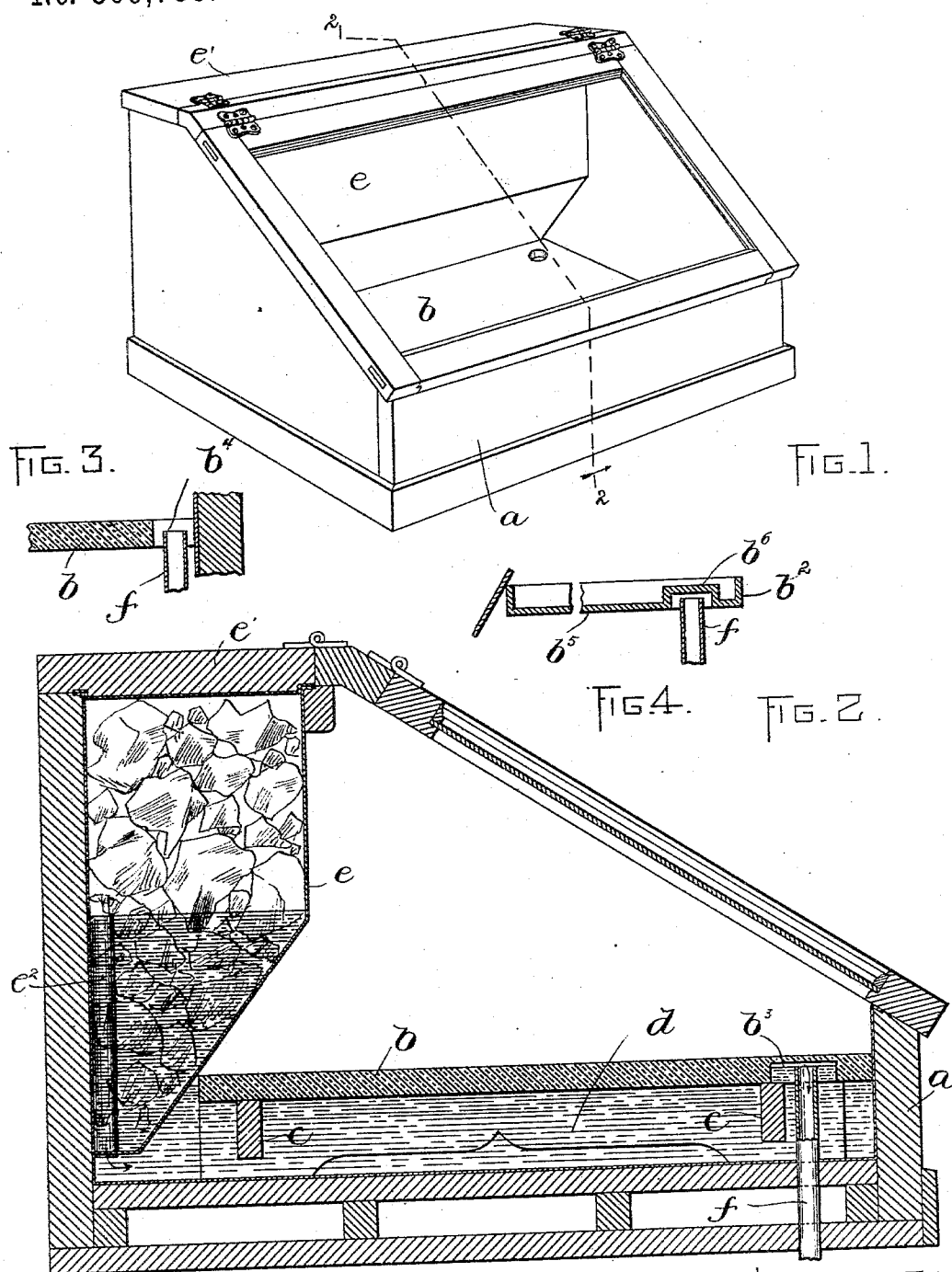


(No Model.)

C. D. HOLMES.
REFRIGERATOR.

No. 569,788.

Patented Oct. 20, 1896.



WITNESSES:

H. A. Hall,
A. L. Adams

INVENTOR:

Chester D. Holmes
by Wright Brown Quincy
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UNITED STATES PATENT OFFICE.

