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PATENTED FEB. 18, 1908.

C. PABST, JR. & H. C. SAVAGE.

REFRIGERATOR.

APPLICATION FILED MAR. 27, 1907.

Fig. 2.

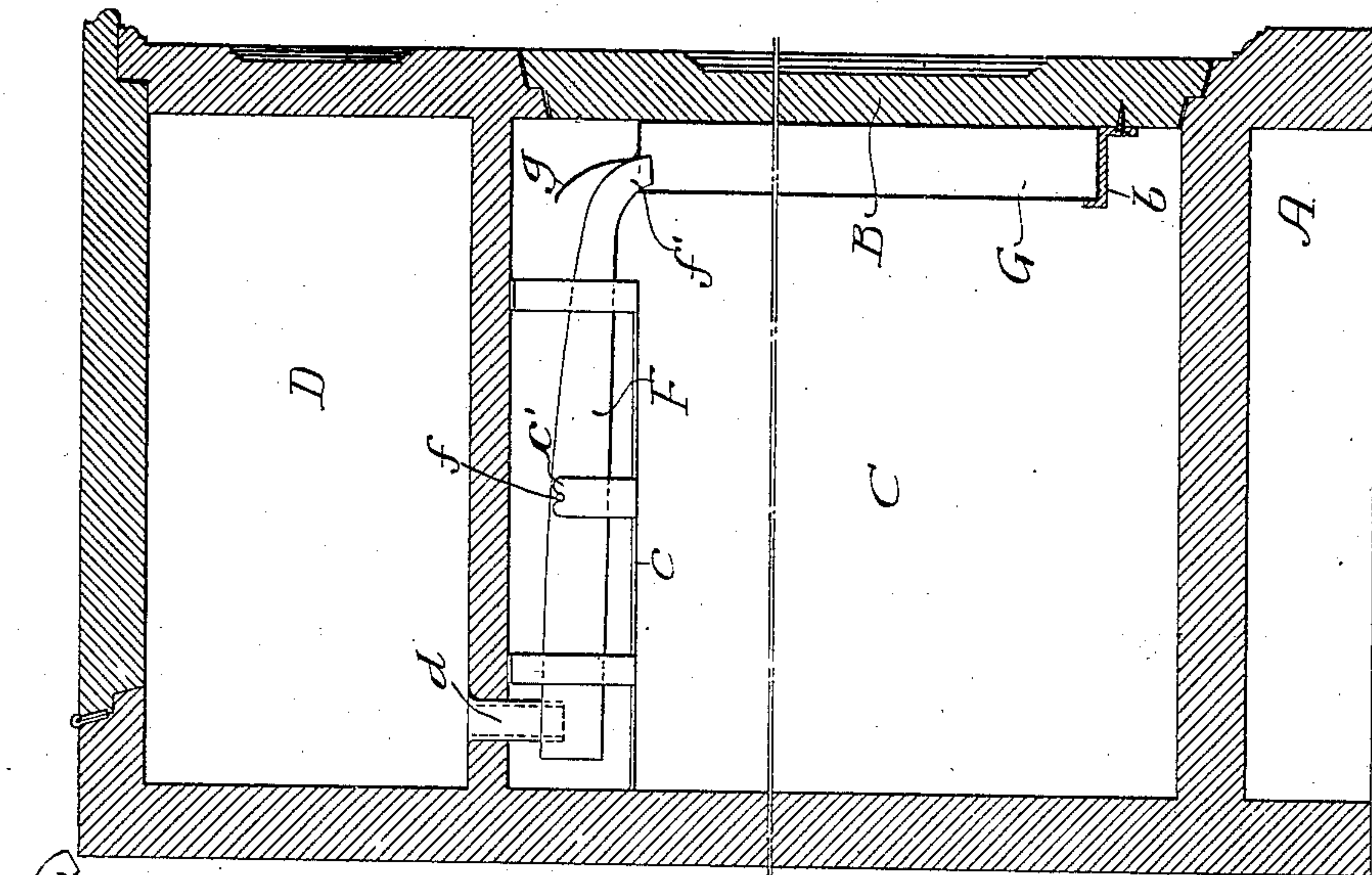


Fig. 3.

