Jan. 23, 1951 R. L. HALLOCK 2,538,939

ICE TRAY GRID

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Fig. 1.

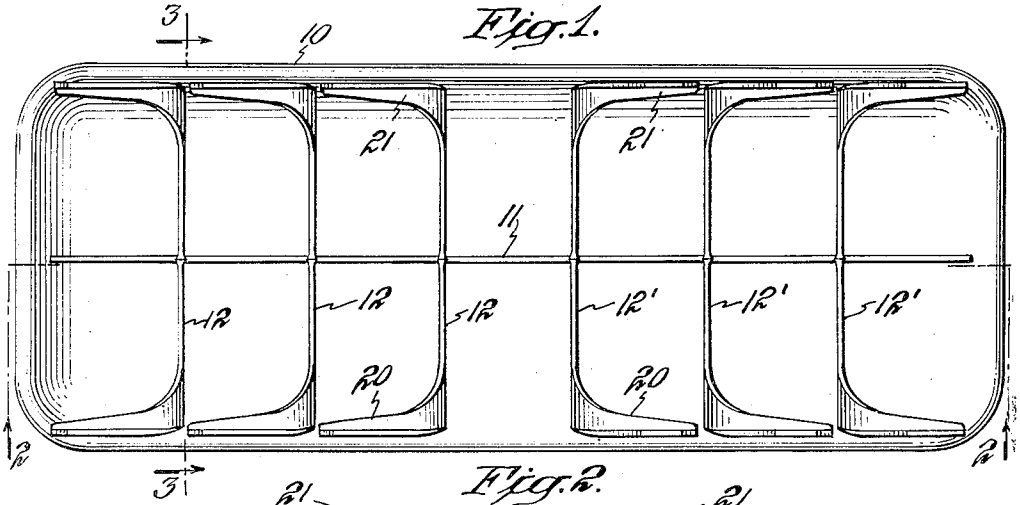


Fig. 2.

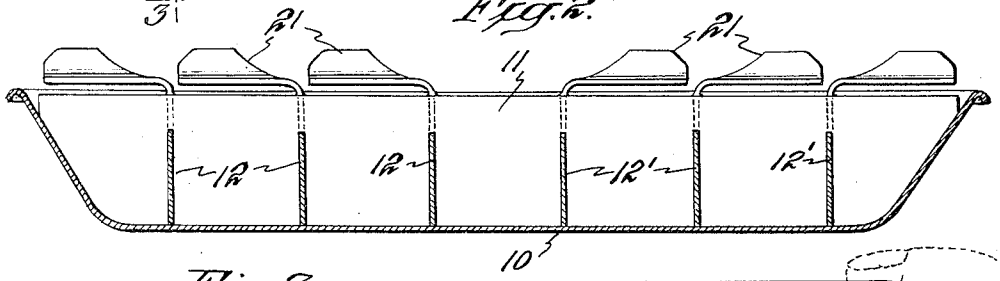


Fig. 3.

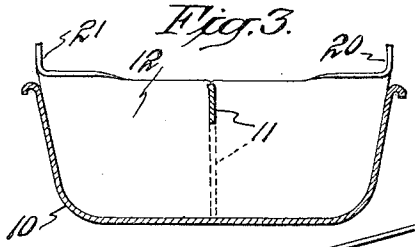


Fig. 4.

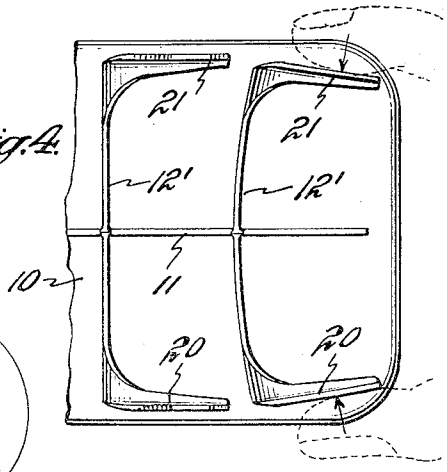
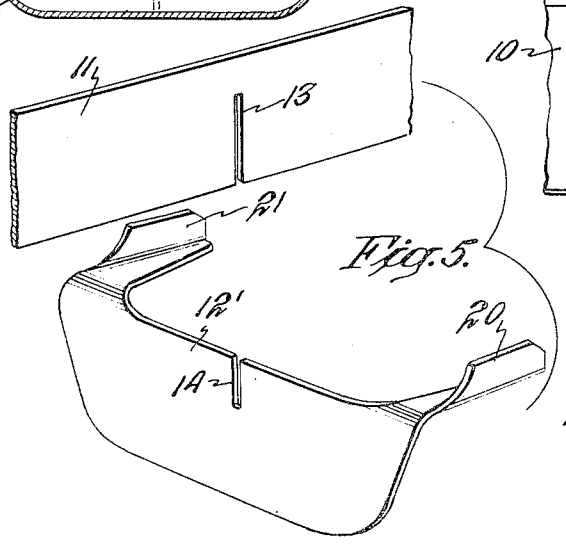


Fig. 5.



