No. 882,854. PATENTED MAR. 24, 1908.

W. S. WEAVER.

FOLDING MILK BOTTLE RECEPTACLE.

APPLICATION FILED MAY 23, 1907.

Fig. 2.

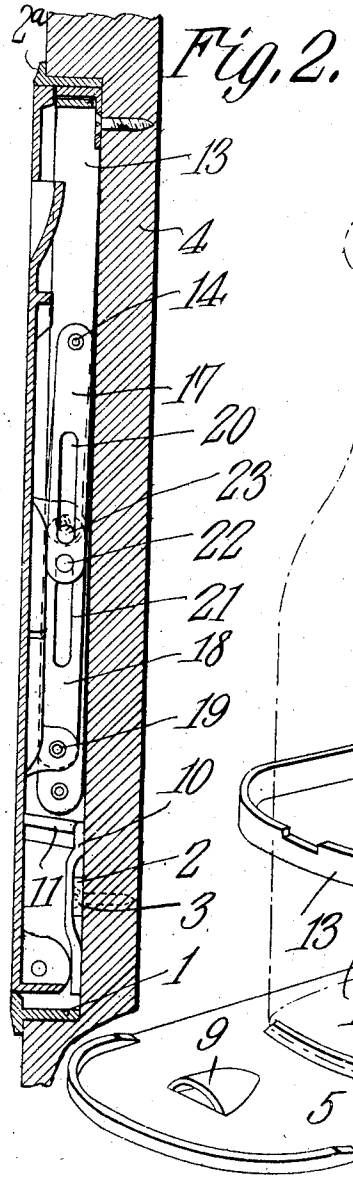
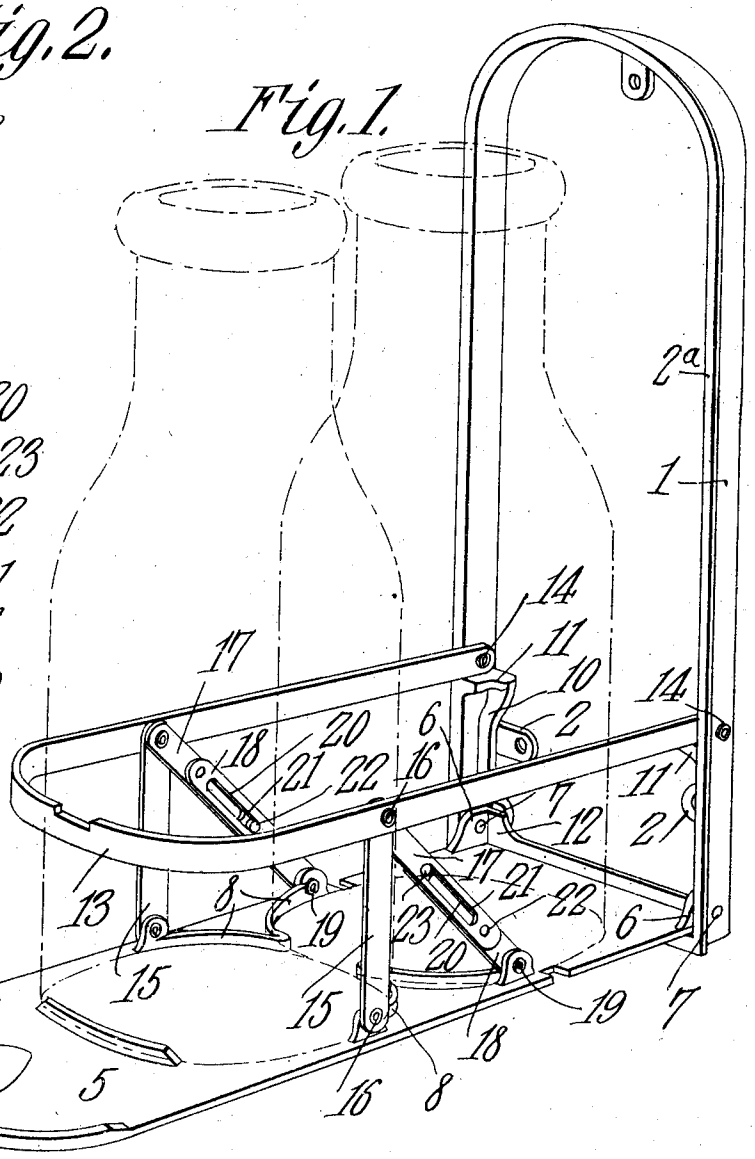


Fig. 1.



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WILLIAM S. WEAVER, OF BETHLEHEM, PENNSYLVANIA.

FOLDING MILK-BOTTLE RECEPTACLE.

No. 882,854. Specification of Letters Patent. Patented March 24, 1908.

Application filed May 23, 1907. Serial No. 375,356.

To all whom it may concern:

Be it known that I, WILLIAM S. WEAVER, a citizen of the United States, residing at Bethlehem, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Folding Milk-Bottle Receptacle, of which the following is a specification.

This invention relates to a milk bottle receptacle which is adapted to be used at residences for receiving the bottles of milk left there by the milkman, so that the usual unpleasant grease marks on the door step, porch, or windowsill, can be avoided.

The invention has for one of its objects to improve and simplify the operation and construction of devices of this character, so as to be comparatively easy and inexpensive to manufacture, readily manipulated and effective in use.

A further object of the invention is the provision of a foldable milk bottle receptacle whereby the part on which the bottle or bottles rest can be folded into the body or supporting frame of the device and thus be out of the way when not in use.

