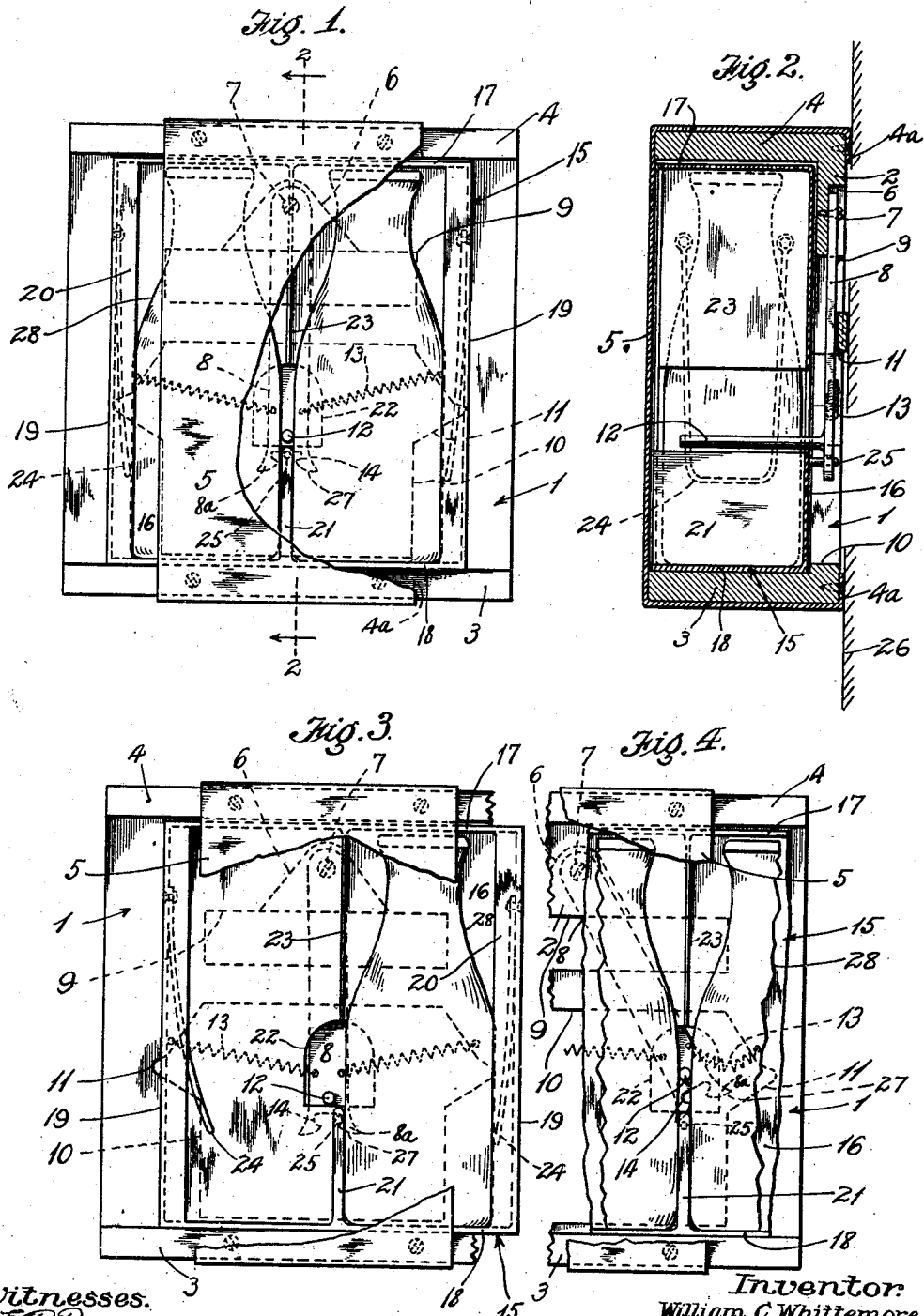


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MILK BOTTLE HOLDER.
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MILK-BOTTLE HOLDER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM C. WHITEMORE, a citizen of the United States, residing at Redlands, in the county of San Bernardino and State of California, have invented new and useful Improvements in Milk-Bottle Holders, of which the following is a specification.

