilizing the overlapping interior ends of the lock bars for withdrawing said lock dogs from engagement with said slots; and a supporting handle for said elements.

EDWIN WAGNER.

Witnesses:

NELLIE E. GRAHAM,
F. C. GRAHAM.