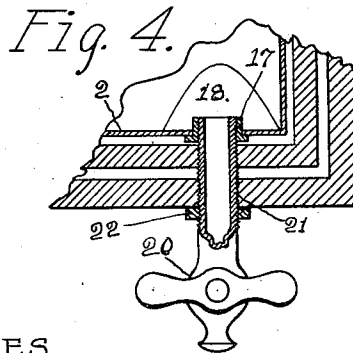
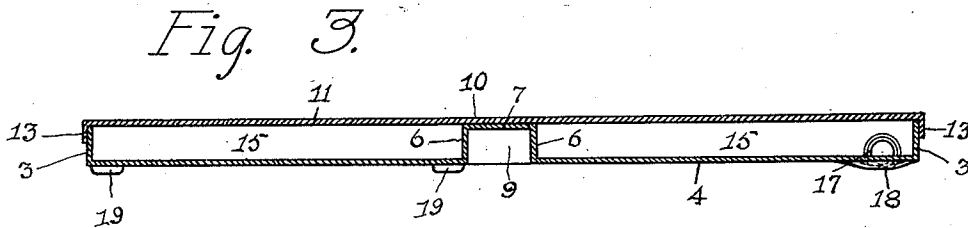
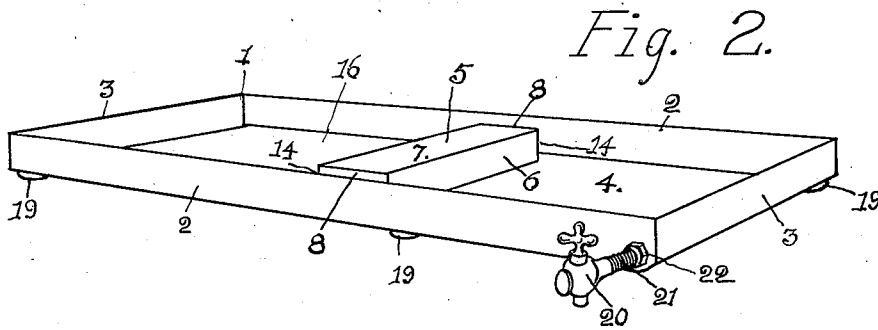
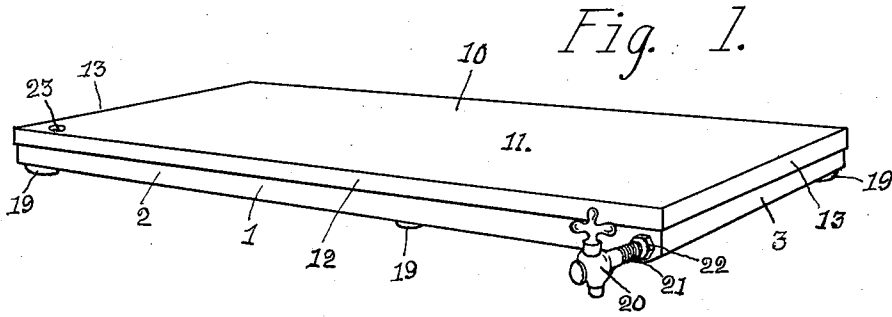


J. PHILIPPS.
 WATER COOLING ICE TRAY FOR REFRIGERATORS.
 APPLICATION FILED MAY 1, 1911.

1,022,565.

Patented Apr. 9, 1912.



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JOHN PHILIPPS, OF TOLEDO, OHIO.

WATER-COOLING ICE-TRAY FOR REFRIGERATORS.

1,022,565.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed May 1, 1911. Serial No. 624,332.

To all whom it may concern:

Be it known that I, JOHN PHILIPPS, a citizen of France, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Water-Cooling Ice-Trays for Refrigerators, of which the following is a specification.

My invention relates to a water cooling ice tray for refrigerators, and has for its object to provide a tray for supporting and draining the ice in a refrigerator that is also adapted as a reservoir for storing and cooling water for drinking. I accomplish these objects by the construction and combination of parts as hereinafter described and illustrated in the drawings, in which—

Figure 1 is a perspective view of a tray constructed in accordance with my invention. Fig. 2 is a similar view of the body of the tray, with the cover removed. Fig. 3 is a longitudinal section of Fig. 1, and Fig. 4 is a broken away portion of one corner of the tray and of the casing of a refrigerator, showing the detachable draw-off faucet.

