Feb. 10, 1925. 1,525,970

H. WILDBERG

BOTTLE CONTAINER

Filed May 21, 1923

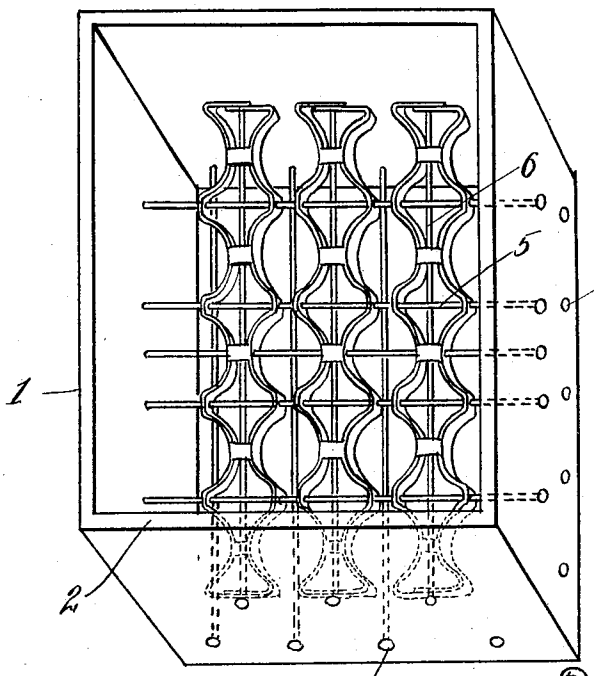


Fig. 1.

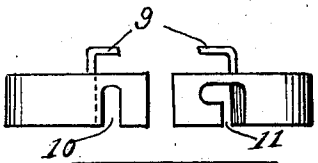


Fig. 3.

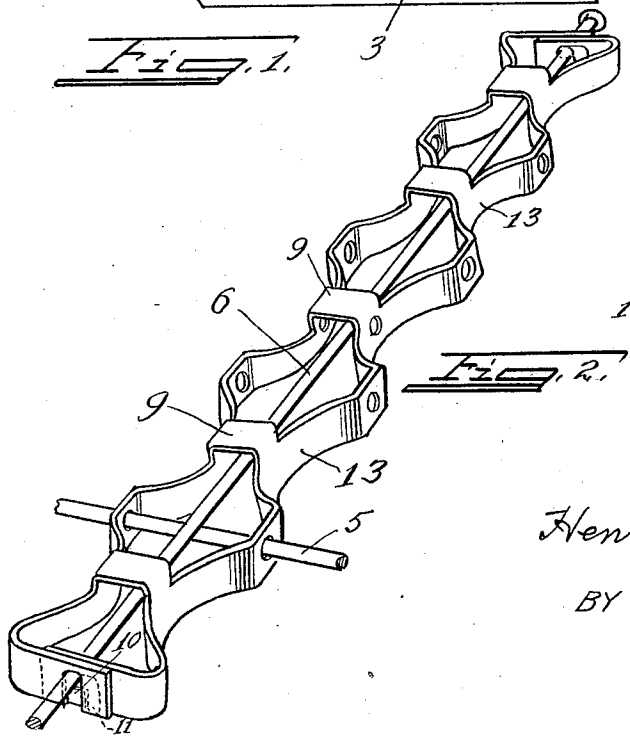


Fig. 2.

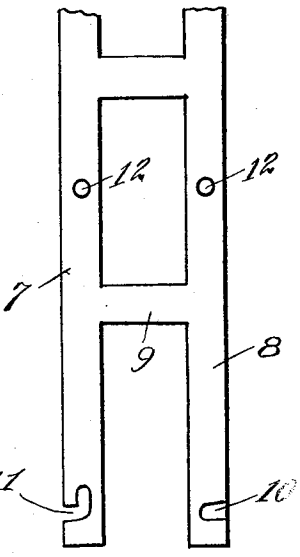


Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY WILDBERG, OF CINCINNATI, OHIO.

BOTTLE CONTAINER.

Application filed May 21, 1923. Serial No. 640,314.

To all whom it may concern:

Be it known that I, HENRY WILDBERG, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Bottle Containers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to improvements in crates for holding and transporting bottles, particularly wide mouth bottles for milk and the like and it has special relation to the interior construction of the crate for holding the bottles separate from each other and particularly for centering them to hold them rigidly and securely in position in the crate when the bottles are to be washed by water jets delivered by the usual construction of washing machine with the bottles inverted in the crate.

