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1,868,070

ICE TRAY

Filed April 29, 1931

Fig. 1.

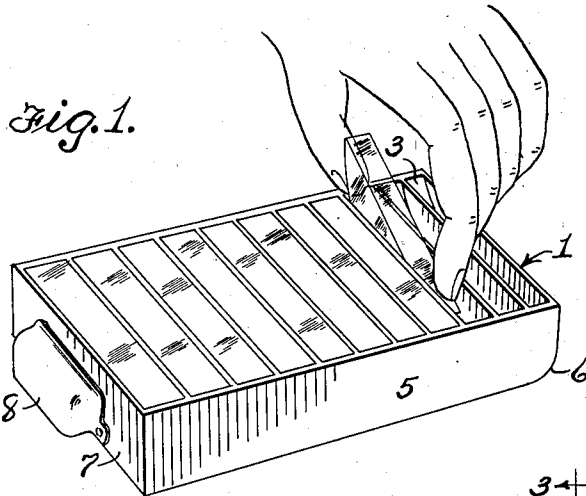


Fig. 2.

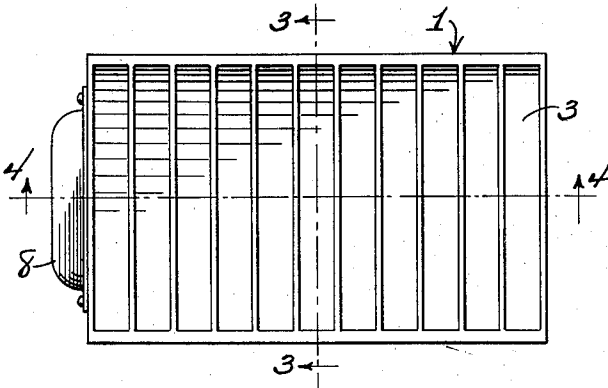


Fig. 3.

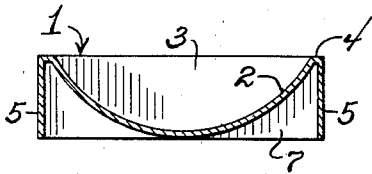


Fig. 6.

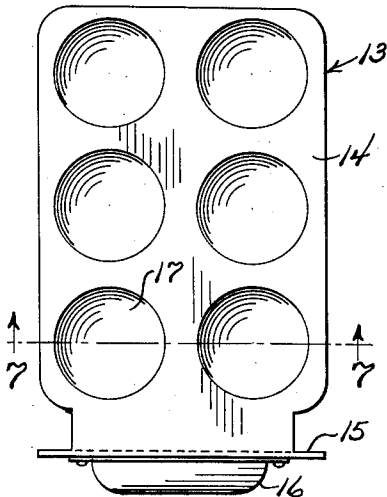


Fig. 4.

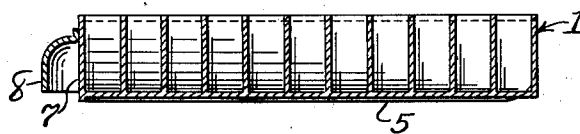


Fig. 5.

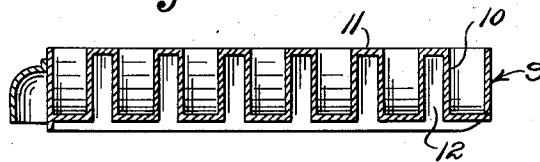
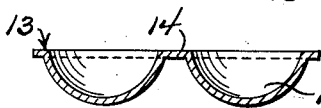


Fig. 7.



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ICE TRAY

Application filed April 29, 1931. Serial No. 533,769.

This invention relates to ice trays especially adapted for refrigerators and has for the primary object, the provision of a device of the above stated character whereby the blocks of ice formed therein may be more conveniently removed than in the present types of trays, due to the construction of the tray which will cause an easy displacement of any one of the blocks of ice when pressure is applied near one edge thereof, positioning the block of ice to extend partially from the tray, whence it may be grasped and removed.

Another object of this invention is the provision of a curved wall to each of the compartments of the tray, so that a pressure placed on and adjacent one edge of any one of the blocks of ice, the block of ice will slide upwardly in the arc of a circle presenting the opposite edge of the block outwardly of the compartment to permit it to be easily grasped for removal from the respective compartment.

A further object of this invention is the provision of an ice tray of the above stated character which will be simple, durable and efficient and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a perspective view illustrating an ice tray constructed in accordance with my invention.

Figure 2 is a top plan view illustrating the same.