CHESTER D. HOLMES, OF BOSTON, MASSACHUSETTS.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 569,788, dated October 20, 1896.

Application filed January 23, 1896. Serial No. 576,517. (No model.)

To all whom it may concern:

Be it known that I, CHESTER D. HOLMES, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This invention has for its object to provide a refrigerator the storage-chamber of which shall have a large area of artificially-cooled surface, including the bottom of said chamber.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a refrigerator embodying my invention. Fig. 2 represents a section on line 2 2 of Fig. 1. Figs. 3 and 4 represent modifications hereinafter referred to.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a casing constructed at its lower portion so that liquid can accumulate therein, its bottom and its sides up to and above the false bottom hereinafter referred to being liquid-tight.

b represents a horizontal slab or false bottom, preferably composed of slate or marble, resting loosely on a supporting-frame *c*, by which it is held above the bottom of the casing, and separated therefrom by a liquid-receiving space *d*.

e represents an ice receptacle or tank which is suitably secured to the casing *a* and is located mainly above the slab *b*. Said receptacle is intended to contain a mixture of ice and salt or its equivalent and has a cover *e'* at its top and an outlet-pipe *e''* at its bottom, said pipe being arranged to discharge the liquid produced by the melting of the ice into the space *d*.

f represents an overflow or waste pipe which communicates with the space *d* and is arranged so that its upper or receiving end is above the lower surface of the slab *b*, the said pipe extending through the bottom of the casing. This arrangement of the receiving end of the overflow-pipe insures the maintenance of a body of liquid filling the space *d* and in contact with the bottom of the slab *b*,

so that said slab is kept in a cold condition. The ice-receptacle *e* forms one side and the slab *b* the bottom of the storage-chamber of the refrigerator, and presents large areas of artificially-cooled surface.

It is necessary to provide some means for preventing the liquid from flowing onto the upper surface of the slab *b*. This result may be conveniently secured by locating the receiving end of the overflow-pipe below the upper surface of the slab, as shown in Figs. 2 and 3, or by providing the slab with a raised marginal wall or flange *b''*, extending above the receiving end of the overflow-pipe and above the upper surface of the slab, as shown in Fig. 4. In Fig. 2 I show the overflow-pipe entering a recess *b'''* in the bottom of the slab, said recess being closed above the pipe. In Fig. 3 I show the pipe entering a recess *b''''*, which is open above the pipe. The slab shown in Fig. 4 (designated *b'''*) has an offset portion *b''''* above the overflow-pipe, this being an equivalent of the recess *b'''*. (Shown in Fig. 2.)

The outlet-pipe of the ice-receptacle is preferably extended considerably above the bottom of said receptacle, as shown in Fig. 2, so that the liquid will accumulate to a considerable height in said receptacle above the slab *b* before escaping. The overflow-pipe *f* is preferably located at or near the opposite end of the space *d* from the outlet-pipe *e''*, so that the liquid will flow continuously through said space.

I claim—

1. A refrigerator comprising a chamber or casing having a liquid-tight lower portion horizontally-arranged supports located above the bottom of said chamber, a loose slab resting on said supports, an ice-receptacle located higher than said slab and provided with an outlet arranged to discharge liquid into said chamber, and an outlet or overflow pipe arranged as described relatively to said supports, to permit contact of the liquid which accumulates in the chamber with the bottom of the slab and to prevent the said liquid from rising above the slab.

2. A refrigerator comprising a chamber or casing having a liquid-tight bottom, a horizontal slab or false bottom supported above the bottom of said chamber and having a re-

cess or opening extending upwardly from its
under side, an ice-receptacle located higher
than said slab and provided with an outlet
arranged to discharge liquid into the cham-
ber, and an outlet or overflow pipe the re-
ceiving end of which is located in said recess
or opening above the lower surface of said
slab and below the highest portion thereof,
while its delivering end is located below the
slab, whereby an accumulation of liquid is

maintained in contact with the slab and is
prevented from rising above the slab.

In testimony whereof I have signed my
name to this specification, in the presence of
two subscribing witnesses, this 13th day of
September, A. D. 1895.

CHESTER D. HOLMES.

Witnesses:

C. F. BROWN,

A. D. HARRISON.