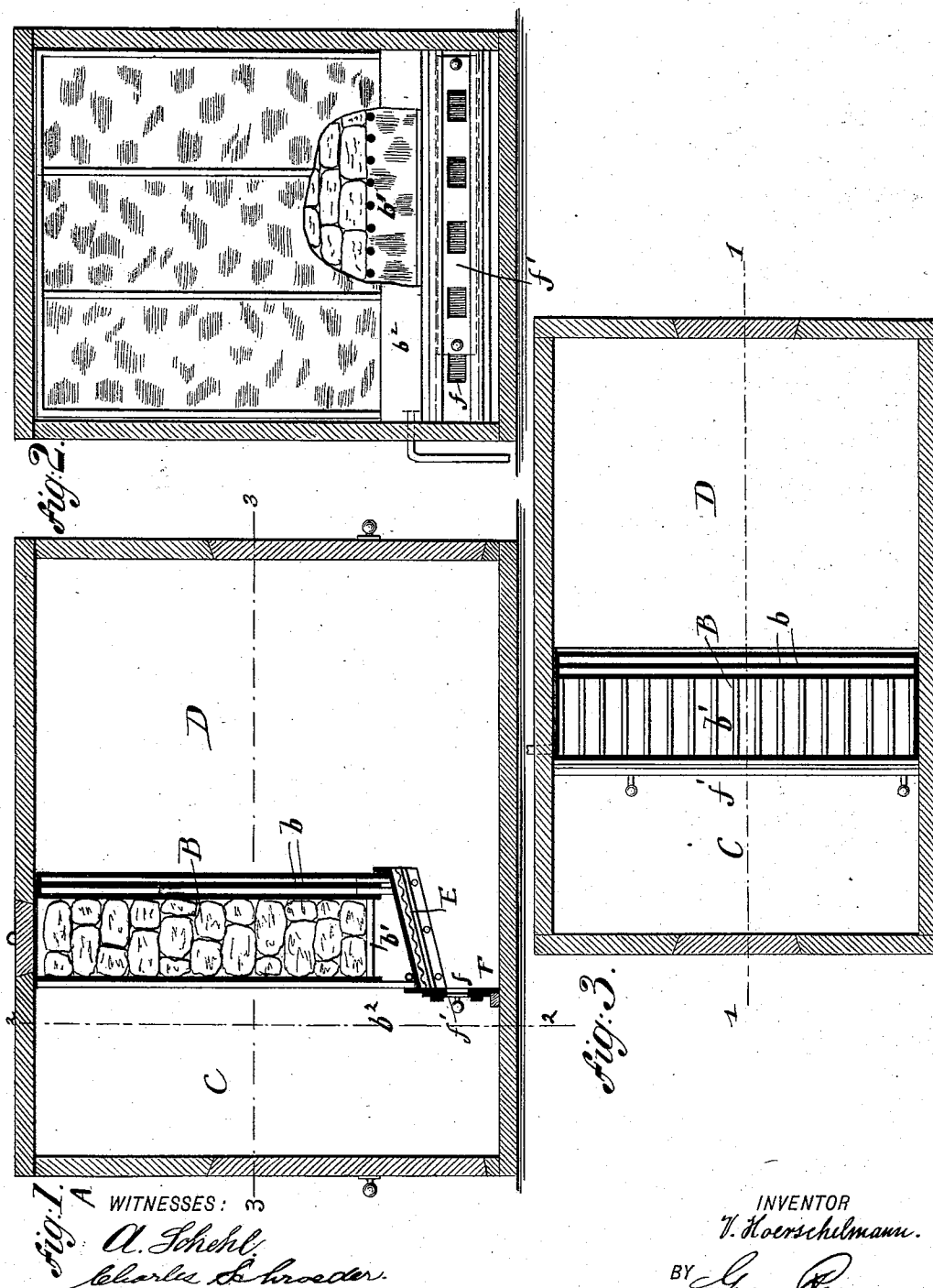


(No Model.)

V. HOERSCHELMANN.
REFRIGERATOR.

No. 477,804.

Patented June 28, 1892.



UNITED STATES PATENT OFFICE.

VALENTINE HOERSCHELMANN, OF BROOKLYN, NEW YORK.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 477,804, dated June 28, 1892.