In the drawings 1 designates the rectangular body of the tray, having the sides 2, the ends 3 and the bottom 4. The bottom 4 is provided centrally and transversely of the body 1 with the rectangular raised portion 5 having the sides 6, the top 7 and the ends 8, forming the recess 9. The sides 6 are of a height to bring the top 7 in the plane of the top edges of the sides 2 and the ends 3 of the body 1.

10 designates a top closure for the body 1 comprising the top 11, the sides 12 and the ends 13, the closure 10 being adapted to telescopically fit over the sides and ends of the body 1, and rest on the top edges of the sides and ends of the body, and on the top of the raised portion 5 of the bottom. Between the ends 8 of the raised portion 5 and the sides 2 of the body 1 are the passages 14 connecting the end portions 15 of the reservoir 16 formed by the bottom sides and ends of the body 1.

The body 1 is provided near one corner with an interiorly threaded nipple 17, which extends through a side 2 into a depressed corner portion 18 of the bottom 4, whereby the nipple is adapted to drain all the water from the reservoir 16. The bottom 4 is also provided at suitable intervals around its edges and the central recess 9 with the button shaped supports 19 which together with the depressed portion 18 support the body 1

slightly above the bottom of the ice chamber of a refrigerator, and are so adjusted in thickness as to slightly incline the bottom 4 to drain water from all parts of the bottom to the outlet nipple 17.

When the tray thus constructed is placed on the bottom of the ice chamber of a refrigerator, a faucet 20 having a threaded portion 21 of a length to extend through the wall of the refrigerator and adapted to be inserted through a suitable orifice in the outer wall of the refrigerator, is threaded into the nipple 17 of the tray. The threaded portion 21 has run thereon a nut 22, which after the connection is made with the nipple, is run out against the refrigerator wall, as shown in Fig. 4.

The closure 10 is provided at one corner of its top with a filling orifice 23, for the insertion of the spout of a funnel, through which the tray, when in position in the ice chamber of a refrigerator is conveniently filled with water for cooling. After filling the tray, the orifice 25 is closed by a cork or other suitable stopper (not shown).

Preferably the tray is constructed of sheet metal and coated outside and inside with enamel to prevent rusting and to make the tray sanitary. Thus constructed the tray forms a support for the ice in the ice chamber that permits a circulation of air between the tray and the bottom of the chamber and through the recess 9, which circulation is produced by the air in the recess that is in direct contact with metal upon which the ice rests becoming cooled, whereby it descends and the warmer air ascends to take its place until all the air in the recess and below the tray is at the same temperature. The water in the tray being surrounded by cool air soon becomes cool, and after being cooled greatly retards the melting of the ice, which mainly is limited to the sides and top of the ice block, the water produced by the melting being free to pass into the drain pipe of the refrigerator around and beneath the tray. The cooled water may be drawn as needed from the tray as a cooler, through the faucet 20, whereby the use and expense of a separate cooler is avoided.

By detaching the faucet 20 from the tray, the latter may be readily removed from the ice chamber as occasion may require for removing any sediment deposited by the water.

Preferably the lower section of my tray is formed of a single piece of sheet metal,

press drawn to the form shown and described, but it is manifest that when otherwise constructed as it may be, the top portion 7 of the raised portion 5 of the bottom 5 may be omitted.

It is manifest that a tray constructed in accordance with my invention may be used in an ice chamber for cooling water alone, instead of the water cooler, where the ice is 10 placed in the water, and that so used, the water supply will be cooled without being mingled with the water of the melted ice, thereby avoiding the contamination of the 15 deleterious matter that may be incorporated with the ice, and I therefore do not limit myself to the use of my tray in refrigerators alone.

What I claim to be new is—

20 In combination with the ice chamber of a refrigerator or the like, a shallow water cooling ice tray adapted to be placed in and removed from the chamber, and to support

a block of ice in the chamber, said tray comprising a base section having a bottom and 25 sides forming a reservoir for water, and a detachable cap section having a top provided with sides adapted to telescopically fit over and around the base section and forming a cover therefor, the bottom of the 30 base section being provided with an upwardly projecting central portion adapted to centrally support the closure section and form an air cooling chamber, a faucet detachably secured to a side of the base section 35 in position to draw off all the water from the tray, and means to support the bottom of the tray on and slightly above the bottom of the ice chamber.

In witness whereof I have hereunto set 40 my hand this 29th day of April, 1911.

JOHN PHILIPPS.

In presence of—

WM. J. FRILSCHE,
M. S. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