Another object of the invention is the employment of a guard for holding the bottles in place and so arranged as to support the member on which the bottles rest in unfolded or horizontal position.

With these objects in view, and others, as will appear as the nature of the invention is better understood, the invention comprises the various novel features of construction and arrangement of parts, which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one of the embodiments of the invention, Figure 1 is a perspective view of the bottle holder or receptacle showing the same open for receiving the bottles. Fig. 2 is a central vertical section of the receptacle and its supporting member.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

Referring to the drawing, 1 designates a skeleton frame, which is preferably a casting or other metal structure having inwardly extending apertured lugs 2 for receiving screws or other fastening devices 3. This frame may be set into its supporting member 4, as shown in Fig. 2, or it may be secured against the outer surface of the member, which latter represents a portion of a door frame, porch post, or the like.

The frame is provided with a rim 2^a extending entirely around the same, and the said frame is set into its supporting member to the extent permitted by the rim. In the lower end of the frame is hinged a plate 5 which, when in open position, serves as a holder or support for the bottles, and when in closed position serves as a door for closing the opening of the frame 1.

The plate 5, which may be a casting or sheet metal structure, is provided with ears 6 through which extend the pintles 7 for hingedly mounting the plate on the frame. On the inner surface of the plate are suitably arranged webs 8 for receiving the lower ends of the milk bottles. Adjacent the free end of the plate is provided a finger notch 9 whereby the milkman can conveniently take hold of the plate or door by one finger and pull it down to its open position. The plate 5 is preferably held open or closed through the agency of one or more leaf springs 10. The upper end of the spring 10 is attached to a lug 11 at the top thereof and passes downwardly in front of the adjacent apertured lug 2 to bear at its lower free end against the flange 12 of the plate 5. The spring thus has a wiping contact on the flange and the parts are so proportioned that the spring will hold the plate in either open or closed position and will snap the plate closed when the latter is slightly raised from its open position.

In order to prevent the bottles from being knocked off the device, a guard 13 is employed. This comprises a strip of steel bent into U-shape with its ends pivoted at 14 to the frame 1 at points just above the lugs 11. The guard 13 has its side portions connected by links 15 with the plate 5, and in order to insure simultaneous movement of the guard and door and to provide a firm support for the latter, links 15 are interposed between the guard and plate, the pivots 16 serving to connect them, the pivots 14 forming a pivotal connection between the guard and frame and being preferably composed of eyelets having their ends expanded or riveted, as shown in Fig. 1. The guard and links are so arranged as to fold together when the plate 5 is moved from its open to its closed position, the guard 13 moving into the frame 1 during the closing movement of the plate, while a

pair of extensible braces interposed between the guard and door serve to limit the opening movement of the latter, the braces shown in the present instance each comprising a pair of sections 17 and 18 pivotally attached at 16 and 19 to the guard and door respectively, and provided with longitudinal slots 20 and 21, respectively, the section 17 having a pin or projection 22 operating longitudinally of the slot 21 while the section 18 has a projection 23 coöperating with the slot 20, the projections engaging the ends of the slots when the door is open to limit the opening movement and moving toward one another to shorten the braces when the door is closed. The lugs 11 on the frame 1 also operate as stops to coöperate with the guard 13 to limit its movement when the plate is in open position, as shown in Fig. 1. The guard 13 extends around the milk bottles at some distance above their bottoms, so as to coöperate with the webs 8 of the plate 5 to prevent the bottles from tipping or otherwise falling from the receptacle.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and, while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that various changes may be made, when desired, as are within the scope of the claims.

What is claimed is:—

1. In a device of the class described, the combination of a frame, a plate hinged thereto, a U-shaped guard hinged to the frame, and links connecting the guard with the plate.

2. In a device of the class described, the combination of a frame, a bottle supporting plate arranged to fold into and unfold out of the frame, a guard hinged to the frame to fold and unfold with the plate, and springs arranged to snap the plate into its folded position.

3. In a device of the class described, the combination of a frame, a plate hinged at one end to the frame to fold into and unfold out of the same, a guard hinged on the frame for retaining bottles on the plate, a stop on the frame with which the guard engages when the plate is in unfolded position, and links connecting the guard with the plate.

4. In a device of the class described, the combination of a frame, a plate foldably mounted on the frame and provided with suitably arranged webs for receiving the bottom ends of the bottles, a guard hinged on the frame to coöperate with the said webs for retaining the bottles in place, means connecting the guard with the plate, stops on the frame with which the guard engages to limit the unfolding movement of the plate, and a spring secured to the lug and arranged with its free end in engagement with the plate to hold the latter in folded position.

5. In a device of the character described, the combination with a frame, a door pivotally connected thereto and adapted to serve as a bottle support, a bottle guard also pivotally connected to the frame, means for insuring a parallel movement of the door and guard during opening and closing movements, and braces interposed between the door and guard for supporting the door in open position and permitting a free opening and closing movement thereof.

6. In a device of the character described, the combination with a frame, a door pivotally connected thereto and adapted to serve as a bottle support, a bottle guard also pivotally connected to the frame, means for insuring a parallel movement of the door and guard during opening and closing movements, and extensible braces interposed between the door and guard each embodying a pair of slotted sections pivotally connected to the guard and door, respectively, and a projection on each section coöperating with the slots of its coöperating section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM S. WEAVER.

Witnesses:
R. CALVIN WEAVER,
WM. D. LONG