INVENTOR.
ROBERT L. HALLOCK
BY
D. C. Heath
his ATTORNEY

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Fig. 6.

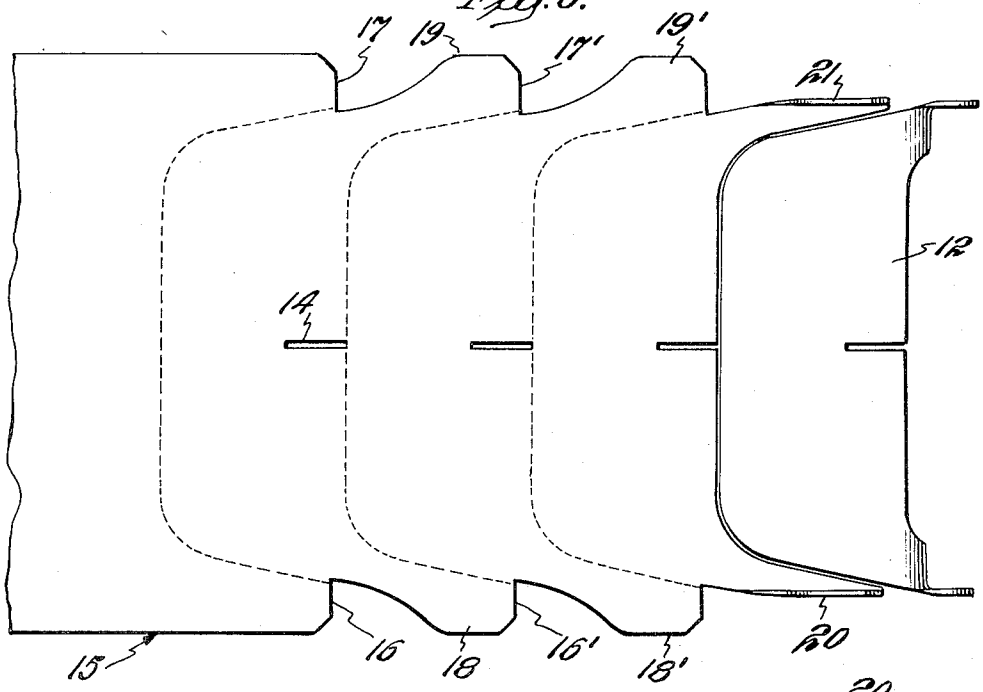


Fig. 7.

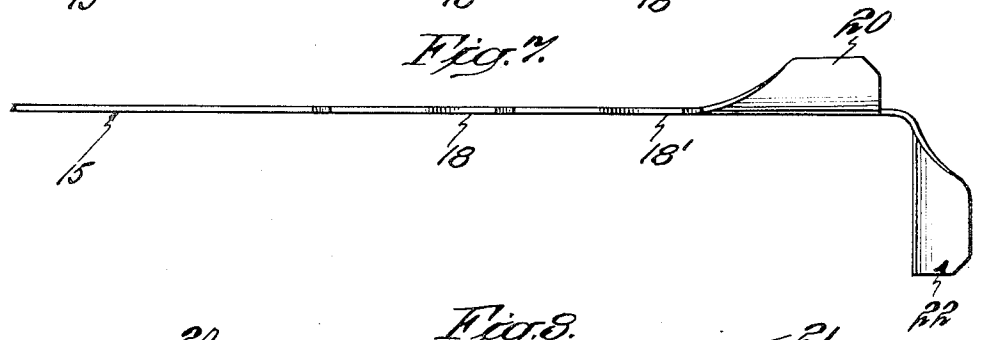
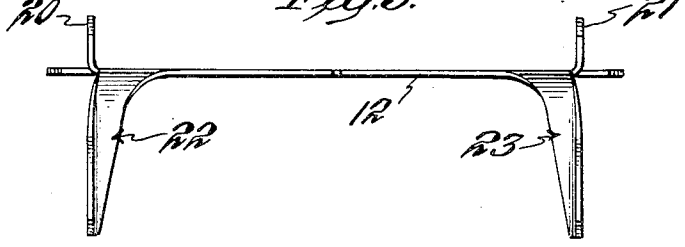


Fig. 8.



INVENTOR.
ROBERT L. HALLOCK
BY
D. K. Heath
his ATTORNEY

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2,538,939

ICE TRAY GRID

Robert Lay Hallock, Larchmont, N. Y.

