Feb. 28, 1933. V. P. WARREN 1,899,171

REFRIGERATOR CONSTRUCTION

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Fig. 1.

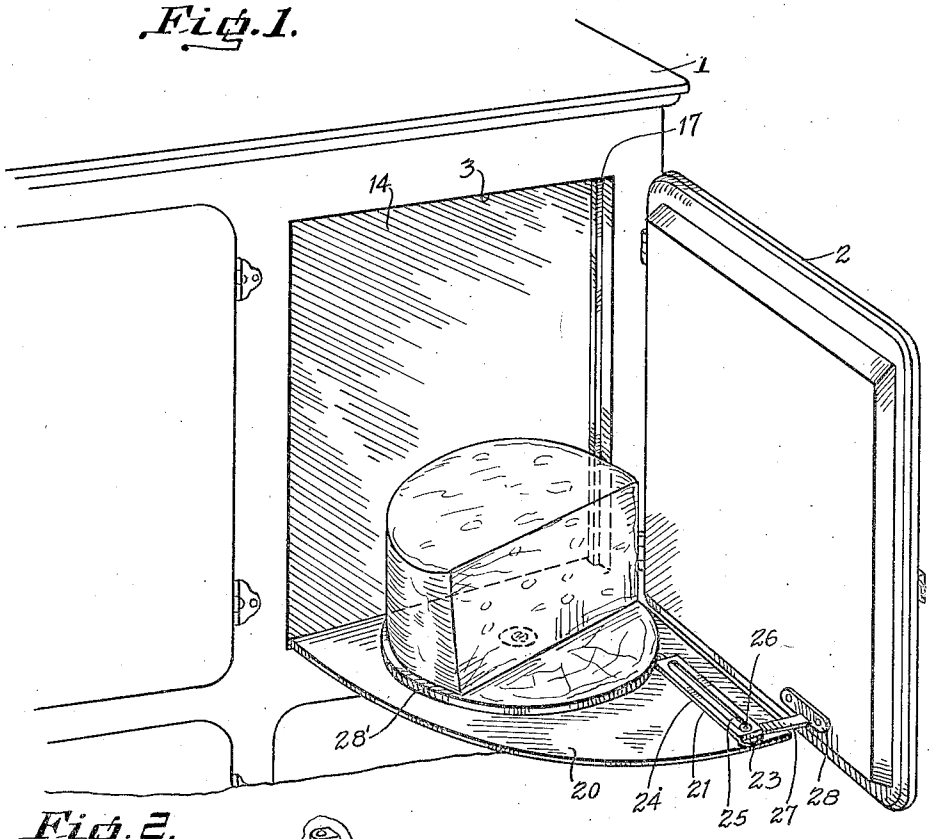


Fig. 2.

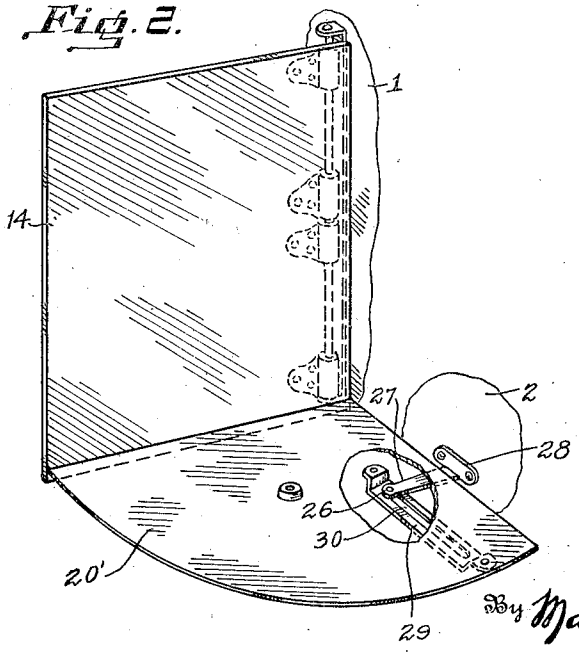
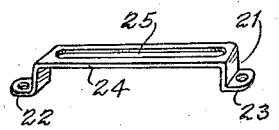


Fig. 3.



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Fig. 4.

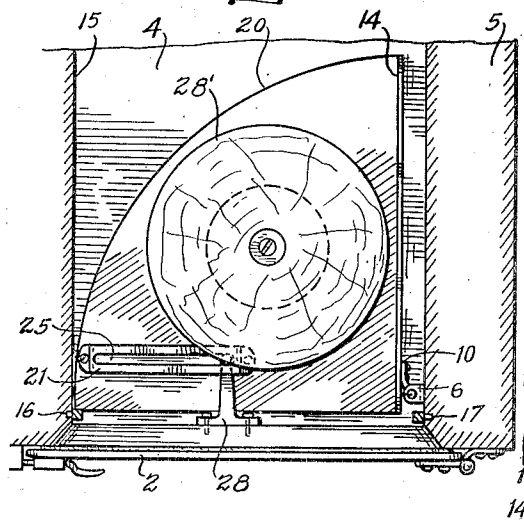


Fig. 5.

