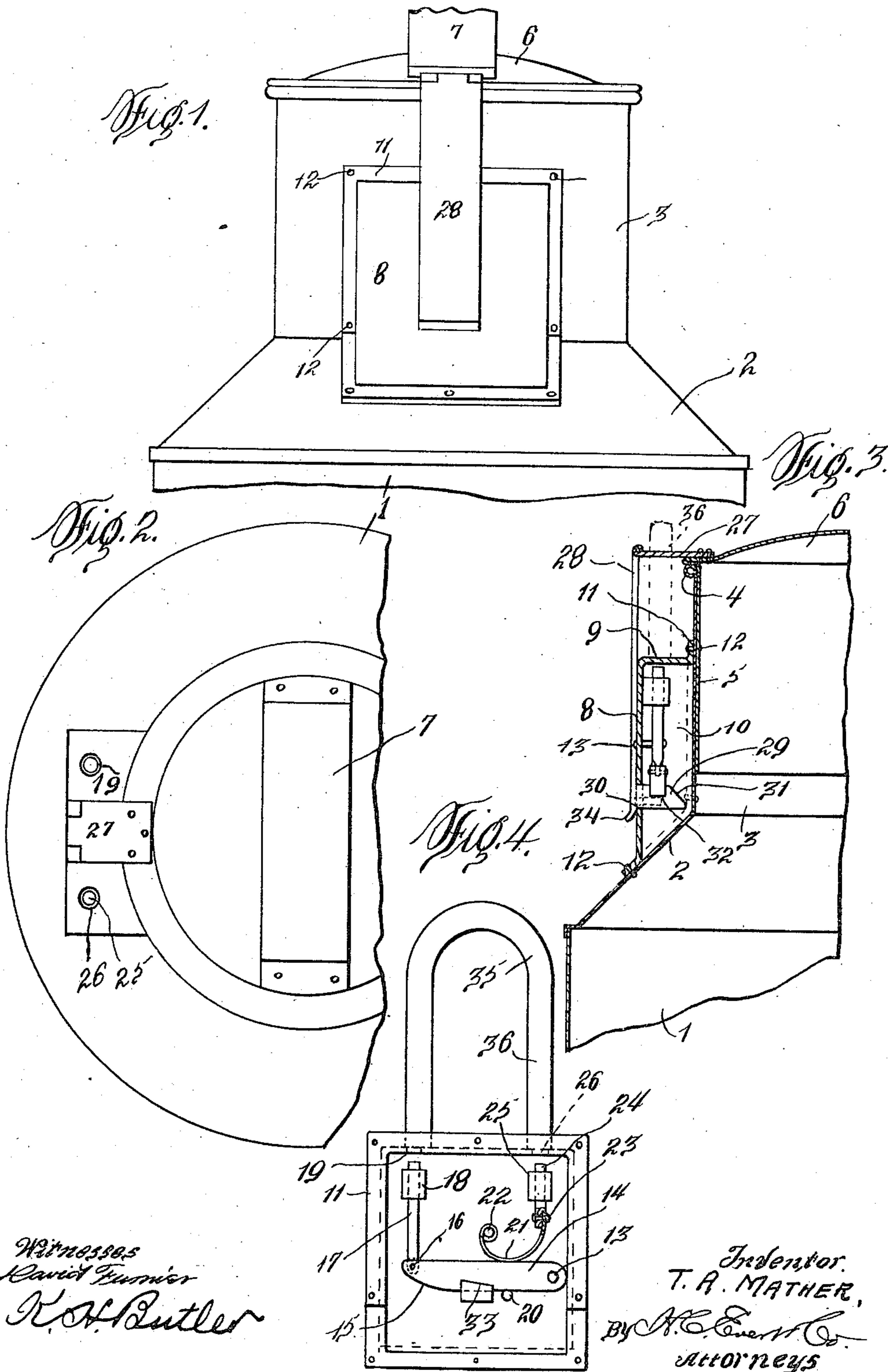


T. A. MATHER.
MILK CAN LOCK.
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975,882.

Patented Nov. 15, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS A. MATHER, OF GREENSBURG, PENNSYLVANIA.

MILK-CAN LOCK.

975,882.

Specification of Letters Patent.

Patented Nov. 15, 1910.

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To all whom it may concern:

Be it known that I, THOMAS A. MATHER, a citizen of the United States of America, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Milk-Can Locks, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to milk can locks, and the invention aims to furnish a milk can or other receptacle with a novel lock for preventing the can from being opened and the contents surreptitiously removed.

To this end, I provide a milk can with a lock adapted to be actuated by the use of a magnet or magnetic element, thereby obviating the necessity of using a key, thus preventing a person not familiar with the construction of the lock from opening the same by using a skeleton key. The lock has been designed whereby it can be used in connection with various kinds of receptacles, but has been primarily designed for milk cans, to prevent trainmen and other persons from removing milk or cream from a can while the same is being transported between the producer and consumer.

The invention will be hereinafter specifically described and then claimed, and reference will now be had to the drawing forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof can be varied or changed without departing from the spirit and scope of the invention.

