A. McNAUGHTON.

DELIVERY RECEPTACLE LOCK.

APPLICATION FILED AUG. 8, 1918.

1,354,500. **Patented Oct. 5, 1920.**

FIG. 1.

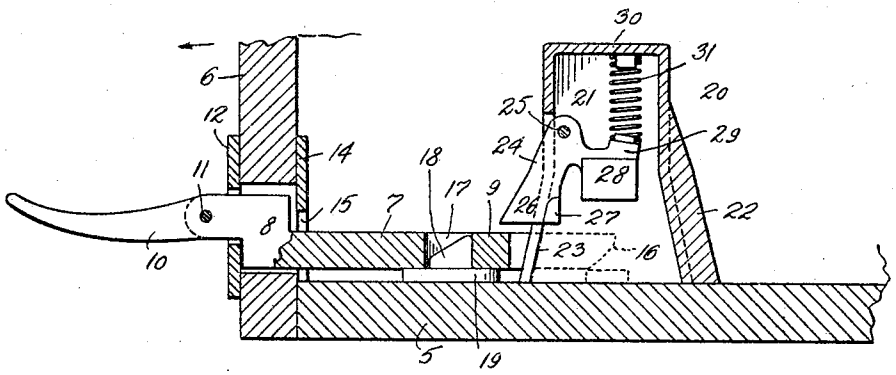


FIG. 2.

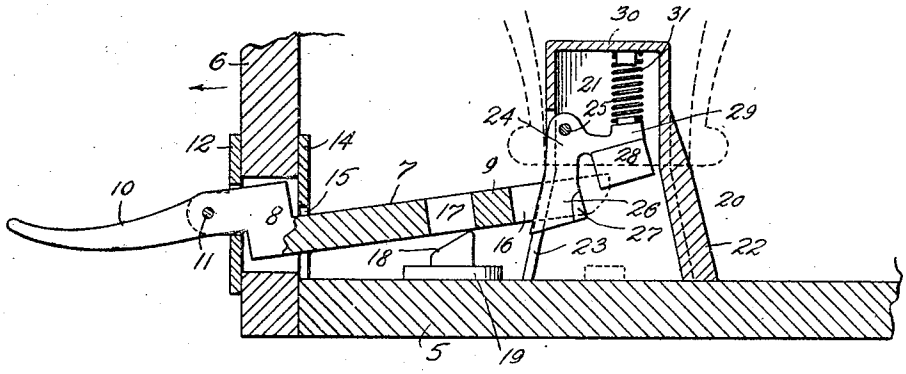
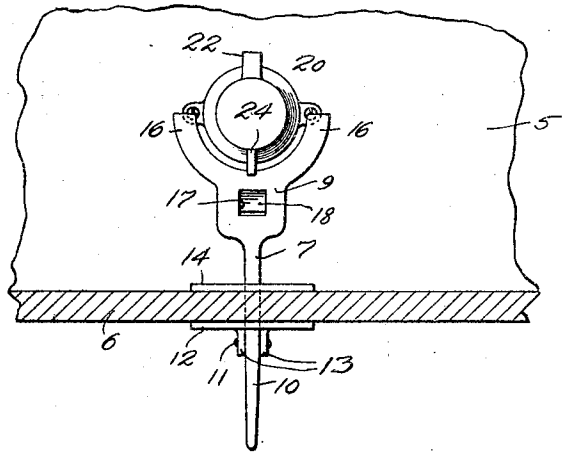


FIG. 3.



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DELIVERY-RECEPTACLE LOCK.

1,354,500. Specification of Letters Patent. Patented Oct. 5, 1920.

Application filed August 8, 1918. Serial No. 248,879.

To all whom it may concern:

Be it known that I, ALEXANDER McNAUGHTON, a citizen of the United States of America, and a resident of the city of Buffalo, county of Erie, and State of New York, have invented a certain new and useful Delivery-Receptacle Lock, of which the following is a specification.

My invention relates generally to delivery receptacle locks, and more particularly to a lock for use in connection with a milk bottle receptacle of the type which is set into the wall of the building and which is accessible from the inside and outside.

It is well known that in receptacles of this kind, where no lock is provided for the outer door, milk bottles may be removed from the receptacle from the outside by any unauthorized person.

The general object of my invention has been to provide a device which shall be kept unlocked by an empty milk bottle, and one which shall lock itself when the empty bottle has been removed and the door closed.

Another object has been to provide a lock which shall be very simple in its construction, of few parts, and reliable in its operation.

Another object has been to provide a lock which may be easily and conveniently attached to existing receptacles.

The above objects and advantages have been accomplished by the device shown in the accompanying drawings, of which:

Figure 1 is a fragmentary, sectional elevation of a receptacle, showing my device in its locked position.

Fig. 2 is a similar view showing the device in its unlocked position.

Fig. 3 is a fragmentary, plan view of a receptacle showing my device in its locked position.

In the drawings, for clearness of illustration, I have shown only a fragmentary portion of the receptacle to which my lock is attached, it being obvious that while I have shown but a portion of the bottom and outer door thereof, that the body is provided with two walls, a top, a bottom, an outer door, and an inner door.

