Feb. 1, 1927. 1,616,085

M. W. HEATH

REFRIGERATOR

Filed Oct. 9, 1925

Fig. 1.

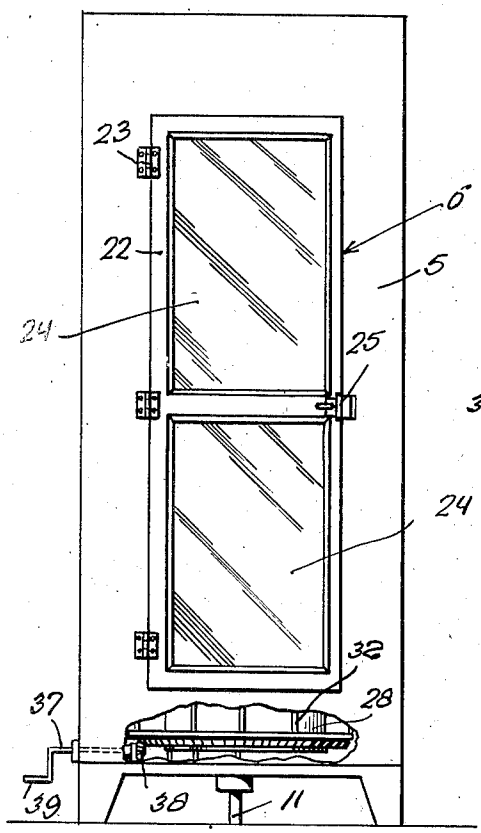
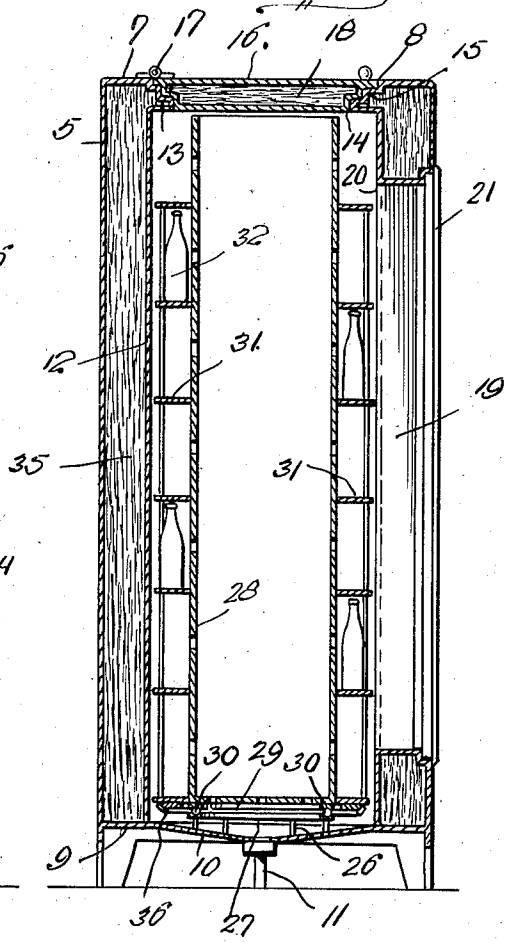


Fig. 2.



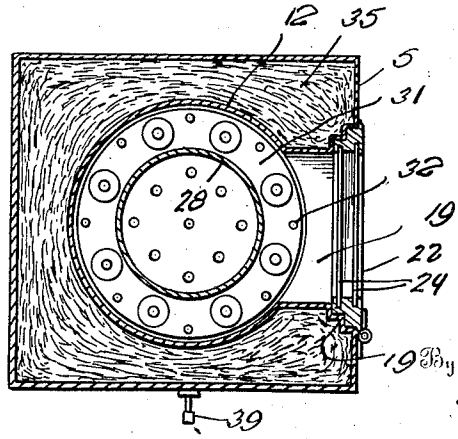


Fig. 3.

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UNITED STATES PATENT OFFICE.

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REFRIGERATOR.

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The present invention relates to a refrigerator and has for its principal object to provide a more compact and convenient structure of this nature which is exceedingly simple, comparatively inexpensive to manufacture, strong, durable, efficient and reliable in use, and otherwise well adapted to the purpose for which it is designed.