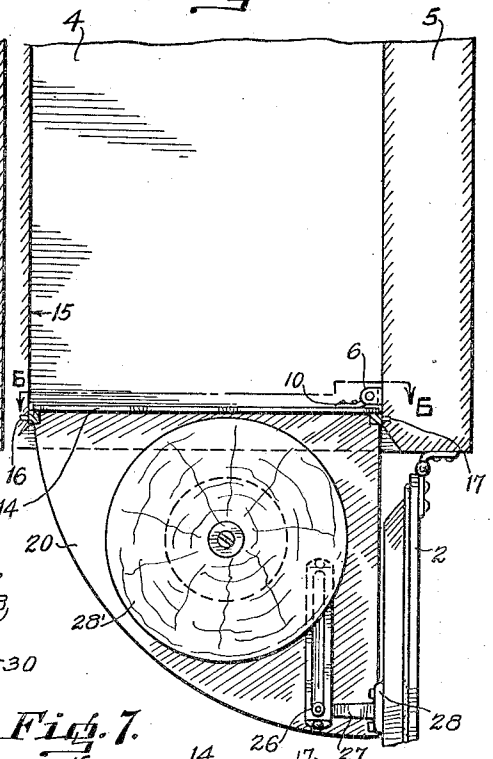


Fig. 8.

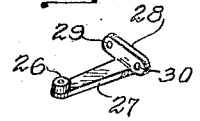


Fig. 6.

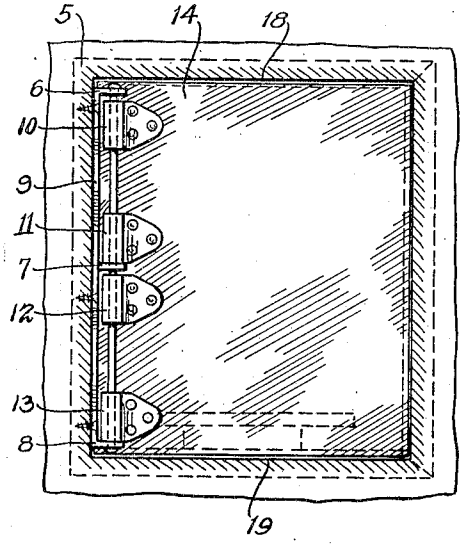
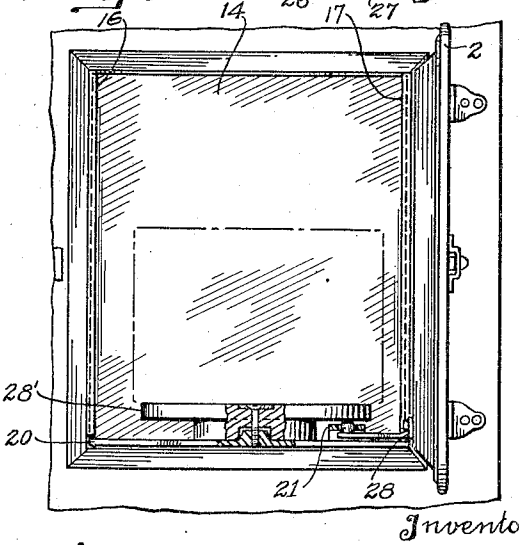


Fig. 7.



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UNITED STATES PATENT OFFICE

VIRGIL P. WARREN, OF ATLANTA, GEORGIA

REFRIGERATOR CONSTRUCTION

Application filed December 26, 1928. Serial No. 328,468.

The invention forming the subject matter of this application is a store fixture of the refrigerator type, adapted to facilitate the storage and dispensing of perishable articles.

The main object of the invention is to provide a refrigerator construction in which the goods to be dispensed therefrom may be withdrawn from the refrigerator merely by opening the door thereof.

A further object of the invention is to provide a construction of this type in which the opening of the door not only withdraws the article to be dispensed, but also operates an inner closure plate which closes the opening when the door is opened to its limit.

Another object of the invention is to provide a shelf, for the article to be dispensed, between the closure plate and door, so that the article to be dispensed may be moved into and out of the refrigerator as desired.

Other objects of the invention will become apparent as the detailed description thereof proceeds.

