Dec. 12, 1939. M. C. BOONE 2,183,090

MILK CRATE

Filed Oct. 18, 1938 2 Sheets-Sheet 1

Fig. 1

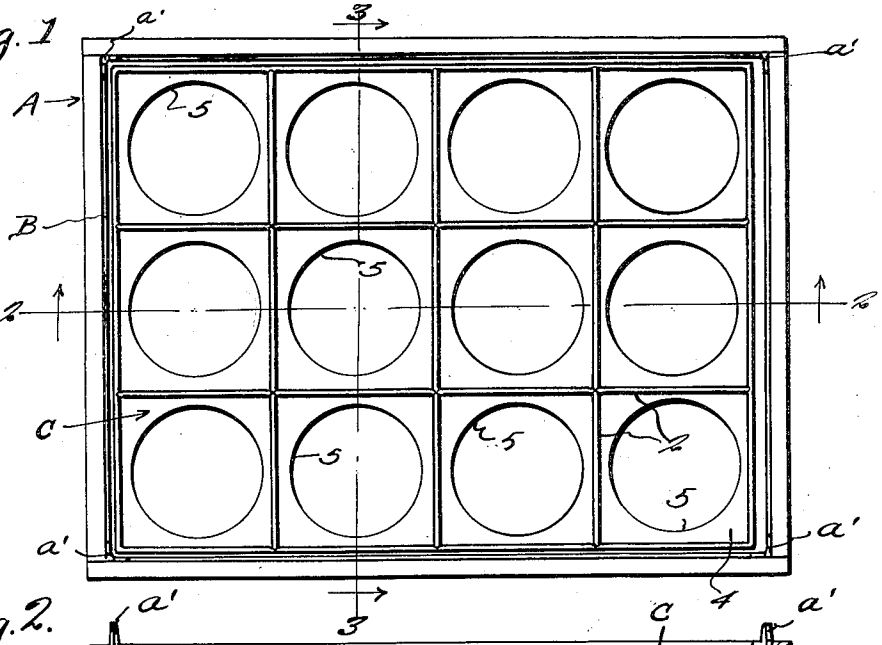
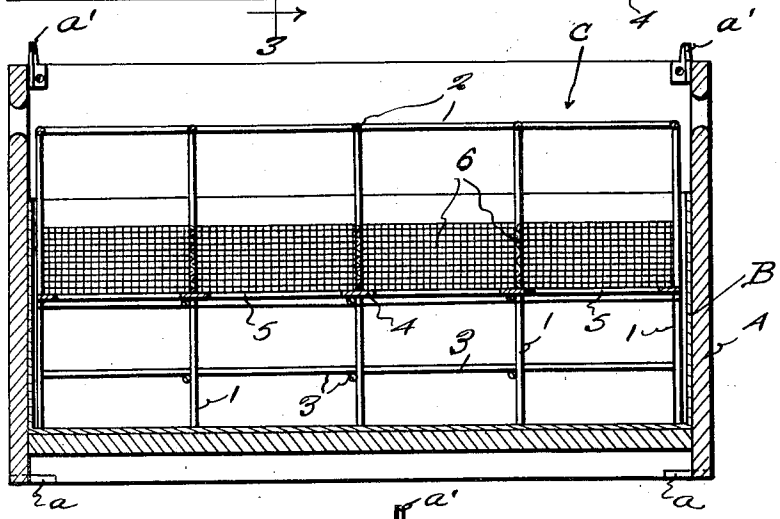


Fig. 2.



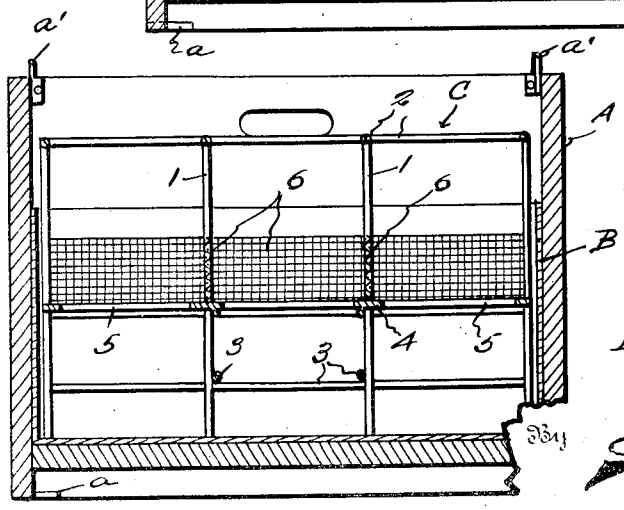


Fig. 3.

