Oct. 14, 1924. 1,511,311

J. WEIBLE

MILK BOTTLE HOLDER

Filed April 28, 1923

FIG. 1

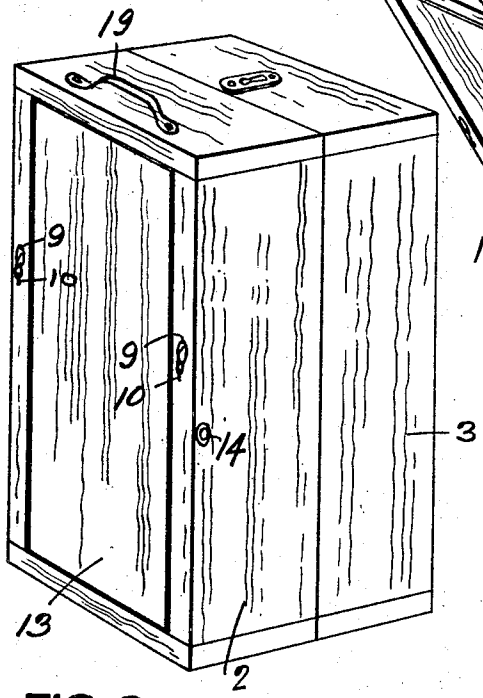


FIG. 2

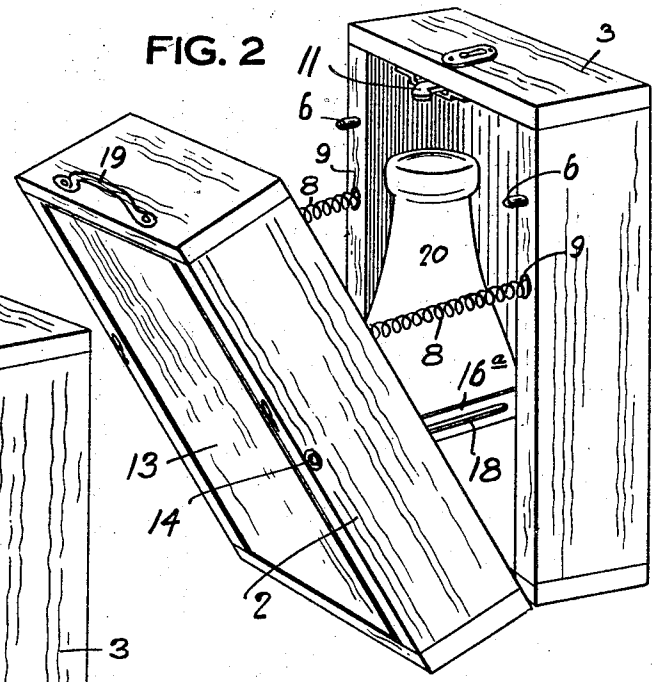


FIG. 3

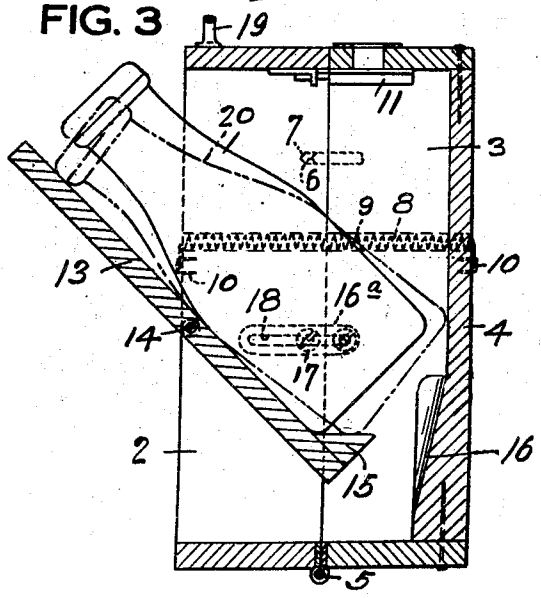
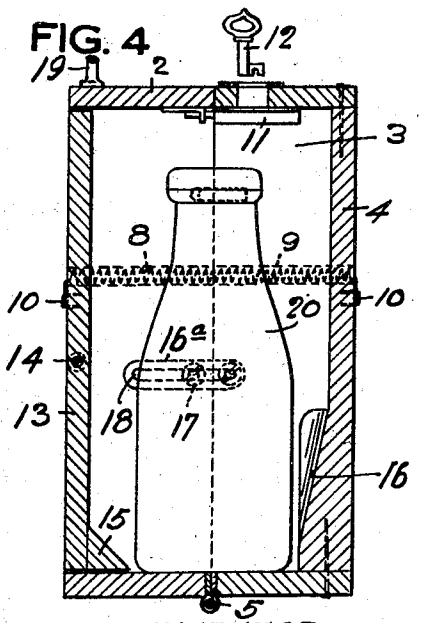


FIG. 4



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UNITED STATES PATENT OFFICE.

JOHN WEIBLE, OF AVALON, PENNSYLVANIA.

MILK-BOTTLE HOLDER.

Application filed April 28, 1923. Serial No. 635,297.

To all whom it may concern:

Be it known that I, JOHN WEIBLE, a citizen of the United States, and resident of Avalon, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Milk-Bottle Holders; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to holders for use in delivering bottles of milk and for similar purposes, and its object is to provide an improved holder of simple construction which, when empty, shall be ready to receive the bottle without being especially adjusted for that purpose, which shall completely enclose the bottle and which, when the bottle is removed, will automatically lock itself.

