

J. B. DUNKLE.

REFRIGERATOR.

APPLICATION FILED JUNE 20, 1907.

916,282.

Patented Mar. 23, 1909.

Fig-1-

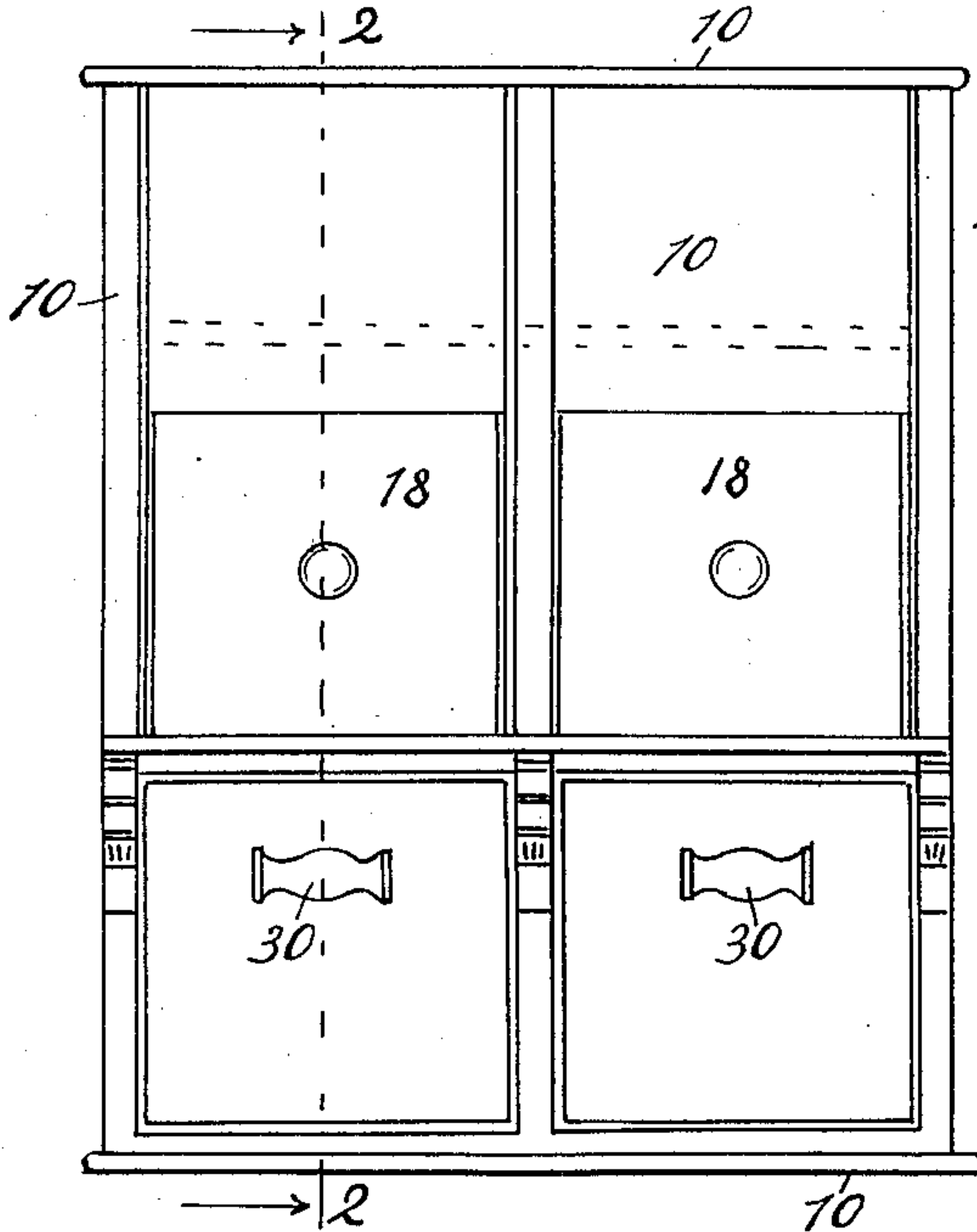