In the drawings:

Figure 1 is a perspective of a part of a refrigerator embodying this invention;

Figure 2 is a perspective of a modified form of the invention shown in Figure 1;

Figure 3 is a perspective of a detail of construction of the form of the invention shown in Figure 1;

Figure 4 is a fragmentary plan view of an article supporting structure forming part of the invention shown in Figure 1;

Figure 5 is a fragmentary plan view of the parts shown in Figure 4, but moved to a different position;

Figure 6 is a vertical section taken on the line 6—6 of Figure 5;

Figure 7 is a front elevation of the parts shown in Figure 5 and with parts broken away to show details of construction; and

Figure 8 is a perspective view of one of the details of construction shown in Figure 5.

Referring to Figure 1, there is shown part of a refrigerator 1, having a door 2 hinged to the front thereof to close an opening 3 leading to a compartment 4 in the refrigerator. (See Figures 4 and 5.)

The side wall 5 of the refrigerator is provided with lugs 6, 7 and 8, (see Figure 6) extending from a plate 9 which is suitably secured on the inside of the side wall 5. The plate 9 extends substantially the whole length of the opening 3 and has pivoted thereto the hinge elements 10, 11, 12 and 13, which are suitably secured to the back of a closure plate 14 of a size to completely close the opening 3 when swung into closing position.

The side wall 5 and the opposite side wall 15 of the compartment 4 are provided with beads 16 and 17 which form stops for the striking and hinged edges of the closure plate 14. The top and bottom edges of the closure plate 14 strike against the top member 18 and bottom member 19 of the framework forming the refrigerator opening 3. The construction just described is such that when the closure plate 14 is in the position shown in Figure 5, the outside air is completely excluded from the chilled air in the refrigerator.

Near the lower edge of the front face of the closure plate 14, a shelf 20 is suitably secured at right angles to the closure plate. This shelf 20 is quadrant-shaped and of a radius substantially equal to the width of the door opening 3. A slotted bracket 21 is mounted on top of the shelf 20 near the straight edge thereof remote from the closure plate 14. The bracket 21 comprises foot plates 22 and 23 connected to opposite ends of a centrally raised part 24 which is provided with a slot 25 adapted to receive slidably a pin 26 formed on the end of a bracket 27 which is fixed to the inner face of the door 2 near the lower edge thereof. A plate 28 is formed integral with the bracket 27 and is provided with apertures 29 and 30 adapted

to receive screws or bolts for securing the bracket to the inner face of door 2.

It will be apparent from Figures 4 and 5, that when the outer door is closed, the pin 26 sliding in the slot 25 causes the closure plate 14 and shelf 20 to be supported wholly within the compartment 4. When the door 2 is opened, as shown in Figure 5, the pin 26 engaging the bracket 21 holds the shelf 20 outside of the refrigerator and at the same time holds the closure plate 14 against the beads 16 and 17 and prevents the outer air from entering the refrigerator compartment 4.

The bracket 21 and the bracket 27 are preferably arranged on the shelf 20 and door 2 so as to form a slidable support for the free end of the shelf 20, and thereby eliminating the necessity for a brace ertending from the closure plate 14 to support this free end.

The construction described is primarily intended to support heavy circular articles, such as cheese, which must be preserved and which is ordinarily intended to be dispensed in comparatively small quantities at one time. Since articles of this type are usually very heavy, it is desirable that the manual labor of lifting them into and out of a refrigerator be eliminated as far as possible, and this construction is designed to eliminate such labor.

In order to support heavy cylindrical articles of the cheese type on the shelf 20, in position to facilitate the cutting thereof, the shelf 20 is provided with a circular supporting disk 28 pivotally mounted in any suitable manner on the shelf 20.

The bracket 21 may be mountd on top of the shelf 20 as shown in Figures 1, 4, 5, and 7, and this is a preferable form since all the parts are accessible through the door opening 3 and above the bottom 19 of the framework of the opening. However, another form of the invention is contemplated and this form has a shelf 20′ connected to the closure plate 14 sufficiently far above the bottom edge thereof to accommodate a plate 29 secured to the underside of the shelf 20′ and provided with a slot 30 adapted to receive slidably the pin 26 of the bracket 27 which is secured to the inside face of the door 2 near the lower edge thereof.

The operation of the invention will be apparent from inspection of the drawings and need not be further described herein.

What I claim is:

In a refrigerator having a frame work providing an opening therethrough to a compartment therein, a door for said opening pivotally mounted on the outer face of the frame work by hinges mounted on an outer side edge of the frame, a closure plate pivotally mounted by one edge within the compartment by hinge means having pivots spaced from but parallel with those of the door hinges, a quadrant shaped shelf rigidly secured by one angular edge to the bottom part of the closure plate, a slotted slide plate secured to the shelf adjacent to and parallel with its other angular edge and a supporting bracket rigidly secured to the inner face of the door and having a pin slidable in the slot of said slide plate, whereby said shelf is supported in part by the bracket and plate and transmits motion from the door to the closure plate as specified.

In testimony whereof I affix my signature.

VIRGIL P. WARREN.