No. 649,286. Patented May 8, 1900.

T. J. ELLIOTT.

COMBINED ICE GRATE AND WATER COOLER FOR REFRIGERATORS.

(Application filed July 18, 1899.)

(No Model.)

Fig. 1.

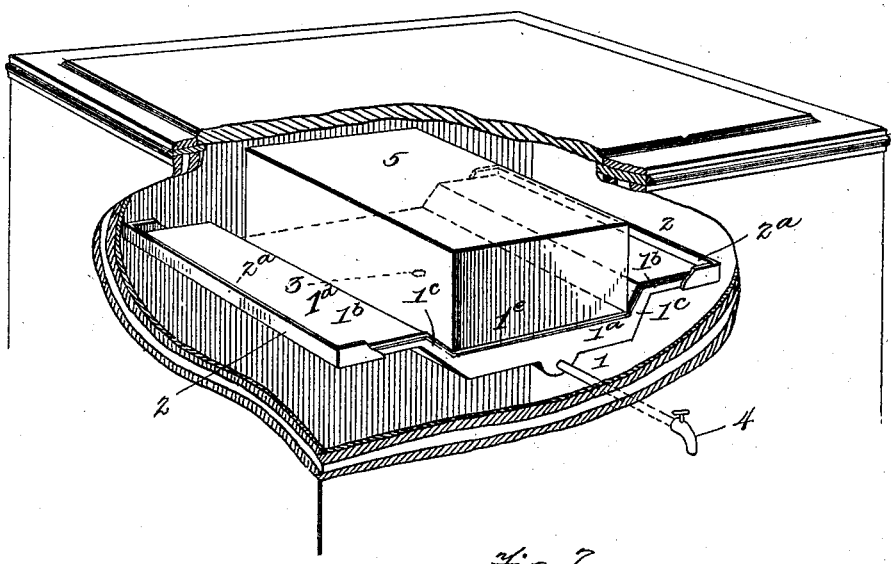


Fig. 2.

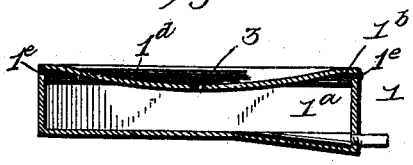


Fig. 3.

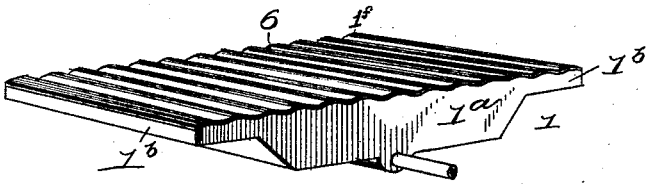
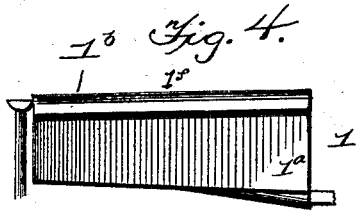


Fig. 4.



Witnesses
T. L. Mocstaben
Herbert W. Lawson

Inventor
Thomas J. Elliott,
per J. Wm. Whister,
Attorney

UNITED STATES PATENT OFFICE.

THOMAS J. ELLIOTT, OF TOWANDA, PENNSYLVANIA.

COMBINED ICE-GRATE AND WATER-COOLER FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 649,286, dated May 8, 1900.

Application filed July 18, 1899. Serial No. 724,306. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. ELLIOTT, a citizen of the United States, residing at Towanda, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Ice-Grate and Water-Cooler for Refrigerators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in what may be termed "combined ice-grates and water-coolers."

It has for its object, mainly, to more effectively than has heretofore been possible lower or reduce the temperature of the water in the cooler and yet not expose the water to direct contact with the ice; also, to exclude the ice from odors arising from the provision chamber or apartment, and thus prevent the absorption thereby of such odors, which would finally taint or affect the water in the cooler, and thus render it unfit for drinking purposes, and to provide for utilizing the ice both to reduce the temperature of the provision-chamber and the water in the cooler; also, to simplify construction and lessen cost of manufacture and to otherwise improve the structure.

It consists of the combination and arrangement of parts substantially as hereinafter more fully disclosed, and specifically pointed out by the claims.

It is understood that latitude is allowed herein as to details, as they may be varied or changed at pleasure without departing from the spirit of my invention and the same yet remain intact and be protected.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a broken-away perspective view of a refrigerator disclosing the application thereto of said invention. Fig. 2 is a cross-section of said invention. Fig. 3 is a perspective view of a modification thereof, and Fig. 4 is a side elevation of the same.

In carrying out my invention I provide a chamber or receptacle 1, of metal, adapted to contain a suitable quantity of water for drinking purposes and arranged or disposed in what is usually termed the "ice-chamber" of a refrigerator, directly above the provision-chamber thereof.