Fig-2-

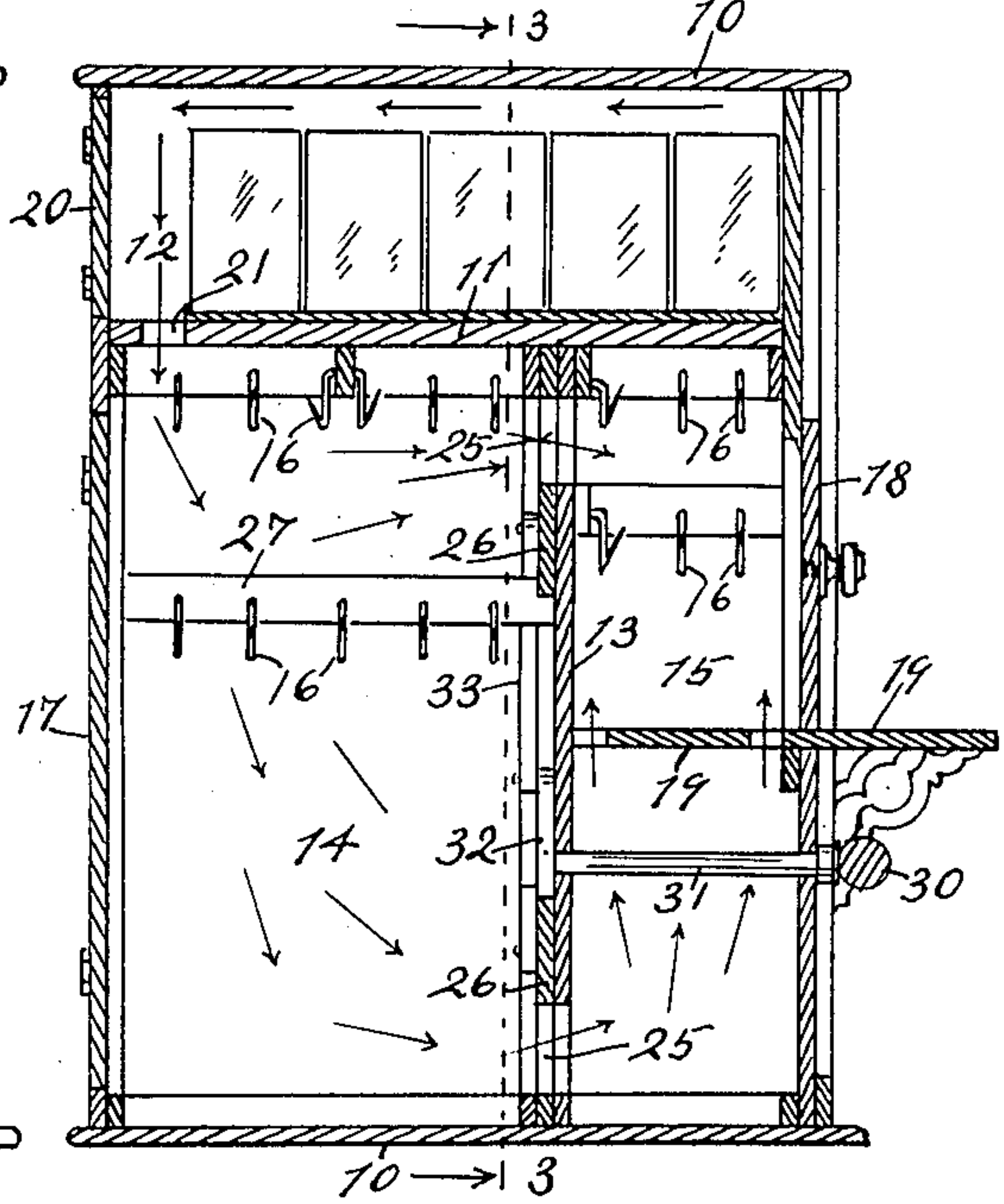


Fig-3-