My improved bottle holder consists of a rectangular box of proper size to contain one or more milk bottles and having a swinging panel which is pivoted above its lower edge so as to swing freely to admit a bottle, but which, when the bottle is in place, cannot be again opened until the bottle is taken out of the box. The box is made in two sections which are preferably hinged together at their lower edges and which are provided with one or more springs for normally holding the sections of the box together, and a spring lock is provided for automatically locking the box when the sections are brought together.

In the accompanying drawing Fig. 1 is a perspective view of a milk bottle holder constructed in accordance with my invention; Fig. 2 is another perspective view of the same device showing the open position of the box; Fig. 3 is a longitudinal vertical sectional view showing the method of inserting a bottle in the box, and Fig. 4 is a similar vertical sectional view showing a bottle in place within the box.

In the drawing the numerals 2 and 3 indicate the front and rear halves, respectively, of a rectangular box which may be constructed of wood, metal or any other suitable material. The section 3 has a closed back portion 4 which may be nailed or otherwise secured to a wall, door or other convenient support. The two sections are pivotally secured together at their lower edges by means of one or more hinges 5. The hinge 5 may suitably extend across the full width of the box in order to reduce the possibility of relative lateral movement between the two sections and such lateral movement may further be prevented by means of dowel pins 6 carried by one of the sections of the box and received in corresponding openings 7 in the other section, as shown in Figs. 2 and 3.

One or more springs 8 are secured to the two sections of the box in such a way as to normally tend to hold the sections together in the position as shown in Figs. 1, 3 and 4. Two of these springs may be provided, as shown, and may extend through openings 9 formed in the side walls of the box. The openings 9 may extend to the front and rear walls of the box, in which case the springs 8 may be secured in place by means of staples as shown at 10.

The sections 2 and 3 of the box are fastened together at their upper edges by means of a spring lock 11 having a key 12. The springs 8 and the spring lock 10 cooperate to close and lock the box whenever the movable section 2 is free to move toward the fixed section 3.

The front wall of the movable section 2 is provided with a swinging panel 13 which is mounted on a horizontal pivot which may consist of a rod 14 extending through the panel 13 and through the side walls of the box section 2. A tapering flange 15 is formed on the inner lower edge of the panel 13 and the inner lower portion of the rear wall 4 is provided with a downwardly tapering portion 16.

In order to limit the lateral movement of the sections 2 and 3, a slotted arm 16ª may be pivotally secured to one of the sections and a screw or other fastening 17 may be carried by the other section and may extend through the slot 18 as shown in Figs. 3 and 4. The movable section 2 may be provided with a handle 19 for convenience in opening the box.

The device normally presents the appearance shown in Fig. 1, the two sections of the box being closed and locked and the front panel 13 being free to swing on its pivot 14. When it is desired to place a milk bottle in the box the portion of the panel 13 below the pivot 14 is pushed inward, thus producing an opening between panel 13 and the top of the box through which a bottle 20 may be inserted in the manner shown in Fig. 3. When a bottle is

thus slipped into the box, the flange 15 of the panel 13 engages the lower edge of the bottle and temporarily checks its descent and causes the bottle to slide into the position shown in dotted lines 3 where the bottom of the bottle rests upon the flange 15 and also against the rear wall 4. The parts are so proportioned that the weight of the bottle when in this position tends to close the panel 13. During this closing movement the bottom of the bottle is lowered without shock on account of the tapering shape of the flange 15 and the rear wall portion 16. The bottle 20 and the panel 13 thus take the position shown in Fig. 4, and the panel 13 cannot be swung open until the bottle is removed.

When it is desired to remove the bottle from the holder the spring lock 11 is unlocked by means of the key 12, and the movable section 2 of the box is pulled to the position shown in Fig. 2 by means of the handle 19. The bottle 20 may then be lifted out through the space between the two halves of the box. When the handle 19 is released, the springs 8 cause the movable section 2 to close upon the fixed section 3 and the spring lock 11 locks the two sections together.

It will be seen that the bottle holder described above is always ready for use without requiring any adjustment to be made either by the householder or by the milkman, and that when the bottle is placed in the box it is impossible to remove it without unlocking the box. It will also be noted that when the movable section of the box is released the box automatically closes and locks itself and is then ready to receive another bottle.

Various changes in the construction and arrangement of parts may be made without departing from my invention, the scope of which is indicated in the appended claims.

I claim as my invention:

1. A bottle holder comprising a vertically divided box having its sections hinged together at their lower edges and having a lock for securing the upper sections of said box together, and a panel disposed in one of the walls of said section, said panel being mounted on a horizontal pivot between its upper and lower ends.

2. A bottle holder comprising a vertically divided box having its sections hinged together at their lower edges and having a lock for securing the upper sections of said box together, and a panel disposed in one of the walls of said section, said panel being mounted on a horizontal pivot between its upper and lower ends and having a tapering flange formed on its inner lower edge.

3. A bottle holder comprising a vertically divided box having its sections hinged together at their lower edges and having a lock for securing the upper edges of said sections together, spring means for normally holding said sections in their closed position, a panel disposed in the front wall of one of said sections and mounted on a pivot between its upper and lower ends, said panel having a tapering flange on its inner lower edge, and a downwardly tapering surface disposed on the inner wall of said box and cooperating with said tapering flange to guide a bottle to the bottom of said box.

4. A bottle holder comprising a box having front and rear portions, the front portion being pivotally connected to said rear portion, and a panel disposed in the front wall of said front portion, the said panel being mounted on a horizontal pivot between its upper and lower ends.

In testimony whereof I, the said JOHN WEIBLE, have hereunto set my hand.

JOHN WEIBLE.