The receptacle or chamber 1 is of such a width as to be removed a suitable distance from the side walls of the refrigerator to allow of the required circulation of differently-temperatured air-currents between the two chambers, as takes place in lowering the temperature of the provision-chamber, as well understood. It is preferably rectangular in its general outline, with its central or body portion 1^a laterally extended, as at 1^c, upwardly and outwardly and provided or terminating into horizontal flanges or wings 1^b for the support of the cooler or receptacle in place, said wings or flanges adapted to rest in cleats or brackets 2, suitably secured to the inner walls of the refrigerator and having lateral upstanding portions or flanges 2^a to prevent displacement of said flanges or wings.

The lid or top 1^d is adapted to serve as the ice-grate and support the block of ice, which may be of distilled water, and is centrally depressed or sunken and provided with a central opening 3 to accordingly drain the water from the melting ice centrally thereof, the water finally entering the receptacle or cooler via said opening and commingling with and aiding to additionally lower the temperature of the water previously placed in said receptacle or cooler and overflowing said top or lid in event of completely filling said cooler or receptacle. The receptacle or cooler has a faucet 4, as usual, at its front, at the bottom edge, to draw off the water for drinking, said bottom being inclined or dipping forward to provide for the draining off or flushing of said receptacle or cooler when required via or through said faucet. Along the top edges of the receptacle or cooler 1 is suitably secured a strip or layer of cloth or rubber 1^e, upon which rests the lid or top 1^d to prevent the chipping of the enamel or porcelain with which water-coolers are generally lined, as would otherwise likely occur by the friction or abrasion caused by the usual contact of

the top therewith in taking it off and placing it thereon, as will be readily understood.

A cover or closure 5 is adapted to fit or rest upon the lid or top 1^d, which latter by reason of its conformity to the aforesaid outline or depression of the receptacle serves to laterally retain said cover or closure in place, said cover inclosing the block of ice to prevent it absorbing odors arising from the provision-chamber, and thus prevent tainting or affecting the water in the cooler thereby.

In the modification as disclosed in Figs. 3 and 4 I produce the top edge of the receptacle or cooler continuously throughout in the same horizontal plane and provide said receptacle with a lid or top 1^f, preferably corrugated for additional strength, this form of the invention, however, having a suitably plugged or closed filling-opening 6 and having its top or lid dipping or sloping rearward to drain the water into a waste-water trough, as usual, and having its bottom dipping forward for the like purpose, as stated in connection with the same part of the form of the invention as above described. In this case, as may sometimes be preferred, lake or pond ice may be used as the refrigerant, the drippings thereof being cut off from the cooler, and in which event the ice may not be protected by a cover or closure, as in the aforesaid disclosed form of the invention, wherein the drippings enter the cooler.

It will be seen from the foregoing that the ice resting directly down upon the top of the cooler, and therefore never able to melt away from it, and also the drippings thereof entering the cooler and commingling with the water therein, as exemplified in Fig. 1, (only, however, as to the first count in Fig. 2,) provision is made for effectively lowering the temperature of the water in the cooler and continuously keeping the temperature down in addition to equally utilizing the refrigerant action of the ice in lowering the temperature of the provision-chamber of the refrigerator, which are desiderata, especially in this class of utensils. It will also be observed that the cooler or receptacle, with the cover for the block of ice, can be readily removed for cleaning or other purpose and that the same is simple in construction, cheaply manufactured, and readily applied for use.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A combined ice-grate and water-cooler, comprising a receptacle having a central portion, a depression in said central portion and upper lateral portions, a lid for said central portion and adapted to hold the ice block, and a cover to inclose the ice block and rest in said depression, substantially as set forth.

2. A combined ice-grate and water-cooler, comprising a receptacle having a central portion, a depression in said central portion, upper lateral portions, and a central depression in the aforesaid depression, a lid for said central portion, adapted to hold the ice, and a cover for the ice block and adapted to rest in the aforesaid depression, substantially as set forth.

3. A combined ice-grate and water-cooler, comprising a receptacle having a central portion, a depression in said central portion, upper lateral portions, and a central sloping gutter or drain in its bottom, a lid adapted to hold the ice block and to rest in said depression, and a cover to inclose the ice block and rest in said depression, substantially as described.

4. A combined ice-grate and water-cooler, comprising a receptacle having a central portion, a depression in said central portion, upper lateral portions, a lid for said central portion and adapted to hold the ice block, a cover adapted to inclose the ice block and to rest in said depression, and brackets to support said upper lateral portions, substantially as set forth.

5. The water-cooler, &c., for refrigerators, comprising a receptacle having a downward-extended central portion, an upper depressed central portion, and upper laterally-extended portions, its top edge having a layer of flexible material to remove the lid or top from direct contact with the receptacle, and a lid conforming to said depressed central portion of receptacle and adapted to hold the ice block, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS J. ELLIOTT.

Witnesses:
LISETTA B. ELLIOTT,
DANL. ELLIOTT.