This invention relates to a device for holding milk bottles.

The object of the invention is to produce a device of this class which will prevent the stealing of bottles of milk after they have been delivered and before the owner removes them.

The device is constructed in such a way that a full bottle of milk can not be removed from it until a second bottle or empty bottle has been placed within it.

In the annexed drawing which fully illustrates my invention, Figure 1 is a front elevation of the device, certain parts being broken away representing the holder in a normal condition and holding two bottles. Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1. Fig. 3 is a view similar to Fig. 1, but showing the manner in which a full bottle of milk is locked against removal unless an empty bottle is placed in the device. Fig. 4 is a view similar to Fig. 3, certain parts are broken away; this view illustrates the manner in which the device operates to permit the withdrawal of the full bottle after the empty bottle of milk has been placed in position.

Referring more particularly to the parts, 1 represents the main frame or body of the holder which comprises a back 2 and the bottom or shelf 3, which projects outwardly therefrom. Over the bottom or shelf 3 at a suitable height to permit the insertion of the milk bottles a cover shelf 4 projects out from the back 2. Across the front of the body 1 extends a guard plate 5, the ends of which pass across the outer faces of the members 3 and 4 and are formed with flanges 4^a attached to the rear faces of the back 2, as indicated. The back 2 is cut away on its rear side and upper portions so as to form a recess 6, in which a pivot screw 7 is provided from which hangs a locking pendulum 8. Below the recess 6 the back is cut away so as to form a substantially rectangular opening 9 and below this point a large opening

10 is formed in the lower portion of the back. The side edges of this opening 10 are cut away so as to form notches 11 into which the end of the pendulum 8 may swing as will be described hereinafter. On the forward side of the pendulum 8 a guide pin 12 is provided, which projects into the interior of the holder, as shown. To the sides of the pendulum 8 coil springs 13 are attached, and the outer ends of these springs are attached to the back, as indicated in Fig. 1, so that they normally hold the pendulum in mid position, as shown. The lower end of the pendulum is formed into two hooks 14, which face inwardly or toward each other, as indicated.

The milk bottles are held in the carriage slide 15 which is open on its forward side, but presents a back plate 16, a cover plate 17 and a bottom 18. The bottom 18 is adapted to rest upon the shelf 3, as shown in Fig. 2. The slide also includes side or end walls 19, which have flanges 20 on their outer edges, as shown. This slide is formed with a main partition wall 21, which extends upwardly from the middle point of the bottom 18, and opposite the upper edge of this partition an opening 22 is formed in the back plate 16. Above the opening 22 an upper or auxiliary partition 23 is formed, which extends up to the cover plate 17. These partitions 21 and 23 divide the slide into two compartments of equal size adapted to hold two milk bottles, as will be readily understood. On the inner sides of the side walls 19, bow springs 24 are provided which tend to force the bottles over against the main partition 21, as will be readily understood.

As indicated in Fig. 1, the pin 12 projects through the opening 22 so that when two bottles are in position in the holder normally the pin 12 is in position just over the partition 21. The width of the partition 21 is substantially the same or slightly greater than the diameter of the pin 12 so that the sides of the bottles will not press the pin between them or tend to prevent its free movement in the space between the bottles. On the rear side of the slide or carriage 12, the back plate 16 is provided with a rearwardly projecting stud 25, and this stud 25 is normally disposed at the lower end of the pendulum and between the two hooks 14.

Referring again to Fig. 1 it will be seen that near the point where the hooks 14 are formed the end of the pendulum is shaped into two outwardly projecting spurs or horns 5 8^a, and these horns are cut away to present inclined divergent curved adjacent faces 27.

In practice the holder is adapted to be attached on the side of a wall 26, as indicated in Fig. 2, by suitable fastening devices so that it cannot be readily removed. The manner of attaching the guard plate 5 prevents it from being removed unless the frame of the holder is also removed.