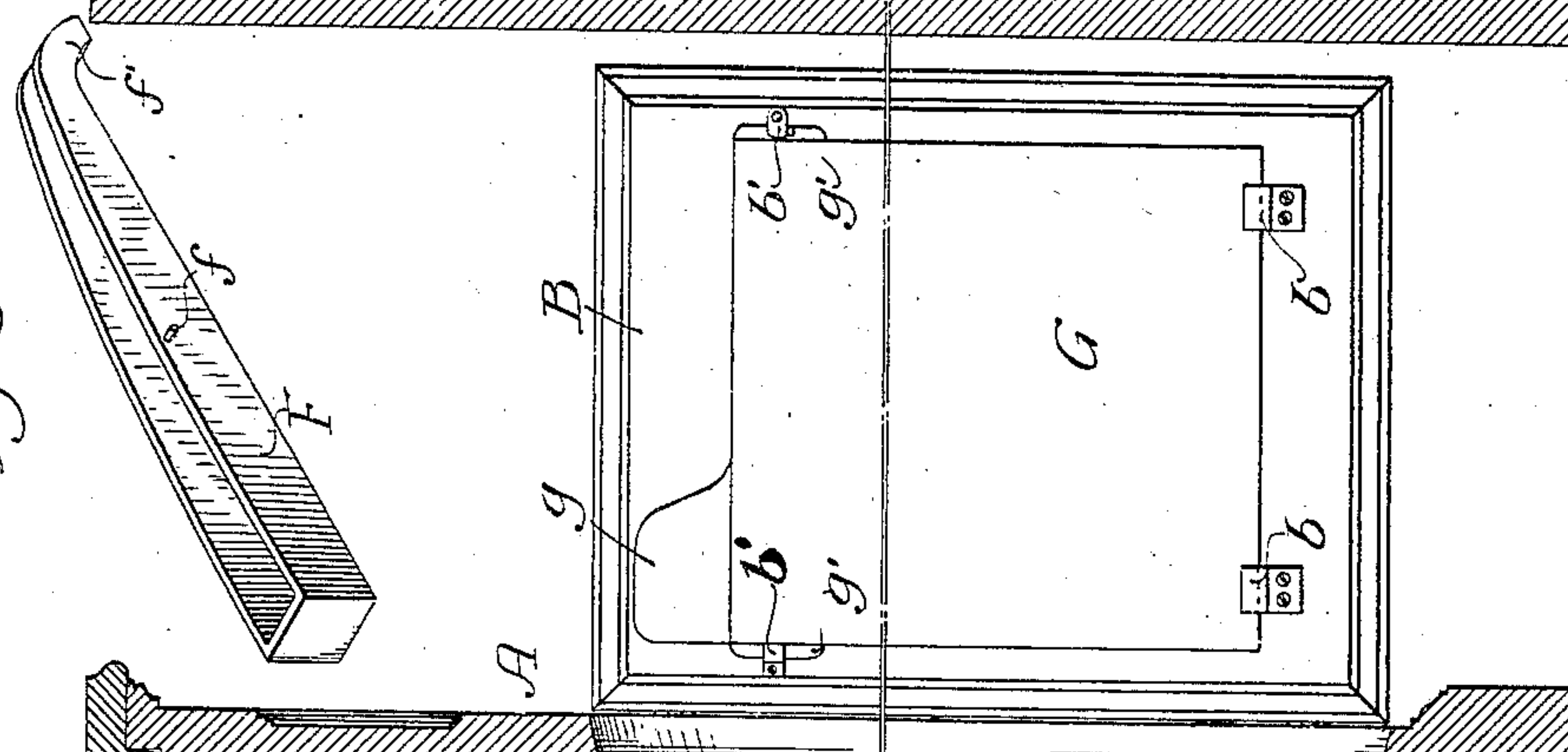
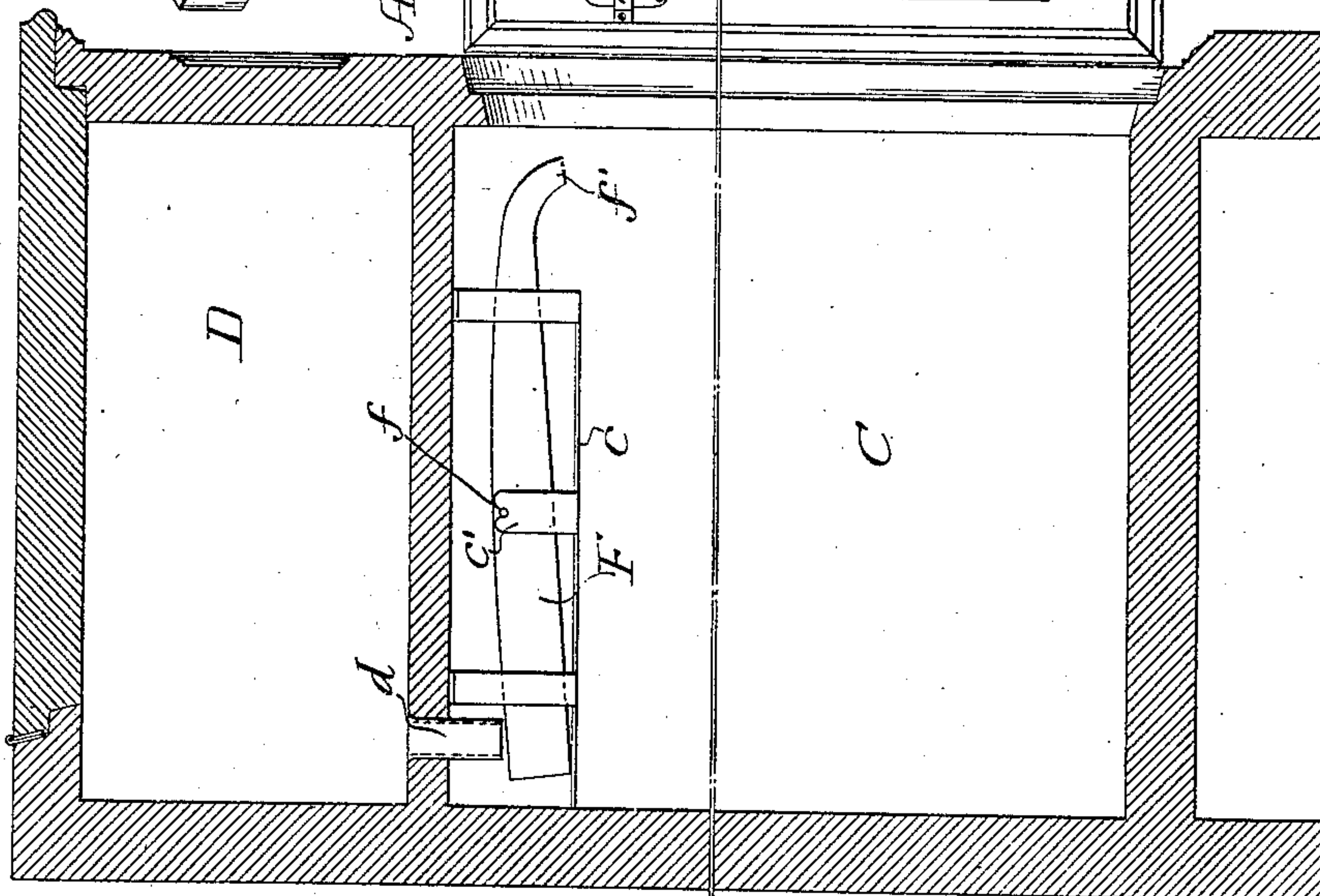


