

No. 746,414.

PATENTED DEC. 8, 1903.

H. S. VAN FLEET.
ICE CONSERVER.

APPLICATION FILED FEB. 20, 1903.

NO MODEL.

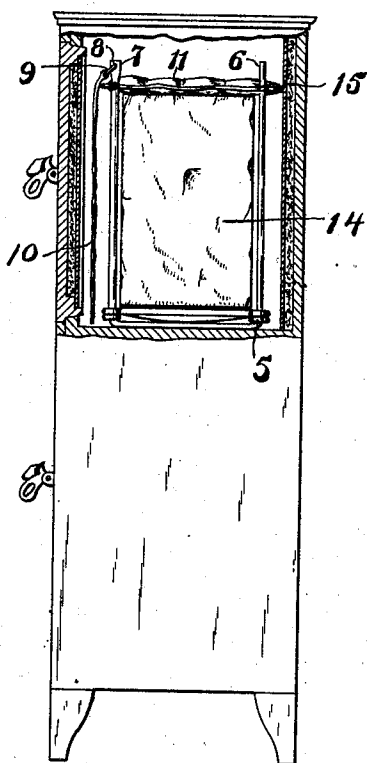


Fig. 1.

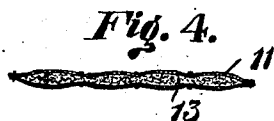


Fig. 4.

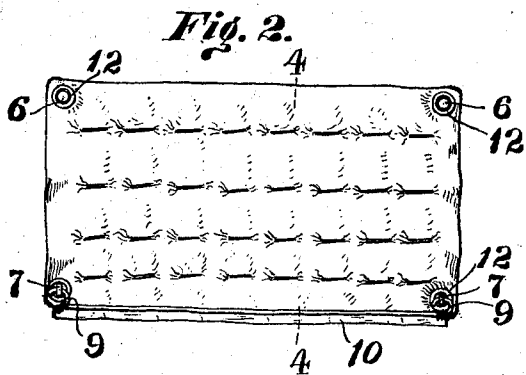


Fig. 2.

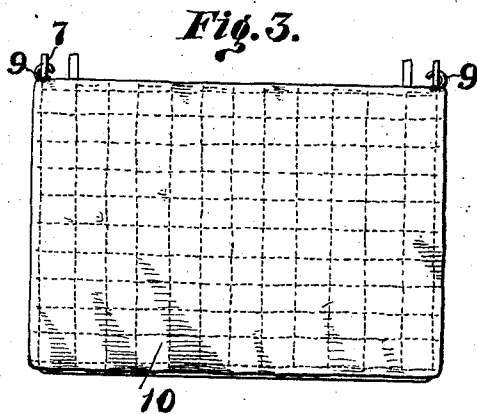


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

HART STEPHEN VAN FLEET, OF ROSELLE, NEW JERSEY.

ICE-CONSERVER.

SPECIFICATION forming part of Letters Patent No. 746,414, dated December 8, 1908.

Application filed February 20, 1908. Serial No. 144,286. (No model.)

To all whom it may concern:

Be it known that I, HART STEPHEN VAN FLEET, a citizen of the United States, residing at Roselle, in the county of Union and State of New Jersey, have invented a new and useful Ice-Conserver, of which the following is a specification.

This invention relates to ice-conservers, and has for its object, first, to provide a simple and efficient device to prevent the rapid melting of ice in a refrigerator by preventing the free air in the ice-chamber thereof to gain access to the ice; second, to protect the ice from the air outside the refrigerator when the door is opened.

I accomplish the objects of my invention by the construction illustrated in the accompanying drawings, in which—

Figure 1 is an elevation view of a refrigerator with the upper part broken away to show my improved ice-conserver applied thereto. Fig. 2 is a plan view of the conserver. Fig. 3 is a front elevation thereof, and Fig. 4 is a section of the top piece or cover on the line 4 4 of Fig. 2.

In the accompanying drawings like numerals of reference refer to the same parts in each of the views, and in the practice of my invention I provide a frame 5, preferably composed of metal and provided with uprights or posts 6 and 7, the latter being mounted in front and provided with apertures 8, into which are passed the open rings 9, from which is suspended the curtain 10, forming the front of the conserver. The cover 11, which is self-adjusting as the ice melts, as it rests directly upon the ice, is provided with gromets 12, proportioned in size and so disposed that the posts 6 and 7 will pass freely there-through, thereby allowing the cover to be moved easily on said posts. By using the gromets the edges of the cover 11 can be held in close contact with the walls of the ice-chamber, as shown at 15 in Fig. 1, thereby forming a more perfect inclosure and preventing the warm air reaching the ice. The cover 11 and curtain 10 are preferably composed of mildew-proof material and are filled with non-heat-conducting material 13, the curtain having less of the filling than the cover, as greater pliability is desirable. The filling may be charcoal, fiber, or any suitable

material; but I prefer to use sawdust and paper-pulp mixed in substantially equal proportions, as the material is very cheap, and I find it very effective.

In operation the conserver is placed in the ice-receptacle of a refrigerator. The front curtain is removed, the cake of ice 14 is placed in the conserver, the cover 11 being raised to allow it to be placed thereunder, and the cover is allowed to rest upon the ice. The curtain 10 is then hung in position and is of sufficient size to shield the ice from the air when the refrigerator-door is opened. As the ice melts the cover will descend, as it is supported entirely by the ice and will protect the ice from the air in the upper part of the ice-chamber.

In practice I find that with the device there is a great saving of ice for the following reasons: The cover and front form a small chamber within the ice-chamber in which the ice is located. This chamber continually contracts, so that there is very little space within the same that is not filled with ice. The air in the chamber outside the conserver will not gain ready access to the conserver, for the reason that warm air does not descend, but will remain in the upper part of the chamber. There will be no cooling of this air, as the cover separates the ice effectually therefrom, so that there is no loss of ice by melting on account of such cooling. As the goods being preserved are located in the chamber beneath the ice-chamber or in the lower part of the ice-chamber all that is necessary is to cool these parts, and it is a waste of energy to cool the air in the upper part of the ice-chamber. Consequently by protecting the ice from this warm strata of air considerable ice is saved, and the ice, having less space in which to melt, will cool this space much more intensely and less ice will be melted. Further, when the door is opened the ice is protected from the warm external air and will not be much affected thereby.

It will thus be seen that I accomplish the objects of my invention in a simple and efficient manner and with a conserver that is comparatively inexpensive.

While I have described a particular way of protecting the ice and reducing the space in which it is located, I do not confine myself to

the particular means herein described, as many ways may be devised for accomplishing the same object. The essential features of my invention are the insulated cover, with
5 means to keep it on the ice and the protecting-curtain.

I claim—

10 An ice-conserver comprising a frame provided with posts, a cover composed of non-heat-conducting material and provided with gromets in which said posts are mounted

the edges of the cover projecting beyond said posts in contact with the walls of the chamber, and a curtain suspended in front of said frame, as and for the purpose set forth. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HART STEPHEN VAN FLEET.

Witnesses:

H. VAN OLDENNEER,

H. E. WOOLLEY.