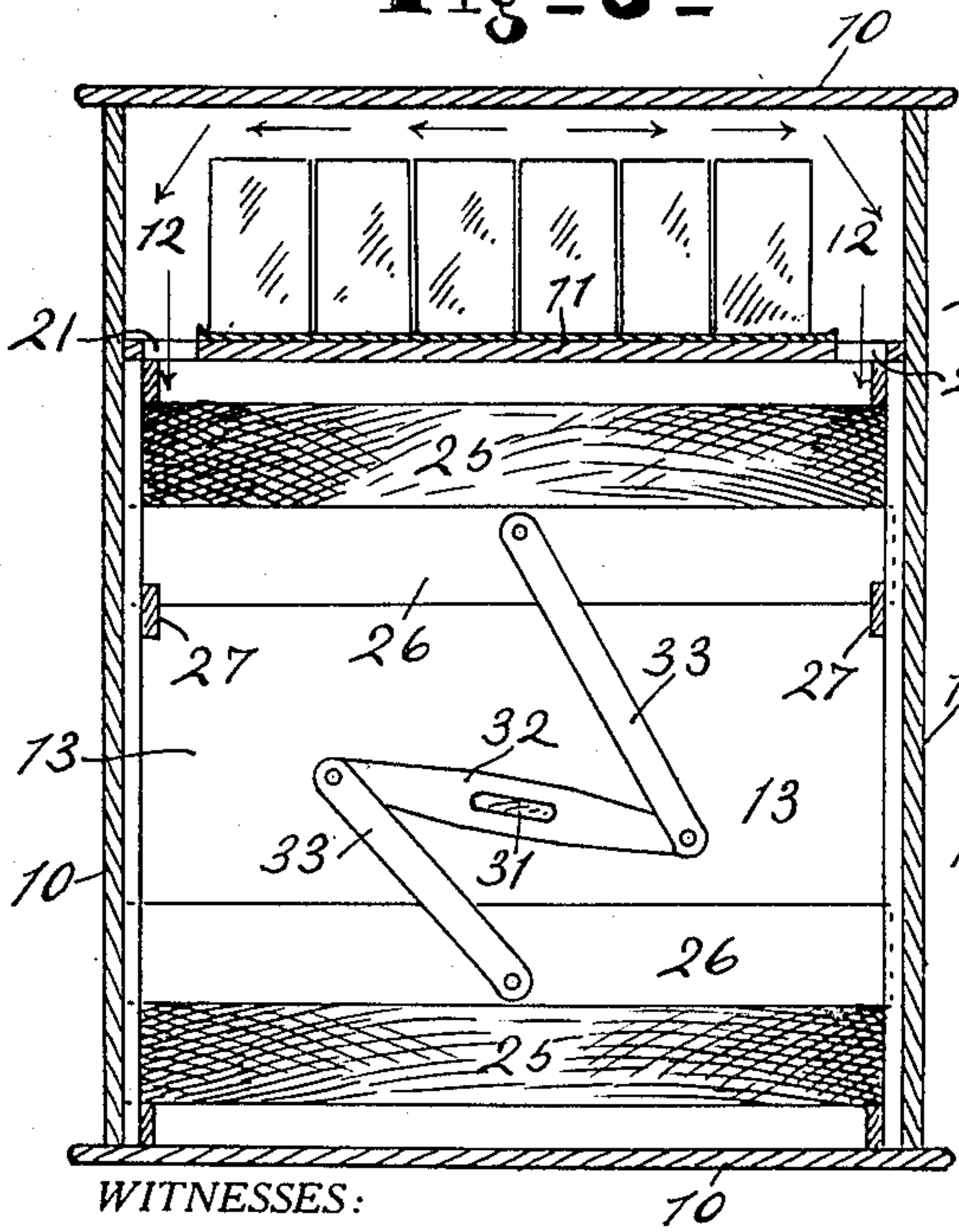
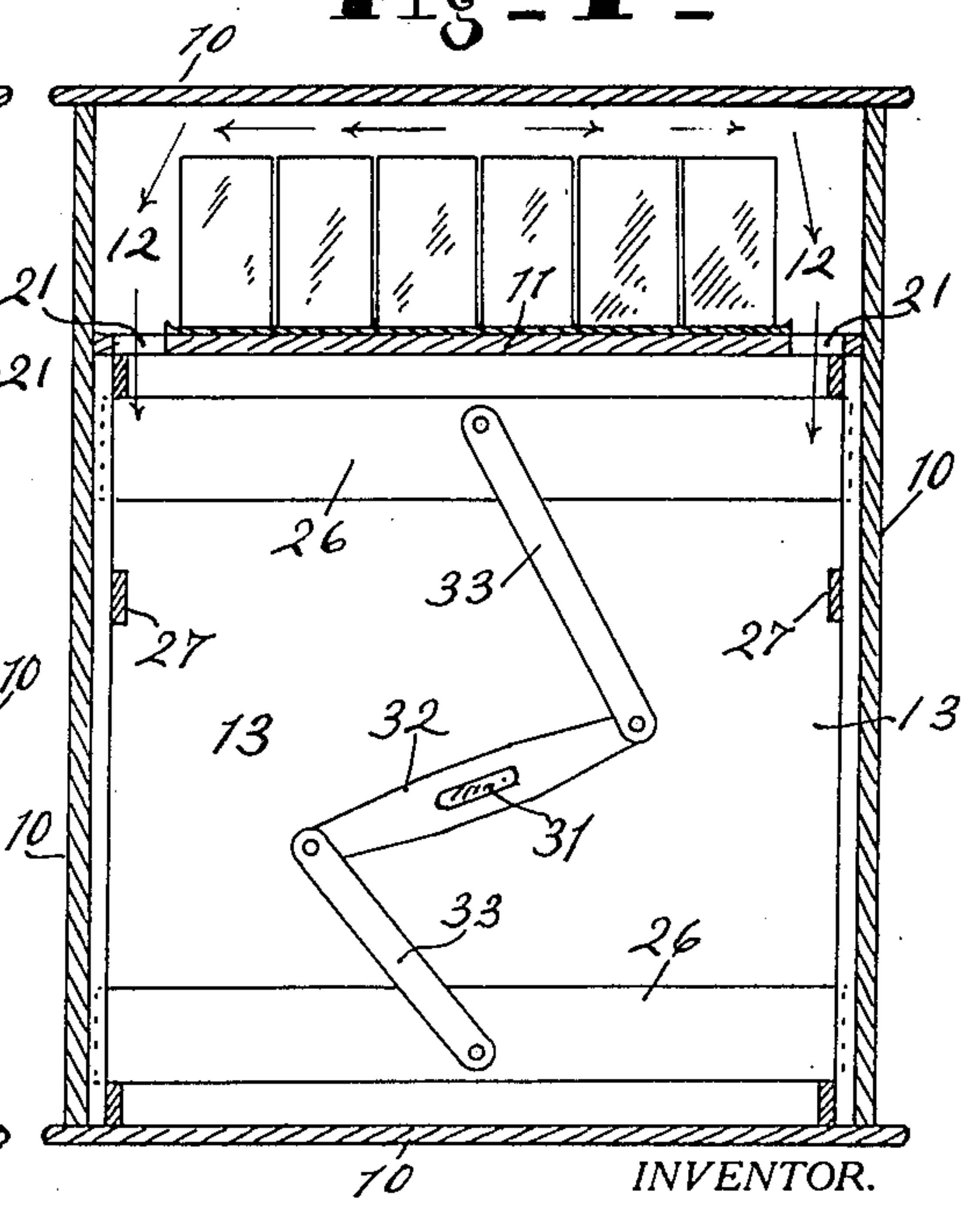