Referring to Fig. 3 the slide is represented with a bottle 28 disposed in the right hand compartment. Suppose that this is a full bottle of milk. If it were attempted to remove this bottle by moving the slide 15 toward the left as far as possible, the slide would not move far enough beyond the edge of the guard plate 5 to permit the bottle to be removed. This movement of the slide would be limited by the pin 12 in the opening 22. If it were attempted to remove the bottle by moving the slide toward the right, the slightest movement of the slide would engage the stud 25 in the right hand hook 14 and the pendulum would in this way hold the slide and prevent its movement. The bottle 28, however, can be readily removed by placing another bottle in the left hand compartment. In order to do this, the slide may be slid toward the left a sufficient distance to expose the left hand compartment and permit the insertion of the bottle. When this bottle is inserted the spring 24 adjacent to it will push it over against the main partition 21 so that the pin 12 will come into the space adjacent the sides of the bottles as indicated in Fig. 1. The slide may then be moved toward the right as indicated in Fig. 4. In this movement toward the right the pin 12 will slide upwardly in the guide space between the bottles and this removes the hook 14 from the path of the stud 25 and permits a sufficient outward movement of the slide to enable the bottle 28 to be removed.

From the foregoing it will be seen that I provide an arrangement such that when a single bottle is left in the holder it can only be removed by placing another bottle in the holder. This arrangement enables the householder to remove the full bottle from the holder and substitute an empty bottle and enables the milkman to remove an empty bottle and substitute a full bottle.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A device of the class described adapted to hold an article to be delivered and having means adapted to lock said article against delivery, and a member for actuating said locking means controlled by the insertion of

a second article of the same kind to release said first article, said member lying in the path of the side of said second article so as to be displaced thereby when said second article is inserted, and means independent of said member for supporting said articles.

2. In a device of the class described, in combination, a fixed frame, a movable frame adapted to be received therein and adapted to carry two milk bottles, a locking member connected with said movable frame and adapted to lock said movable frame against withdrawal, and means for controlling said locking member by the insertion of a second milk bottle in said frame so as to permit the withdrawal of said first bottle.

3. In a device of the class described, in combination, a fixed frame, a slide adapted to be received therein and adapted to receive two milk bottles, a locking member having means for engaging said slide which may prevent the withdrawal thereof and having means for engaging the milk bottles, said means holding said locking member out of engagement with said slide when both of said milk bottles are in place.

4. In a device of the class described, in combination, a fixed frame, a slide adapted to be received therein and adapted to receive a pair of milk bottles, a locking member having a projection extending into the space between the milk bottles and adapted to be displaced when said slide is withdrawn while containing two milk bottles, and a projection carried by said slide adapted to engage said locking member when said locking member is unguided by said bottles, and preventing the withdrawal of said slide.

5. In a device of the class described, in combination, a fixed frame, a slide adapted to move into said frame and adapted to carry a pair of milk bottles, a pendulum pivoted on said fixed frame and connected with said slide so as to limit the outward sliding movement thereof, a projection on said slide which may interlock with said pendulum to prevent the withdrawal of said slide, said pendulum having a pin projecting into the space between the milk bottles and adapted to guide said pendulum to prevent the engagement of said projection with said pendulum.

6. In a device of the class described, in combination, a fixed frame, a slide normally disposed in mid-position in said frame and adapted to slide in either direction from said mid-position, means for limiting said outward movement of said slide in each direction at a point permitting the withdrawal of one of said milk bottles, locking means which may lock said slide against movement to prevent a complete withdrawal thereof in one direction, and means for rendering said locking means inoperative controlled by the milk bottles.

7. In a device of the class described, in combination, a fixed frame, a slide mounted in said frame adapted to hold two milk bottles, said slide being normally disposed in mid-position, means for limiting the outward sliding movement of said slide in either direction at points permitting the withdrawal of said milk bottles, a locking device for holding said slide against movement, springs tending to hold said locking device in mid-position but permitting the lateral movement thereof, and means in connection with said locking means for guiding the same on said milk bottles to prevent the locking of said slide.

8. In a device of the class described, in combination, a fixed frame, a slide moving in and out of said frame adapted to carry two milk bottles, a pendulum pivoted on said frame and having a projection extending into the space between said milk bottles so that the moving of said bottles may displace said pendulum, resilient means tending to hold said pendulum normally in mid-position, and a stud carried by said slide adapted to interlock with said pendulum to prevent the withdrawal of said slide when said pendulum is unguided by said bottles.