Another important object of the invention is to provide a refrigerator having a casing with an ice receptacle, rotatably mounted therein and provided with shelves for supporting bottles or the like and the casing being provided with a transparent closure for allowing access to the bottles or the like and also allowing said bottles to be seen from the exterior of the refrigerator whereby the contents of the refrigerator may be on display and whereby it is possible to obtain easy access thereto.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing—

Figure 1 is a front elevation of the refrigerator embodying the features of my invention, showing a portion of the bottom section broken away to illustrate the interior mechanism,

Fig. 2 is a vertical section taken therethrough, and

Fig. 3 is a horizontal section taken therethrough.

Referring to the drawing in detail, it will be seen that 5 designates the outer casing which is preferably constructed with four vertical rectangularly disposed walls, one of which is provided with an opening 6. The top 7 of the casing 5 is provided with an opening 8. The bottom 9 of the casing 5 is provided with a downwardly dished center portion 10, from which depends a suitable drain pipe 11. An inner casing 12, preferably of cylindrical formation is mounted within the outer casing, rising from the bottom 9 thereof to surround the central dished portion 10. The top 13 of this inner casing 12 is provided with an opening 14.

A stepped flange 15 extends between the edges of the openings 8 and 14 for the purpose of forming a door frame. A door 16 is hinged as at 17 in the door frame 15 and is preferably of a hollow construction containing suitable insulation 18. A flange 19 extends from a rectangular opening 20 provided in the side of the cylindrical casing 12 and registering with the opening 6. Adjacent the opening 6, the flange 19 terminates in a stepped structure 21 forming a door frame within the opening 6. In this door frame 21 there is mounted a door 22 hinged as at 23, and provided with spaced transparencies 24. The door 22 may be held closed by any suitable fastening means 25. When this door 22 is opened, access may be had to the interior of the casing 12 and when the door is closed, the contents of the casing 12 will be visible through the transparency 24.

A suitable bearing structure is mounted on the dished portion 10 of the bottom 9 and includes legs 26 supporting a race 27. A perforated cylindrical container 28 has a race 29 on its bottom and bearings 30 are disposed between the races 27 and 29, thereby rotatably mounting the cylindrical container within the casing 12. A plurality of vertically spaced annular shelves 31 are disposed exteriorly about the container 28 and are braced in relation to each other by rods 32 or in any other suitable manner. Bottles or the like are adapted to be received on the shelves. By opening the door 16, ice may be placed in the container 28, thereby setting up a circulation between the interior of the container 28 and the interior of the casing 12 for the purpose of cooling the bottles or the like on the shelves 31. As the ice melts in the container 30, the water may drip through the apertures thereof onto the dished portion 10 of the bottom 9 through the drain pipe 11.

If the refrigerator is used to cool bottled goods, it will be seen that they may be very easily placed on the shelves 31 and as they are being taken from the refrigerator, the container may be turned so as always to display some bottles through the transparency 24 of the door 22 until they have become exhausted. It is apparent that the same advantage is true no matter what the nature of the goods may be which is stored in the refrigerator. The ice may be cracked and very easily placed in the cylindrical container 26 when the door 16 is opened.

It is thought that the superior compactness and convenience of the operation will

now be quite apparent without a more detailed description thereof. It is desired, however, to point out that the present embodiment of the invention is disclosed merely by way of example since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description. Changes in the details of construction and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed, or sacrificing any of its advantages.

If desired suitable insulating material 35 may be placed between the inner and outer casings, and about the flange 19. If desired, a bevel gear 36 may be fixed to the bottom of the container 28. A shaft 37 with the bevel pinion 38 is operatively associated with the gear 36 and has a crank 39 exteriorly of the casing 5 so that the container may be rotated without opening the door 22.

Having thus described my invention, what I claim as new is:—

A refrigerator of the class described including a bottom having the central portion thereof dished downwardly, an outer casing rising from the bottom at the outer edge thereof, an inner casing rising from the bottom at the edge of the dished portion, insulating material between the casings, an annular race, legs supporting the annular race above the dished portion, a beveled gear, bearing elements on one side of the beveled gear engaging the race, a pinion in mesh with the beveled gear, a crank on the pinion journaled through the casings, and a cylinder rising from the beveled gear within the inner casing.

In testimony whereof I affix my signature.

MILBOURN W. HEATH.