Inventor

M. C. Boone

By L. B. James

Attorney

Dec. 12, 1939. M. C. BOONE 2,183,090

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Filed Oct. 18, 1938 2 Sheets-Sheet 2

Fig. 4

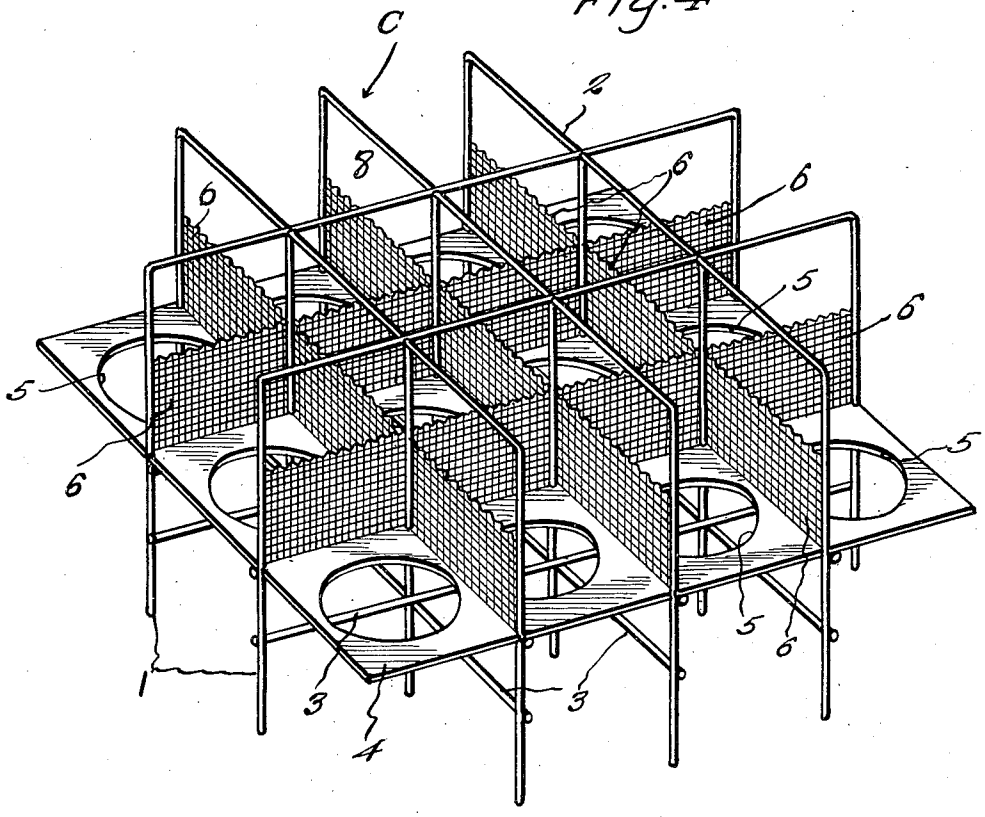


Fig. 5.

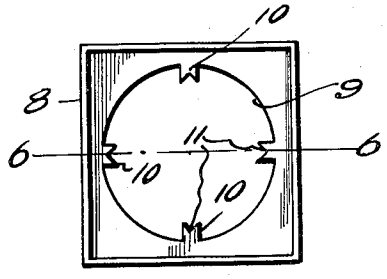
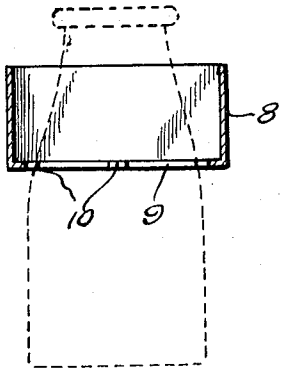


Fig. 6.



Inventor

M. C. Boone

By L. B. James

Attorney

Patented Dec. 12, 1939 2,183,090

UNITED STATES PATENT OFFICE

2,183,090

MILK CRATE

Marvin C. Boone, Jackson, Miss.

