J. G. R. SCHUMANN.

MILK BOTTLE LOCKING DEVICE.

APPLICATION FILED NOV. 20, 1915.

1,193,931. Patented Aug. 8, 1916.

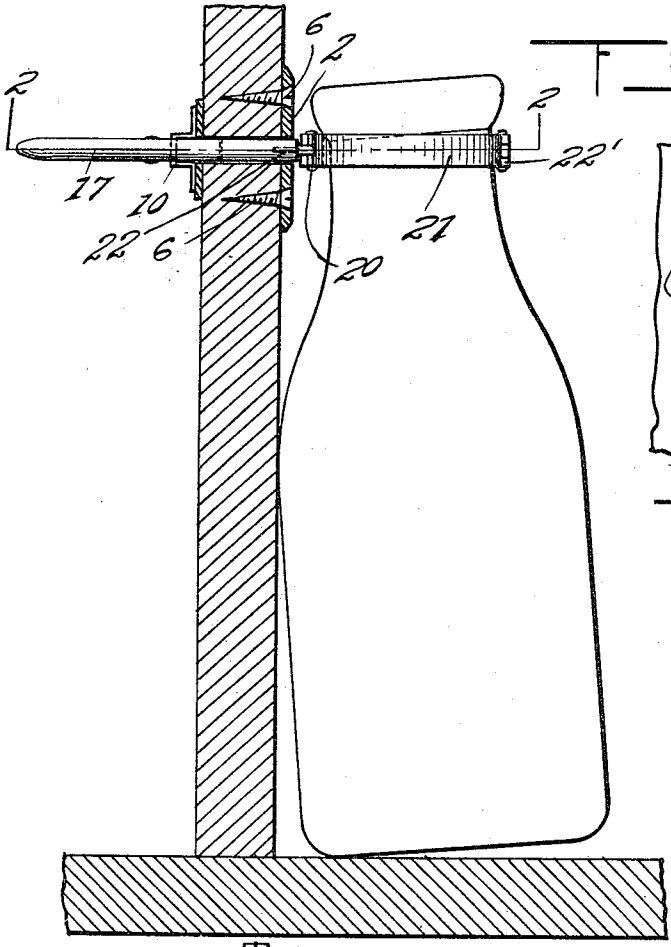


Fig. 1.

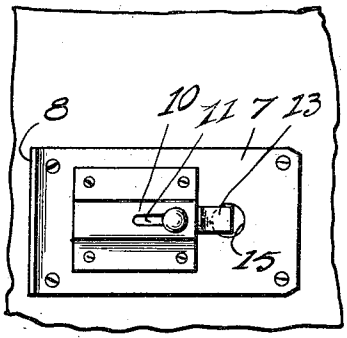


Fig. 3.

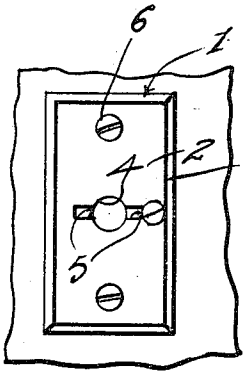


Fig. 4.

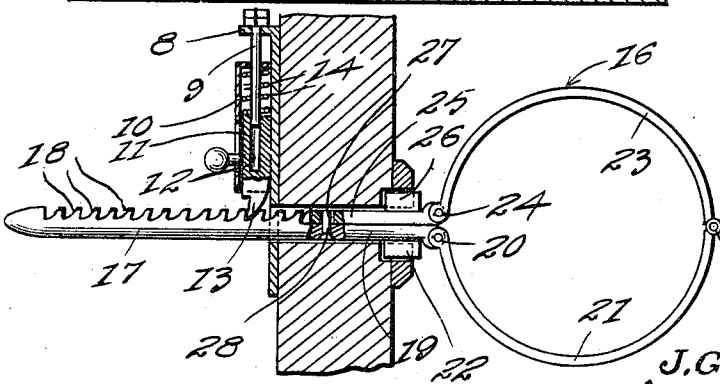


Fig. 2.

Witnesses

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MILK-BOTTLE-LOCKING DEVICE.

1,193,931. Specification of Letters Patent. Patented Aug. 8, 1916.

Application filed November 20, 1915. Serial No. 62,578.

To all whom it may concern:

Be it known that I, JOHN G. R. SCHUMANN, a subject of the Emperor of Germany, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Milk-Bottle-Locking Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in milk bottle locking devices and the principal object of the invention is to provide a device which will prevent milk bottles from being stolen from the doorstep after having been placed there by the milk man.

Another object of the invention is to provide a locking device capable of preventing the bottle from being removed except when released from the inside of the door.