Fig. 1.



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UNITED STATES PATENT OFFICE.

CHARLES PABST, JR., AND HENRY C. SAVAGE, OF PHILADELPHIA, PENNSYLVANIA.

REFRIGERATOR.

No. 879,579.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed March 27, 1907. Serial No. 364,839.

To all whom it may concern:

Be it known that we, CHARLES PABST, Jr., and HENRY C. SAVAGE, citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Refrigerators, of which the following is a specification.

One object of our invention is to provide a connection between the ice box of a refrigerator and a receptacle carried by the door of the food compartment of said refrigerator, which shall be capable of moving to such a position as to retain the ice water discharged into it during the time that the said door is open, but which will, when the door is closed, be moved to such a position as to deliver water from the ice box to the receptacle upon the door.

A further object of the invention is to provide the door of the food compartment of a refrigerator with a removable receptacle having a device for automatically moving a conducting pipe or trough which is at all times in communication with the ice box of a refrigerator, into position to deliver water from the ice box into said receptacle and to maintain it in such position when the door is closed; the trough or pipe being of such construction and so supported that it will automatically move into a position to retain water delivered from the ice box when the door of the food compartment is open.

Another object of the invention is to provide a refrigerator with a removable receptacle for ice water so placed as to aid in maintaining a low temperature in the food compartment, in connection with a device whereby it is connected to receive water from the ice box only when the door of the food compartment is closed and is cut off from receiving water when the door is open.

These objects and other advantageous ends we secure as hereinafter set forth, reference being had to the accompanying drawings in which:—

Figure 1, is a vertical section of a refrigerator, showing this with the door of its food compartment open and illustrating the application of our invention thereto; Fig. 2, is a vertical section of the refrigerator illustrated in Fig. 1, showing the door of the food compartment closed and the oscillatory pipe or trough in such position as to deliver water from the ice box to the receptacle on the door, and Fig. 3, is a perspective view of the oscil-

latory trough or pipe forming part of our invention.