Application October 18, 1938, Serial No. 235,676

3 Claims. (Cl. 62—142)

This invention relates to means for holding ice around milk bottles while the bottles are in a crate, the general object of the invention being to provide a member having an opening therein for the passage of the bottle with means for holding ice around that part of the bottle projecting above the member, the opening permitting the water from the ice to flow down the bottle below the member.

Another object of the invention is to provide a tank in the crate for catching this water and for holding the same around the bottles.

The invention also consists in certain other features of construction, combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Fig. 1 is a top plan view of a crate with the invention associated therewith.

Fig. 2 is a section on line 2—2 of Fig. 1.

Fig. 3 is a section on line 3—3 of Fig. 1.

Fig. 4 is a perspective view of the invention.

Fig. 5 is a plan view of a modification.

Fig. 6 is a section on line 6—6 of Fig. 5.

In these drawings, the letter A indicates a crate having its bottom spaced above the lower edges of its sides with the female stacking lugs *a* at the lower corners of the crate and the male stacking lugs *a1* at the upper corners thereof. A tank B is located in the crate. The letter C indicates a removable frame which is formed of a plurality of posts 1 connected together at their upper ends by the bars 2 and connected together at their lower portions by the bars 3. A horizontal plate 4 is supported by the posts above the bars 3 and a plurality of holes 5 is formed in the plate. Transverse and longitudinal partitions 6 are connected to the posts and extend upwardly from the plate and these partitions separate the holes one from another. The partitions may be formed of sheet metal or wire mesh, the latter being shown in the drawings. Of course the posts rest on the bottom of the tank and the plate is arranged so that it will come adjacent the "cream" line of the bottles passing through the openings 5 and the openings are made slightly larger than the bottles so that the water from the melting ice can trickle down the sides of the bottles and collect in the tank. Cracked ice is placed around the tops of the bottles and the partitions hold this ice in place, the slight spaces between the walls of the openings and the bottles preventing the ice passing through such spaces. The posts should extend above the tops of the bottles to help protect the bottles from breakage and the partitions should extend to the tops of the bottles to hold the ice around the upper parts of the bottles. As will be seen these partitions hold the ice around each bottle, so that when a bottle is lifted through an opening the ice that surrounded the upper part of the bottle will drop through the opening into the tank and this ice will not be wasted but will act to keep the water cold in the tank which is in contact with the remaining bottles. The other parts of the partitions will hold the ice around the upper portions of the remaining bottles.

In the modification shown in Figs. 5 and 6, an ice holder is provided for each bottle in a crate, the holder consisting of a box like member 8 having its top open and having a hole 9 in its bottom into which project the lugs 10 connected with the walls of the hole. These lugs have recesses 11 in their inner ends shaped to conform with the rounded sides of the bottle. These lugs hold the member with its bottom at approximately the "cream" line of the bottle and the walls of the hole spaced from the bottle so the ice water can flow down the sides of the bottle. Of course this member holds the ice around the upper portion of the bottle, as in the first form of the invention, this second form being mainly designed for use on bottles in an ordinary crate.

It will be understood that the invention will be made in various sizes to suit the different sizes of milk bottles used by the trade.

With this invention, milk bottles can be refrigerated with the minimum amount of ice and the milk is kept refrigerated in the crates until it is delivered to the customer.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction, combination and arrangement of the several parts, provided such changes fall within the scope of the appended claims.

What I claim and desire to protect by Letters Patent is:

1. An icing device for a bottle comprising a horizontal member having a hole therein through which the bottle passes and vertical members connected with the horizontal member and spaced from the hole, said vertical members forming an

ice receiving chamber for holding ice in direct contact with the upper portion of the bottle.

2. An icing device for milk bottles comprising a horizontal member having an opening therein for the passage of the bottle, means for holding said member at approximately the "cream" line of the bottle and vertical members spaced from the opening for holding ice around the upper portion of the bottle and on said horizontal member and in direct contact with the upper portion of the bottle, the water from the ice passing through the opening and down the sides of the bottle.

3. An icing device for a crate of milk bottles comprising a frame, a horizontal member supported by the frame and having a plurality of openings therein, one for each bottle, the opening being slightly larger than the bottle and the frame holding the member at approximately the "cream" line of the bottles, vertically arranged partitions carried by the frame above the horizontal member for holding ice around the upper parts of the bottles and in direct contact with the bottles, said partitions holding the ice around the individual bottles, whereby when one bottle is removed, the ice remains around the other bottles, and a tank in the crate for catching the water from the ice.

MARVIN C. BOONE.