Application February 26, 1949, Serial No. 78,578

2 Claims. (Cl. 62—108.5)

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My invention relates to ice trays and grids of the resilient wall type and more particularly those with grid walls that are individually flexed to release ice pieces.

The objects of the invention are to provide an ice tray grid that is simple in structure and operation and which permits stacking of ice trays.

The invention is characterized by a grid structure having a center wall intersecting a series of resilient cross walls having projections at their outer top edges generally parallel to the center wall formed to provide leverage for flexing the cross walls and to cradle a tray stacked thereon.

Other characteristics and the advantages of the invention will appear in the following description in connection with the accompanying drawings in which:

Fig. 1 is a top plan view of an ice tray and grid embodying the invention;

Fig. 2 is a section on line 2—2 in Fig. 1;

Fig. 3 is a section on line 3—3 in Fig. 1;

Fig. 4 is a partial view like Fig. 1 illustrating how a cross wall is flexed to release ice pieces;

Fig. 5 is an exploded perspective of a cross wall and part of the center wall; and

Figs. 6, 7 and 8 are conventional orthographic views of strip stock in the several stages of blanking and forming a cross wall.

Referring to Figs. 1 and 2, an ice tray 10 contains a removable grid comprising a center wall 11 intersecting a series of resilient cross walls 12. The center wall 11 is formed of a strip shaped at its ends to conform to the interior of the tray end walls, and cut with a series of notches projecting upward from the lower edge of the strip like the notch 13 in Fig. 5.

Each of the cross walls 12, like the cross wall 12' in Fig. 5, has a notch 14 projecting downward from the center of its top edge. The cross walls are assembled on the center wall with the upper part of the center wall resting in the notches 14, and the notches 13 straddling the lower parts of the cross walls 12 and 12'. The cross walls are held in place by peening the upper edges of the notches 14 at the top of the cross wall. The cross wall 11 may be flat as illustrated, or it may be curved slightly in a vertical arc from its bottom edge to the top of the notches 13 to afford a firm joint between cross wall and center wall without close tolerance in the notches 13 and 14.

The cross walls 12 have handles or finger holds at their outer top edges projecting horizontally

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and generally parallel to the center wall. The cross walls may be arranged so that the handles project in the same direction or, as seen in Figs. 1 and 2, half of the series of cross walls 12 may have their handles projecting toward one end of the tray while the other series of cross walls 12' have their handles projecting toward the opposite end of the tray.

The cross walls 12 are formed by a continuous press operation. Referring to Figs. 6, 7 and 8, a strip of resilient material 15 is blanked to form opposite edge notches 16 and 17 and the center slot 14. The similar portions 18 and 19 are bent to form tabs 20 and 21. In the next operation step the wall 12 is sheared from the strip 15 and the sections on which the tabs 20 and 21 are located are bent to form the projections or handles 22 and 23.

The projections 22 and 23 taper from a relatively broad base at the top edge of the wall 12 outward to the edge of the tray. The tabs 20 and 21 form upward flanges on the tapered projections 22 and 23. Bending the material into two intersecting planes generally perpendicular to each other and to the plane of the cross wall produces strong finger holds that can be squeezed toward the center wall to warp the cross walls to release ice pieces as illustrated in Fig. 4.

The grid with its projections is all within the area of the tray as may be seen in Figs. 1 and 4. The horizontal and vertical portions of the cross wall flexing handles are aligned and form a cradle adapted to receive the bottom of a tray stacked on top of this grid. The upstanding flanges of tabs 20 and 21 restrain lateral movement of a tray stacked on top of a grid. The tapering of the flexing handles provides for a minimum amount of material in the handle but yet affords stiffening of the top edge of the cross walls for transmission of the warping or flexing stress well into the cross walls toward the center wall. This is important in effecting easy removal of ice pieces by wall flexure.

Various changes and modifications may be made within the scope of the invention as set forth in the following claims.

I claim:

1. An ice tray grid having a center wall intersecting a series of flexible cross walls each with a pair of projections at its outer top edges and projecting in a direction generally parallel to the center wall, the pair of projections on each cross wall being directly opposite each other and having upstanding finger hold portions so

that each pair can be squeezed toward the center wall to warp its associated cross wall to release ice adhering thereto.

2. An ice tray grid having a center wall intersecting a series of resilient cross walls each formed by a sheet of resilient material formed in the shape of a cross wall with projections at the outer top edges bent generally perpendicular to the plane of the cross wall and also bent into a plane generally parallel with the center wall to form levers for warping the cross walls by opposed forces applied generally parallel to the cross walls.

ROBERT LAY HALLOCK.

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