Application filed February 6, 1892. Serial No. 420,532. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE HOERSCHELMANN, a citizen of the United States, and a resident of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This invention relates to an improved construction of refrigerators of that class which is intended for the use of butchers and others for preserving meat and similar perishable articles, in which an extra low temperature is required for the preservation of the articles, the improvement being designed with a view to furnish in the refrigerator a larger provision-chamber in which articles are stored that do not require a very low temperature, and also a chill-room in which such articles are stored which require a temperature below the freezing-point. For this purpose the invention consists of a refrigerator in which the ice-chamber is arranged transverse to the structure and at some distance from the ends of the same, so that a smaller chill-room and a larger provision-chamber is formed at opposite sides of the ice-chamber. The wall of the ice-chamber toward the provision-chamber is composed of several partitions, forming air-spaces, which extend below the grated bottom of the ice-chamber and terminate in a drip-pan, so that the frost deposited on the partition-walls when melted is conducted off by the drip-pan. Between the grated bottom of the ice-chamber and the drip-pan is an opening that communicates with the chill-room, while a gate provided with sliding registers is arranged below the lower edge of the drip-pan and the bottom of the refrigerator, so that the chilled air can be conducted from the chill-room through the register into the provision-chamber, whereby the temperature of the latter can be readily controlled.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section on line 1 1, Fig. 3, of my improved refrigerator. Fig. 2 is a vertical transverse section on line 2 2, Fig. 1. Fig. 3 is a horizontal section on line 3 3 of Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a refrigerator or refrigerating-building which is intended for the preservation of meat or other perishable substances. In the refrigerator structure A is arranged an ice-chamber B, that extends transversely across the refrigerator; but is nearer to one end wall of the same than to the other, so as to form at one side of the ice-chamber a small chill-room C, and at the other side of the same a larger provision-chamber D. The side walls of the ice-chamber B toward the small chill-room C is preferably constructed of galvanized sheet metal, which is reinforced by suitable rods, as shown in Figs. 1 and 2, while the wall toward the provision-chamber is composed of a number of parallel partitions *b b*, between which and the side wall of said chamber air-spaces are formed that prevent the formation of frost on the surface of the ice-chamber, so that consequently the temperature in the provision-chamber cannot be lowered beyond a certain degree. The lower ends of the partition *b b* extend to an inclined drip-pan E, provided with an insulating layer of peat, as shown, so that the drip produced by the melting frost on said partitions is taken up by the drip-pan and conducted through the drain-pipe *e* to the outside of the refrigerator. The ice-chamber B is provided with a grated bottom *v'*, on which the lumps of ice rest, so that the air that is conducted in downward direction through the ice and is chilled and discharged through the opening *b²*, that is arranged below the grated bottom and between the lower edge of that wall of the ice-chamber which faces the chill-room and the lower part of the drip-pan E, so that the air is conducted into the chill-room and keeps the same at a temperature below the freezing-point, so as to preserve articles like fowls, &c., which are preserved by keeping them in frozen condition for a suitable length of time.

Between the lower edge of the drip-pan E and the bottom of the refrigerator A is arranged a gate F, which is provided with openings *f* and a sliding register *f'*, so that the supply of air of low temperature from the chill-room C to the provision-chamber D can be regulated, and the temperature of the latter can be raised or lowered, as desired, ac-

according to the greater or smaller quantity of chilled air which is permitted to pass into the same from the chill-room C.

As the annoyance caused by the melting of the frost deposited on the partition-walls *b b* is entirely obviated by the discharge of the drip into the drip-pan, and as the partitions *b b* prevent the too great chilling of the provision-chamber a very low temperature can be kept up in the chill-room, while the ordinary low temperature required for preserving meats and like articles is maintained in the provision-chamber, so that the refrigerator C is adapted for the ordinary purpose of a refrigerator and the freezing of such articles as require a very low temperature without necessitating the use of the ice-chamber as a store-room for these articles that require an extra low temperature for their preservation. By means of the register below the ice-chamber the temperature either in the chill-room or in the provision-chamber can be easily regulated and adapted to the special requirements of the trade. Doors are provided in the end walls of the refrigerator, so that access is given to either chamber of the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with an ice-chamber arranged transversely in a refrigerator, so as to form a smaller chill-room and a larger provision-chamber, the wall of the ice-chamber facing the provision-chamber being formed of several partitions forming air-chambers be-

tween said partitions, of an inclined drip-pan extending from the lower end of the partition-wall to the opposite wall of the ice-chamber, so as to form an air-opening between the grated bottom of the ice-chamber and the lower part of the drip-pan, and a gate having openings, and a sliding register arranged between the lower part of said drip-pan and the bottom of the refrigerator, so as to establish communication between the chill-room and the provision-chamber and regulate the temperature in either chamber, substantially as set forth.

2. The combination of a refrigerator, an ice-chamber extending transversely across the same intermediately between the end walls, so as to form a smaller chill-room and a larger provision-chamber, an inclined drip-pan extending from the lower edge of the wall of the ice-chamber facing the provision-chamber toward the opposite wall of the ice-chamber, the lower end of the drip-pan forming an air-discharge opening between it and the lower edge of the wall facing the chill-room, and a gate arranged between the lower end of the drip-pan and the bottom of the refrigerator and provided with openings and a sliding register, substantially as set forth.

In testimony that I claim the foregoing invention I have signed my name in presence of two subscribing witnesses.

VALENTINE HOERSCHELMANN.

Witnesses:

PAUL GOEPEL,
CHARLES SCHROEDER.