

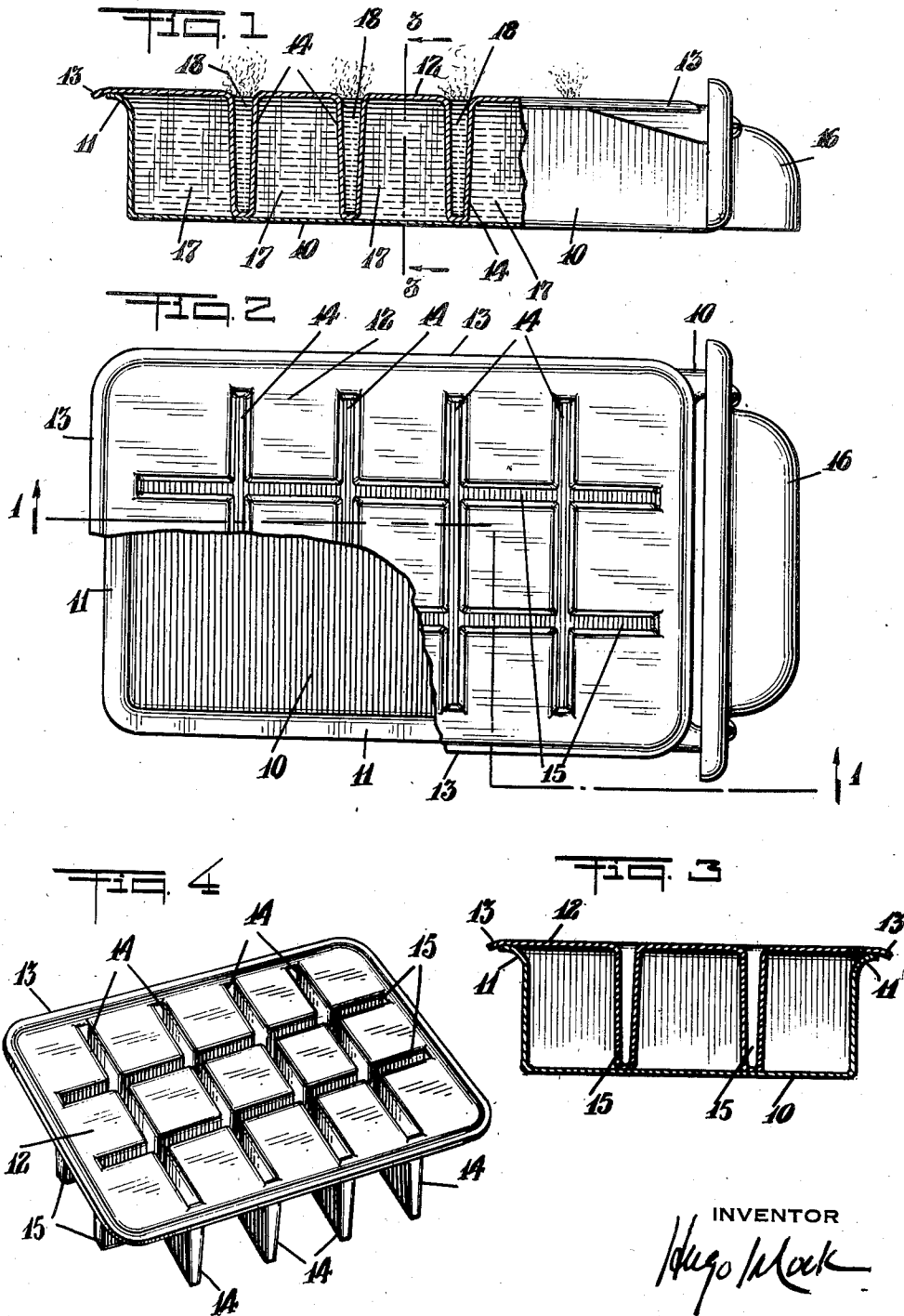
Feb. 18, 1936.