A further object of the invention is to provide a device which may be readily attached to doors of the ordinary construction without necessitating the alteration thereof.

With these and other objects in view the invention consists in the novel combination and arrangement of parts which will be fully set forth in the following specification and accompanying drawings, in which:—

Figure 1 is a sectional view through a door illustrating this device applied thereto. Fig. 2 is a horizontal sectional view showing the device applied to the door. Fig. 3 is a fragmentary elevation of the door showing the attachment in place, and Fig. 4 is a fragmentary front elevation of the door showing the front plate of the device.

Referring now to the drawing by characters of reference, the numeral 1 designates as an entirety the front plate best illustrated in Fig. 4 comprising a body 2 having chamfered edge 3, a central opening 4 is formed in the plate and has communicating therewith the transversely extending slot 5. The opposite ends of the slot 5 extend beyond the opening 4 and form chambers for the reception of the lugs which will be more fully hereinafter described. Extending through the plate near each end are the screws 6 by means of which the same is held in place on the door.

Secured to the rear of the door is a latch plate 7, provided at one end with the upturned flange 8 through which the pin 9 extends. A suitable latch housing 10 is secured to the plate and slidable therein is the latch 11, which is formed with the axial bore 12. The pin 9 extends into the latch housing and projects in the bore 12 and forms a guide for the latch as clearly illustrated in Fig. 2. The forward end of the latch 11 is formed with the ratchet engaging member 13 and a suitable spring 14 is positioned between the end wall of the housing 10 and the rear face of the latch 11. The latch plate 7 is formed with a suitable opening 15, which is positioned at one end of the housing 10 and in alinement with the ratchet engaging portion 13 so that when said portion is forced outwardly as shown in Figs. 2 and 3, the same will partially overlie the opening so as to engage the member which is passed therethrough.

The plates 1 and 7 are secured to the door in such a position as to allow their openings 4 and 15 respectively to aline and also to aline with a suitable opening drilled in the door previously to the securing of the plates in place.

The bottle holder is designated generally by the numeral 16 and comprises the stem 17 provided with a plurality of ratchet teeth 18 and this stem is provided with the forward semi-cylindrical projection 19 to which is pivotally secured as at 20, the semi-circular neck encircling member 21. A suitable lug 22 extends laterally from the semi-cylindrical extension 19 and pivotally connected as at 22′ to the outer end of the semi-circular neck encircling member 21 is the co-operating semi-circular neck encircling member 23 to which is pivotally secured as at 24, the semi-cylindrical member 25, which co-operates with the semi-cylindrical extension 19 in forming a continuation of the stem 17. This semi-cylindrical member 25 is provided with a lug 26, which is identical in construction with the lug 22 and has formed near its free end an opening 27 through which the pin 28 carried by the semi-cylindrical extension 19 extends.

It will be apparent from the foregoing that in use the bottle is placed between the ring encircling members 21 and 23 and the same are then swung closed on their pivot 22′ and in such position that the semi-cylindrical extension 25 will lie against the flat face of the semi-cylindrical extension 19, thereby completing a cylindrical shank at

the end of the stem 17. The stem 17 is then passed through the openings 4 and 15 in such a way that the ratchet teeth 18 will be engaged by the tooth engaging member 13 and upon forcing the shank inwardly as far as it will go, it will be evident that the lugs 22 and 26 will lie in the slot 5 and thereby prevent the device from being twisted by inverting the bottle. It will thus be seen that the bottle cannot be removed from the outside of the door and may be easily and quickly removed by releasing the latch on the inside of the door.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that such changes may be made in the combination and arrangement of parts as will fall within the spirit and scope of the appended claim.

What is claimed is:—

The combination with a door having an opening near its bottom, a ratchet plate secured on the inside of the door, said ratchet plate being formed with an opening alining with the opening in the door, a front plate on the outside of the door having a central opening therein alining with the opening in the door, the front plate also having a transverse slot extending therethrough and communicating with the opening, and a ratchet on the ratchet plate, of a stem arranged to extend through the openings, the teeth on the stem arranged to be engaged by the ratchet, a semi-cylindrical extension on the forward end of the stem, a semi-circular neck engaging member pivoted to the forward end of the semi-cylindrical extension, a coöperating semi-circular neck engaging member pivoted to the forward end of the first mentioned neck engaging member, a semi-cylindrical member pivoted to the free end of the last mentioned semi-circular member, the semi-cylindrical member being of a size equal to the semi-cylindrical extension, and lugs on the extension of the semi-cylindrical member engaging in the slot in the front plate to lock the whole against turning.

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

JOHN G. R. SCHUMANN.

Witnesses:
ABE J. BLUM,
HARRY J. WEINER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."