In the above drawings, A represents a refrigerator of any desired construction having the usual door B for its food compartment C and an ice box D, having a vertical outlet pipe *d* through which the water formed by the melting ice is delivered. At the top of the food compartment B is a depending frame *c*, having bearings *c'* for the reception of the trunnions or pivots *f* of an oscillatory pipe or trough F mounted so as to extend from the back of the food compartment toward the front thereof. The trunnions are so placed on this trough that it is normally overbalanced, and therefore, tends to assume the position illustrated in Fig. 1. Its inner end is directly under the outlet pipe *d* of the ice box, and it has, when in the position shown in Fig. 1, sufficient capacity to hold all the water delivered from the ice box for a period of about fifteen minutes, under normal temperature conditions. The front of the trough or pipe F is provided with a downwardly curved spout *f'*, and it is to be understood that the frame *c*, and therefore the trough F, are preferably mounted at that portion of the top of the food compartment adjacent to the hinge-carrying edge of the door B. The inside of this door is provided, adjacent to its lower edge, with two supporting brackets *b* and at its upper portion with two holding brackets or clips *b'*.

A flat box or receptacle G is held in place on the inside of the door by means of the brackets *b—b'* and has projecting upwardly from that corner adjacent to the upper hinge of the door a curved lip or cam plate *g* designed to engage the curved spout *f'* of the oscillatory trough F when the door is moved to its closed position; it being noted from Fig. 2 that there is an opening in the top of the receptacle G, in front of this cam plate, into which the said spout may fit.

When the door of the food compartment is open the oscillatory trough naturally assumes the position shown in Fig. 1, and if the customary amount of ice is placed in the ice box D, will serve to retain all the water delivered from the melting ice for a predetermined time, depending upon its capacity. The receptacle may be easily removed from the inside of the door, as its upper edge is provided with lugs *g'* fitting under the holding brackets *b'* it being necessary to first

raise it so that its lower edge clears the brackets *b*, and then, after moving said lower edge outward, sliding the receptacle downwardly until the lugs *g'* clear the holding brackets *b'*. When the receptacle has been replaced upon the door and the latter moved to its closed position, it will be seen that the cam plate engages the curved portion of the spout *f'* and turns the trough on its pivots or trunnions so that the bottom of said trough is inclined downwardly towards the front from the rear thereof, thus causing all accumulated water to be at once delivered into the receptacle, since the spout *f'* enters the opening in the top thereof, as shown in Fig. 2. Therefore, all water delivered from the ice box quickly flows from the trough *F* into said receptacle, though as soon as the door *B* is opened the receptacle automatically swings on its trunnions into the position illustrated in Fig. 1.

By the arrangement shown, we have provided a device which will give ample time in which the receptacle *G* may be emptied without permitting discharge of water from the ice box into the body of the food compartment and which is of such a nature as to be out of the way while permitting of the removal of the receptacle *G* from the door without the necessity for disconnecting any of its parts.

The device as a whole is of an inexpensive construction and is mechanically so simple that it is not likely to require either attention or repair. Moreover, the placing of the receptacle on the inside of the door is a material aid in maintaining the temperature of the food compartment at a low point.

We claim:

1. A refrigerator having an ice box and a door, a receptacle carried by the door, and a conductor placed to connect said receptacle with the ice box only when the door is in its closed position and being capable of retaining water from the ice box when the door is open, substantially as described.

2. The combination of a refrigerator having a removable receptacle for water and an ice box, with a conductor for delivering water from the ice box to the receptacle, said conductor being movably mounted so as to cut off connection between the receptacle

and the ice box when the door of the refrigerator is open, substantially as described.

3. The combination of a refrigerator having a door, an ice box provided with an outlet for water, a water receptacle on the door, and an oscillatory conductor for connecting the ice box and the receptacle when said door is in a predetermined position, substantially as described.

4. The combination of a refrigerator having an ice box provided with a water outlet opening into the food compartment, a door for said food compartment provided with a removable receptacle, an oscillatory conductor supported within the food compartment and placed to receive water from the outlet of the ice box, with means for placing said conductor in connection with the receptacle on the door when said door is closed, substantially as described.

5. The combination of a refrigerator having an ice box and a food compartment, a door for said food compartment provided with a removable receptacle for water, a cam piece on the door, a removable receptacle within the food compartment communicating with the ice box and arranged to receive and hold water when the door is opened, said receptacle having a part placed to co-act with the cam piece on the door when the latter is moved to its closed position, substantially as described.

6. The combination of a refrigerator having an ice box and a food compartment, an overbalanced conductor formed to hold a predetermined volume of water when in its overbalanced position and communicating with the ice box, a receptacle for water on the door of the food compartment, and means for moving said conductor when the door is brought to its closed position to cause it to discharge its contents into said receptacle, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES PABST, JR.
HENRY C. SAVAGE.

Witnesses:

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