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2,031,276

COMBINATION GRID AND COVER FOR ICE TRAYS

Filed Oct. 30, 1931



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UNITED STATES PATENT OFFICE

2,031,276

COMBINATION GRID AND COVER FOR
ICE TRAYS

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Application October 30, 1931, Serial No. 572,012

1 Claim. (Cl. 62-108.5)

This invention relates to improvements in devices for forming cubes in ice trays and has for its particular object the provision of an improved combination grid and cover for ice trays by means of which the ice cubes formed in the ice trays of electric refrigerators may be speedily removed.

A further object of this invention is the provision of an improved ice tray and grid therefor in which the ice cubes will be normally covered and in which the cubes may be readily detached from the grid, cover and base of the tray by pouring a small quantity of water onto the cover of the tray.

A further object of this invention is the provision of an improved combination cover and grid for ice trays for electric refrigerators made in one piece from a single sheet of metal.

Further objects of this invention will be apparent from the specification and drawing in which

Fig. 1 is a side view partly in section of an ice tray with my improved combination grid and cover in place.

Fig. 2 is a top plan view of the tray and the combination grid and cover partly cut away.

Fig. 3 is a sectional view along the line 3-3 of Fig. 1.

Fig. 4 is a perspective view of the combination grid and cover.

10 indicates an ice tray of conventional construction having the rounded edge 11. 12 indicates my improved unit, the combination grid and cover, having the overlapping edge or margin 13. 14 are openings running transversally on the combination grid and cover. 15 are the openings running longitudinally on the combination grid and cover and at right angles to the openings 14.

16 indicates the handle of the tray, 17 the ice cubes themselves. 18 designates the water which is poured into the openings 14 and 15 when it is desired to release the ice cubes 17.

The following should be noted with reference to this combination grid and cover:—

The openings 14 and 15 should preferably be as narrow as possible and the bottom of the grid should rest upon the bottom of the tray so as to form complete cubes.

By forming the rim 13 to overlap the edge of the ice tray 11, any excess water poured onto the cover of the tray will run off without entering the tray. Inasmuch as the entire ice cube is surrounded by the grid and cover with the excep-

tion of the base of same, it is very easy to liberate the ice cubes from the tray by merely pouring water on top of the cover so that the metallic surfaces surrounding the cubes on all sides are immediately slightly raised in temperature so as to melt the film of ice contacting with such metal surfaces. Naturally the warmer the water poured onto the cover, the quicker the ice cubes will be released.

In order to insure the proper formation of the cubes, the grid and cover should be inserted obliquely in the water filled tray. This method of inserting the cover and grid in the tray is advisable so as to eliminate the possibility of trapping any considerable quantity of air in the center cubicles formed by the grid and top.

It should also be noted that preferably when the combination grid and cover rests on the bottom of the tray, the top of the cover should be somewhat below the top of the upper edge of the tray so that when the tray is nearly filled with water, the water will reach to the under-surface of the cover without overflowing the outer edges of the tray.

One of the advantages of this form of combined cover and grid is that there is a permanent cover for the ice tray at all times so that the cubes are not exposed nor affected by any odorous food products in the refrigerator and the cubes are releasable from the tray with a minimum of time and trouble.

A further advantage of this type of construction of grid and cover is that since each surface of the cube is at all times in contact with metal, the freezing of the cubes will take place in a shorter time than in the type of ice tray and grid hitherto known.

It is advantageous to make this improved cover and tray from a single sheet of metal, preferably of aluminum.

Having fully described my invention, what I claim is:

In a combination grid and cover for ice trays, a series of forms for ice cubes connected to each other, a common cover for such forms, and a series of intersecting air channels separating said forms from each other, the sides of said forms for ice cubes being perpendicular, and the edges of the cover extending beyond the edges of the tray in which said ice cubes are formed.

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