In the drawings: 5 represents the bottom of the receptacle and 6 the outer door which is accessible to the tradesman. This door, of course, is mounted upon hinges and arranged to swing outwardly. 7 is the latch of my device which is provided with a body portion 8 having an inner arm 9 and an outer arm 10. The latch is pivoted at 11 to a plate 12, which is preferably secured to the outer face of the door 6. The latch passes between lugs 13 formed on the plate 12, whereby it is suitably supported. The outer arm 10 of the latch is preferably curved slightly as shown in the drawings and provides a suitable lever whereby the latch may be operated by the tradesman. On the inside of the door, where the latch passes through, is secured a plate 14 having a slot 15, which acts as a guide for the latch. The inner arm 9 of the latch is preferably provided at its inner end with two curved arms 16, and, intermediate the body portions and these ends, with a square aperture 17. A latch lug 18, carried by a plate 19 is secured to the bottom 5 of the receptacle and is in registering position with the aperture 17 of the latch.

So as to lock the latch bar in its engagement with the latch lug 18, a standard 20 is provided. This standard is secured to the bottom 5 of the receptacle and is arranged between the curved ends 16 of the inner arm 9 and preferably concentric with the curvature of the said arms. The standard 20 is preferably tapered and is provided with a hollow center 21. The standard is of such a size and shape as to have its upper end pass into the neck of an inverted milk bottle. A rib 22 is formed at the back side of the standard so as to draw the milk bottle tightly against the front side thereof. In the front side of the standard, a slot 23 is provided, in which is pivotally arranged a trigger 24. The trigger is pivoted at 25 and is provided with a downwardly extending lower arm 26. When the trigger is in the position shown in Fig. 1, the lower face of its arm 26 will be disposed above the inner arm 9 of the latch, thereby preventing the latch from being raised. A stop 27 is preferably provided at each side of the arm 26 and near its lower end, whereby the further outward motion of the arm 26 will be prevented. The trigger is also provided with an inwardly extending weighted arm 28. This arm is preferably provided with an upwardly extending end 29, and between this end and the top 30 of the standard is disposed a helical spring 31, which serves to keep the trigger normally in the position shown in the drawings. If desired the weighted arm 28 may be made heavy enough

so as not to require the spring 31 which may then be omitted.

It will be clear from the above description that when the parts are as shown in Fig. 1, the door 6 cannot be opened because of the engagement of the aperture 17 of the latch with the latch lug 18, and that the latch cannot be operated because the arm 26 of the trigger 24 acts as a stop, whereby the door 6 of the receptacle is securely locked and all access to the receptacle from the outside prevented.

When the customer wishes to make it possible for the tradesman to open the door 6, he places an inverted milk bottle over the standard 20, as shown in Fig. 2. As the neck of the bottle passes down over the standard it will be drawn in close contact with the front thereof and will move the trigger 24 inwardly to the position shown. It is clear that when the trigger is in this position, the inner end 9 of the latch may be elevated by the tradesman and the door opened. After the tradesman has opened the door he removes, from the receptacle and from the standard 13, the empty bottles and places the full bottles therein. When the empty bottle has been removed from the standard, the weight 28 or spring 31 will force the end 26 of the trigger outwardly into the position shown in Fig. 1. The tradesman now places his wares in the receptacle and closes the door. As he closes the door, the end 9 of the trigger will be elevated as it passes over the latch lug 18 and it will push the end 26 of the trigger inwardly until the door is fully closed and the aperture 17 is in register with the latch lug 18, whereupon the arm 9 of the trigger will be permitted to assume its normal position as the latch lug 18 enters the aperture 17. When the door is being closed, the inner end 9 of the latch will press the arm 26 of the trigger inwardly, and when the latch arm has moved to its normal position, the trigger 26 will be released and will move outwardly again to its normal position as shown in Fig. 1.

While I have shown and described my invention in connection with delivery of milk bottles, it is obvious that it may be used for the delivery of other wares by using an empty milk bottle to actuate the trigger 24. Should it be desired to dispense altogether with a milk bottle, it is obvious that a ring of the size of the milk bottle neck may be used in connection with the standard instead of the bottle. As hereinbefore stated, either a weight or a spring may be used to actuate the trigger 24. These and other modifications of the details herein shown and described may be made without departing from the spirit of my invention or the scope of the appended claims; and I do not, therefore, wish to be limited to the exact embodiment herein shown and described.

Having thus described my invention, what I claim is:

1. A receptacle lock comprising a standard formed to fit the mouth and neck of a milk bottle and provided with a tapered portion, the standard being also provided with a tapered rib at its rear side and a slot in its front side, a trigger pivotally mounted in the standard and projecting through the slot, means for keeping the trigger in its normal position, and latching means engageable with the trigger but separate from and independent of the standard.

2. A receptacle lock comprising a standard formed to fit the mouth and neck of a milk bottle and provided with a tapered portion, the standard being also provided with a tapered rib at its rear side and a slot in its front side, a trigger pivotally mounted in the standard and projecting through the slot, means for keeping the trigger in its normal position, and latching means comprising a pivotally mounted latch bar engageable with the trigger and provided with an aperture near its inner end, and a latch lug in registering position with the aperture of the latch bar.

3. A receptacle lock comprising a standard formed to fit the mouth and neck of a milk bottle and provided with a slot in its front side, a trigger pivotally mounted in the standard and projecting through the slot, means for keeping the trigger in its normal position, and latching means engageable with the trigger but separate from and independent of the standard.

4. A receptacle lock comprising a standard formed to fit the mouth and neck of a milk bottle and provided with a slot in its front side, a trigger pivotally mounted in the standard and projecting through the slot, means for keeping the trigger in its normal position, and latching means comprising a pivotally mounted latch bar engageable with the trigger and provided with an aperture near its inner end, and a latch lug, in registering position with the aperture of the latch bar.

In testimony whereof, I have hereunto signed my name.

ALEXANDER McNAUGHTON.