Fig-4-



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## REFRIGERATOR.

No. 916,282.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed June 20, 1907. Serial No. 379,890.

*To all whom it may concern:*

Be it known that I, JEROME B. DUNKLE, of Veedersburg, county of Fountain, and State of Indiana, have invented a certain new and useful Refrigerator; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

The object of this invention is to improve the construction of refrigerators, especially those of the larger type and which have different compartments, some of the compartments being used and opened more frequently than others.

This invention relates chiefly to the improved means herein set forth for controlling the communication between the chambers of the refrigerator whereby when one is opened, the communication will be shut off, and when it is closed, the communication will be restored. This is for the purpose of economy in the refrigerating material.

The nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Figure 1 is a front elevation of the refrigerator. Fig. 2 is a vertical section on the line 2—2 of Fig. 1. Fig. 3 is a vertical section on the line 3—3 of Fig. 2, showing the communication between said chambers closed. Fig. 4 is the same as Fig. 3 with the ventilators opened.

In detail this refrigerator is provided with an outside wall casing 10, a horizontal partition 11 for forming the "ice" chamber 12, and a vertical partition 13 for forming the chambers 14 and 15. The chamber 15 may be called the "retail" chamber, which is frequently opened, while the chamber 14 may be called the "wholesale" chamber or chamber containing the larger supply, and which is seldom opened. The particular refrigerator shown is for use in a meat market, and the beef quarters and larger pieces of meat are hung in the chamber 14 on hooks 16, and are accessible through a door 17. The smaller pieces of meat from which purchases are being sliced are hung on the hooks 16 in the retail chamber 15 and are accessible through a vertically sliding door 18. A horizontal shelf 19 is midway of the retail chamber and extends out beyond the casing. There is a door 20 to the ice box or chamber 12. A passage-way 21 extends from the chamber 12 to the

chamber 14 but none to the chamber 15. The passage 21 is made through the horizontal partition 11 along the rear edge and also along the sides, the latter appearing in Figs. 3 and 4. To this end there is provided in the device a refrigerator chamber, a "wholesale" chamber from which articles are seldom removed, and a "retail" chamber from which articles are more frequently removed, the refrigerating chamber being in communication with the "wholesale" chamber and not with the "retail" chamber, and the "retail" chamber being in communication only with the "wholesale" chamber, and means being provided for closing the communication between the "retail" and "wholesale" chambers, whereby when the "retail" chamber is opened it can be cut off entirely from the "wholesale" chamber, and since it is always cut off directly from the refrigerating chamber, there is no appreciable loss of refrigeration while the retail chamber is being used, the "wholesale" chamber remaining closed. As soon as the "retail" chamber is closed and the communication between that and the "wholesale" chamber opened, it will be cooled from the "wholesale" chamber. Hence the refrigerating chamber cools only the "wholesale" chamber and the "retail" chamber is cooled only by the "wholesale" chamber, and the communication between them can be cut off when the "retail" chamber is in use.

The partition plate 13 does not extend either to the bottom or to the top of the construction in which, or the chambers between which it is mounted, as appears in Fig. 3, so as to leave a considerable opening 25 at the upper end and also at the lower end for very full and free communication between the chambers 14 and 15 whereby the chamber 15 is kept cool. These openings 25 are closed by plates or dampers 26 slidably mounted at their ends in the side walls of the refrigerator. The upper one is stopped in its downward movement by stops 27. These slidable plates 26 are controlled by a handle 30 outside the refrigerator under the shelf 19 on a shaft 31 which is mounted in the front wall of the refrigerator and the partition 13 so that it can rotate, and to its inner end a lever 32 is centrally secured, and connecting bars 33 are pivotally connected to the ends of the lever 32 and to the plates 26, so that when the handle 30 is



turned in one direction, said plates 26 will be moved toward each other and the communication opened between the two chambers, and the reverse movement will close 5 said openings.

In operation before the sliding door 18 is opened, the handle 30 is operated to close the openings 25. Then while meat is being removed from or replaced in the chamber 10 15, there will be no escape of cold air from the chamber 14. After the door 18 is closed, then the handle 30 is reversed and communication reestablished between the chambers 14 and 15. The openings 25 by 15 being at the bottom and at the top of said chambers permit the free movement of the air currents within the refrigerator so that the parts thereof will be cold and of substantially the same temperature.

20 The arrows in Fig. 2 indicate the direction of movement of the cold air from the refrigerating chamber. It passes from said chamber through the passage 21 into the chamber 14 and thence from the bottom and top 25 thereof into the upper and lower parts of chamber 15.

What I claim as my invention and desire to secure by Letters Patent is:

30 1. A refrigerator including an "ice" chamber, a second chamber in communication with the "ice" chamber, a third chamber adjacent the second chamber with a vertical partition between them that does not extend to the top and bottom of said cham- 35 bers whereby openings are left at the top and bottom of said partition, there being

no communication between the "ice" and third chambers, vertically slidable plates for closing the openings between the second and third chambers, a rocking lever mounted 40 in said partition, connecting bars between the ends of said levers and said sliding plates, and means operable outside the refrigerator for rocking said lever so that said sliding plates will simultaneously be moved into an 45 opening or closing position.

2. A refrigerator including an "ice" chamber, a second chamber in communication with the "ice" chamber, a third chamber adjacent the second chamber with a ver- 50 tical partition between them that does not extend to the top and bottom of said chambers whereby openings are left at the top and bottom of said partitions, there being no communication between the "ice" and 55 third chambers, a horizontal shelf projecting into the said third chamber, a door above said shelf, a shaft mounted under said shelf operable from the outside and mounted in said partition, a rocking lever mounted on 60 said shaft, sliding plates for closing the communication between the second and third chambers, and pivoted connecting bars between said sliding plates and the end 65 of said rocking lever.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

JEROME B. DUNKLE.

Witnesses:

C. C. DUNKLE,  
S. J. LUDLOW.