In the drawing:—Figure 1 is a front elevation of a portion of a milk can provided with the lock, Fig. 2 is a plan of a portion of the same, Fig. 3 is a vertical sectional view of a portion of the can and lock, and Fig. 4 is a rear elevation of a detached lock.

In the accompanying drawing the reference numeral 1 denotes a can or receptacle having the upper end thereof reduced and provided with a breast 2 terminating in a cylindrical neck 3, said neck having the upper edge thereof reamed or reinforced, as at 4. Adapted to fit in the neck 3 is the depending sleeve 5 of a lid 6, said lid having a conventional form of handle or bail 7.

Mounted upon the outer side of the neck 3 is a lock casing, comprising a front wall 8, a top wall 9 and side walls 10, all of these

walls being flanged, as at 11 whereby they can be riveted or otherwise connected to the neck 3 and to the breast 2, as at 12. The front wall 8 is of a sufficient length to rest upon the breast 2 and the lower edges of the side walls 10 are cut to conform to the inclination or angularity of the breast 2, thus providing a compartment between said walls and the neck 3 and the breast 2. The inner side of the front wall 8 is provided with a pivot or pin 13 for a latch 14 having the forward under side thereof beveled, as at 15. Pivotaly connected to the forward end of the latch 14 by a pin 16 is a vertical rod 17 extending upwardly through a tubular guide 18, carried by the inner side of the front wall 8. The upper end of the rod 17 extends into proximity to an opening 19 formed in the top wall 9 of the lock casing. The latch 14 is limited in its lowering movement and normally supported by a projection 20, carried by the inner side of the front wall 8, and said latch is normally held in engagement with the projection 20 by a curved flat spring 21 having one end fixed to a pin 22, carried by the inner side of the wall 8, and the opposite end connected, as at 23 to a rod 24 movably mounted in a tubular guide 25, carried by the inner side of the wall 8. The upper end of the rod 24 extends in proximity to an opening 26 provided therefor in the top wall 9.

The lid 6 of the milk can is provided with a fixed support 27 for a pivoted or hinged hasp 28 and the lower end of said hasp is provided with an inwardly projecting keeper 29 adapted to extend through an opening 30 provided therefor in the front wall 8 of the lock casing. The keeper 29 has the inner upper edge thereof beveled, as at 31 whereby it will easily ride into engagement with the latch 14, and said keeper is provided with a groove 32 to receive the latch. The end of the keeper is also cut away, as at 33 whereby it will clear the latch 14 when the same is in an elevated position. The lower end of the hasp 28 is bent outwardly, as at 34 whereby a finger can be easily placed under the end of the hasp to raise the same and move the keeper 29 out of the lock casing.

To manipulate the lock a horseshoe magnet or magnetic element 35 having arms or pins 36 is employed, the ends of the arms or pins 36 being held over the openings 19 and 26, whereby the rods 17 and 24 will be at-

tracted and elevated. By elevating the rod 24 the tension of the spring 21 upon the upper edge of the latch 14 is released, whereby the rod 17, which is elevated simultaneously with the rod 24, will elevate the latch 14 and release the keeper 29, allowing the hasp to be swung outwardly and the lid removed from the can. As long as the magnet is held over the openings 19 and 26, the rods 17 and 24 will be retained in an elevated position, until the magnetic force is exhausted. When the magnet is removed from the top of the lock casing, the spring 21 immediately returns the latch 14 to its normal position, and through the medium of the beveled end 31 of the keeper 29, said keeper can be snapped or sprung into engagement with the latch when the hasp is closed. It is preferable to use a horseshoe magnet.

What I claim is:—

1. A lock for milk cans comprising a lock casing, said casing having a front and a top wall, a latch pivotally mounted at one end thereof within said casing to said front wall, an upwardly-extending rod pivoted to the other end of said latch, a tubular guide secured to said front wall and receiving said rod therethrough, said top wall provided with an opening therein alining with the upper end of said rod, a projection carried by said front wall adapted to limit the movement of the latch in one direction, a curved flat spring pivoted at one end to the front wall and contacting the latch on the opposite side of the latter from said projection, a short rod secured to the other end of said spring, another tubular guide upon said

front wall and receiving said short rod therethrough, the top wall of said casing provided with another opening positioned in alinement with said short rod, a keeper adapted to enter said casing and be engaged by said latch and a magnet adapted to elevate said rods.

2. In a milk can lock, a casing, a spring pressed latch pivotally mounted in said casing, a keeper adapted to enter said casing and be engaged by said latch for retaining said milk can in a closed position, rods, one of said rods being arranged to move said latch, the other of said rods being arranged to release the tension of the spring upon said latch, and a magnet for moving said rods, substantially as described.

3. In a milk can, the combination with a milk can having a neck, a lid adapted to close said neck, of a hasp carried by said lid, a keeper attached to the lower end of said hasp, a lock casing connected to said neck and adapted to receive said keeper, a latch pivotally mounted in said lock casing to engage said keeper, a spring adapted to normally retain said latch in engagement with said keeper, a rod connected to said spring, a rod connected to said latch for moving said latch out of engagement with said keeper, and a magnet adapted to elevate said rods.

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

THOMAS A. MATHER.

Witnesses:

H. B. MAINHART,

THOS. L. FOSTER.