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a view similar to Figure 4 illustrating a modified form of my invention.

Figure 6 is a top plan view illustrating another modified form of my invention.

Figure 7 is a sectional view taken on the line 7—7 of Figure 6.

Referring in detail to the drawing, the numeral 1 indicates, in its entirety, a tray to be employed in the freezing unit of a refrigerator for forming blocks of ice or other ingredients into frozen forms. The tray 1 includes a semi-cylindrical shaped wall 2 having formed integral therewith a plurality of relatively spaced semi-circular shaped partitions 3 providing a plurality of compartments adapted to contain water or other ingredients to be frozen. The curved edges of the partitions are formed integral with the semi-cylindrical wall 2 with the straight edges of the partitions disposed flush with the edges of the semi-cylindrical wall 2, so that the blocks of ice or other ingredients frozen within said compartments will be of semi-circular shape as shown in Figure 1 having their straight edges disposed uppermost while lying within the tray. The side edges of the semi-cylindrical wall 2 are formed integral with comparatively narrow flanges 4 on which are formed side plates 5 providing runners to engage the usual guides within the freezing unit of a refrigerator for efficiently supporting the tray therein and permitting the easy removal and application of the tray to the freezing unit when desired. The plates 5 at one of their ends are slightly curved as shown at 6 to facilitate the application of the tray onto the usual supporting guides in the freezing unit. A front wall 7 is formed integral with the other ends of the plates 5 and also forms a side wall to the end compartment of the tray and has secured thereto a suitable handle 8 for aiding in applying and removing the tray from the freezing unit of the refrigerator. After the contents of the compartments have been frozen into semi-circular shaped blocks and the tray removed from the freezing unit of the refrigerator water is allowed to flow thereover for a short period of time which loosens the blocks from the walls of the compartments and to remove any one of the blocks, pressure is applied to the respective block adjacent one edge and due to the semi-cylindrical wall 2, the block will be caused to slide in the arc of a

circle presenting the opposite edge of the block outwardly of the respective compartment, so that it may be easily grasped and removed as shown in Figure 1. Referring to Figure 5 which illustrates one modified form of my invention, the tray 9 is similar in construction to the tray 1 except the partitions each include relatively spaced walls 10 joined at their upper edges by comparatively short top walls 11 providing spaces 12 within each partition to provide a greater freezing area for the tray, or in other words, the cold temperature may enter the spaces 12 thereby freezing the contents of the compartments in a much shorter period of time.

Referring to Figures 6 and 7 which illustrate another modified form of my invention, the tray 13 consists of a substantially rectangular shaped plate 14 having one end reduced and flanged as shown at 15 to which a handle 16 is secured. A plurality of semi-spherical shaped depressions or pockets 17 are formed by pressing the material of the plate 14 outwardly in which the water or other ingredients may be placed for freezing within the usual freezing unit of the refrigerator. It being understood that the side edges of the plate 14 engage the usual supporting guides within the freezing unit. The pockets or depressions 17 form individual compartments and each having a curved wall so that when the frozen block is pressed upon adjacent one edge, the block will slide in the arc of a circle presenting the opposite edge of the block outwardly of the pocket or depression that the block may be easily grasped and removed.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of my invention, as claimed.

Having thus described my invention, what I claim is:

1. An ice tray comprising a cylindrical shaped wall, an end plate closing one end of said semi-cylindrical shaped wall and extending below the latter, a plurality of spaced semi-circular shaped partitions formed integrally with the inner faces of the semi-cylindrical shaped wall and one of the end partitions forming a closure for the other end of the semi-cylindrical shaped wall, said partitions, wall and plate cooperating to provide semi-circular shaped compartments to contain frozen blocks whereby pressure applied to any one of the blocks adjacent one edge will cause a sliding of said block within its respective compartment and position the opposite edge thereof outwardly of the compartment to be easily grasped, and side plates formed integrally with the side edges of the semi-cylindrical wall and the end plate to provide runners spaced from the semi-cylindrical wall and extending below the latter and providing a reinforcement to said semi-cylindrical wall.

2. An ice tray comprising a plate having one end reduced and bent angularly to form an attaching flange, a handle secured to the flange for sliding said plate into and out of a freezing unit, said plate having spaced portions offset outwardly therefrom to form semi-spherical shaped pockets with curved walls for containing frozen blocks whereby pressure applied to any one of the blocks adjacent one edge will cause sliding of said block to position the opposite edge thereof outwardly of the respective pocket so that it may be readily grasped.

In testimony whereof I affix my signature.
EDWIN P. S. NEWMAN.