It has been usual to construct the interior divisions by wire rods crossing each other at right angles to provide the division compartments, with the ends of the rods riveted through the wooden side walls of the crate, and to provide racks of wood grooved to receive the bottles and properly center them.

I have found, however, that a much more effective and satisfactory interior construction can be obtained by the use of galvanized metal racks as a substitute for the wooden racks in common use, and it is to this feature that my invention is particularly directed, the details and advantages of which will be more particularly set forth and claimed in the specifications which follow.

In the drawings:

Figure 1 is a perspective view of my improved crate.

Figure 2 is a perspective view of one of the partition pieces, forming the self centering rack.

Figure 3 is an end view of the same illustrating the construction for locking the partition on the supporting rod.

Figure 4 is a portion of the blank from which the rack portion is formed.

The crate is formed of the usual wooden side walls 1, 2, secured together at the corners to form a substantial rectangular frame open at top and bottom.

The bottom to retain the bottles is formed of wire rods 3, 4, riveted in the side walls of the crate and crossing each other at the proper division intervals, and the middle portion of the crate is also provided with cross rods 5, 6, located in staggered relation to the bottom rods and properly spaced to receive the bottles and permit them to rest on and be supported by the bottom rods.

The centering partitions to form the centering and holding racks for the bottles I form from a sheet metal blank cut and slotted as shown in Figure 4 forming parallel bars 7, 8, connected at intervals by bands 9. The ends of these bars are slotted at 10, 11, to form the bayonet lock and perforations 12 are cut for the brace rods. The blank is then subjected to the action of dies in a press, the bars 7 and 8 are bent over at right angles to the bands 9 and curved inwardly to form the semi-circular shape 13 to embrace the bottles and the ends are brought into position to overlap when pressed together.

The longitudinal rods 6 are riveted in position lengthwise of the crate while the cross rods 5 are not riveted but provided with a threaded washer at one end or otherwise arranged so that they can be easily removed.

The partition racks are first secured in position on the rods 6 by pressing together the ends and passing the slots 10 and 11 when in registry over the rods. The cross rods are then passed through to the perforations provided for them and screwed tight and the crate is ready for use.

It will be obvious that should any of the racks become bent or broken, the broken part can be readily and easily replaced by loosening and slipping out the cross rods and unclamping the rack piece at the ends. The racks supported as they are in both directions by the rods are exceedingly rigid and strong, and with the rods form a very substantial construction effectively preventing contact of the bottles with each other, preventing breakage and also serving to brace and strengthen the sides of the crate.

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

1. In a bottle container in combination with the cross rods of a wire interior crate, metallic rack pieces shaped to engage the bottles, said metallic rack pieces supported so as to have spring-like concave engagement surfaces for holding the bottles in compressed tension in the container and

means for mounting said pieces on the cross rods of the wire interior of the crate to form a centering support for the bottles.

2. In a bottle container in combination with the cross rods of a wire interior crate, metallic rack pieces shaped to engage the bottles, said metallic rack pieces supported so as to have spring-like concave engagement surfaces for holding the bottles in compressed tension in the container and means for removably mounting said pieces on the cross rods of the wire interior of the crate to form a centering support for the bottles.

3. In a bottle container in combination with the cross rods of a wire interior crate, metallic rack pieces comprising strips of sheet metal shaped to form a circular holder with the adjacent strips, and with spring-like concave engagement surfaces for holding the bottles in compressed tension in the container with means for removably mounting said strips on the set of wire rods extending in one direction, said strips having aligned perforations to receive the rods extending in a cross direction.

4. In a bottle container in combination with the cross rods of a wire interior crate, metallic rack pieces comprising strips of sheet metal shaped to form a circular holder with the adjacent strips, and with vertical concave engagement surfaces for exerting compressed tension on bottles inserted within the circular holder, said strips having ends adapted to overlap with bayonet slots therein to removably lock the strips on the rods extending in one direction, with said strips provided with aligned perforations to receive the rods extending in a cross direction.

5. A rack supporting member for bottle crates formed from a strip of sheet metal slotted and bent to form spring-like semi-circular engagement surfaces in series and with overlapping ends, with slots in the ends adapted to engage over a supporting rod to removably mount the strip thereon.

6. A rack for bottle crates, comprising a plurality of rack members with means for mounting them in the crate adjacent to each other, each rack member formed of a strip of sheet-metal slotted and bent to form spring-like semi-circular engagement surfaces in series, with the semi-circular portions of each rack member aligned to form with the adjacent members a circular support for the bottles.

HENRY WILDBERG.