9. In a device of the class described, in combination, a fixed frame, a slide mounted in said frame and adapted to slide in each direction from a mid-position therein, a pendulum pivoted on said frame and having a pair of hooks facing each other, a stud on said slide disposed between said hooks and which may engage with either of said hooks, said slide being adapted to receive a pair of milk bottles disposed at each side of said pendulum when said slide is in its normal position, resilient means tending to hold said pendulum in a mid-position, and a pin carried by said pendulum disposed in the space between said milk bottles and adapted to be actuated thereby.

10. In a device of the class described, in combination, a fixed frame having a guard plate disposed across the front thereof, a slide mounted in said frame normally disposed in a mid-position therein and having compartments for two milk bottles, means for limiting the outward sliding movement of said slide in each direction to enable either of said milk bottles to be placed in said slide, a pendulum pivotally mounted on said frame near the middle line thereof and having a pin projecting into the space between said bottles, said pendulum having hooks facing toward each other, a stud on said slide disposed in the space between said hooks and which may engage either of said hooks to lock said slide against a complete lateral movement, and springs attached to said pendulum and normally holding the same in mid-position.

11. In a device of the class described, a

fixed frame, a slide moving in said frame, means for holding a pair of bottles within said slide with their adjacent sides disposed slightly apart, a locking member movably attached to said frame and having an extension projecting into the space between the adjacent sides of said bottles, resilient means tending to hold said locking member in a central position with respect to said bottles, means carried by said slide which may engage said locking member, said extension affording means for guiding said locking member through the medium of said bottles to prevent said last named means from locking said slide.

12. In a device of the class described, in combination, a fixed frame, a slide held in said frame and adapted to slide laterally therein, said slide having an upwardly projecting partition and being adapted to receive a bottle on each side of said partition, means carried by said slide for holding said bottles against said partition, a locking member movably attached to said frame and having an extension normally disposed over said partition and projecting into the space between the bottles, means carried by said slide adapted to engage said locking member in order to prevent the lateral sliding movement of said slide, said extension affording means for guiding said locking member on said bottles to prevent the locking of said slide.

13. A device of the class described, comprising a fixed frame, a slide movably mounted in said frame and having a back plate with an opening therein, a pivotally suspended pendulum attached to said frame and having a pin projecting through said opening and across the interior of said slide, springs connected with said pendulum and tending to hold the same normally in mid-position, said pendulum having hooks formed thereupon facing toward each other, a stud on said slide normally disposed between said hooks and which may engage one of said hooks when said slide is moved laterally, and means for holding bottles respectively on each side of said pin, said bottles affording means for guiding said pin to prevent said stud from engaging either of said notches.

14. In a device of the class described, in combination, a frame having a back board and a guard plate disposed across the front thereof, a slide disposed in the space between said back board and said guard plate, said slide having two compartments, each of said compartments being adapted to receive a milk bottle, means for limiting the lateral sliding movement of said slide at a point permitting the introduction of a milk bottle into one of said compartments, locking means adapted to prevent a sufficient withdrawal of said slide to permit the re-

moval of one of said bottles, and means for controlling said locking means through the medium of the bottles.

15 15. In a device of the class described, in combination, a frame, a slide normally mounted in a mid-position therein, said slide having a pair of compartments, each of said compartments being adapted to receive a milk bottle, a partition dividing said com-
10 partments, resilient means on said slide tending to hold the bottles against said partition and with the adjacent sides of said bottles disposed slightly apart to form a gap there-
between, a locking member having an ex-

tension projecting into said gap and adapted 15
to be actuated by the bottles when said slide is moved laterally, resilient means tending to hold said locking member in a fixed position, and a member on said slide adapted to engage said locking member to lock said 20
slide against lateral movement.

In witness that I claim the foregoing I have hereunto subscribed my name this 22nd day of March, 1910.

W. C. WHITTEMORE.

Witnesses:

F. D. AMMEN,

EDMUND A. STRAUSE.