

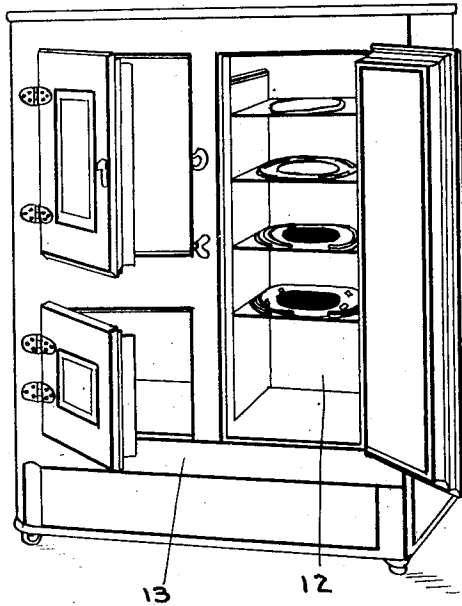
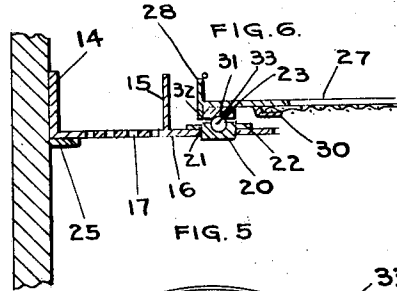
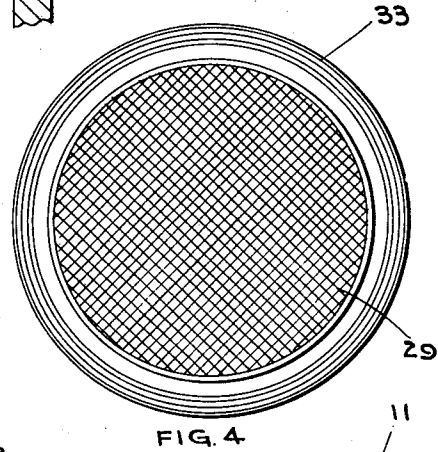
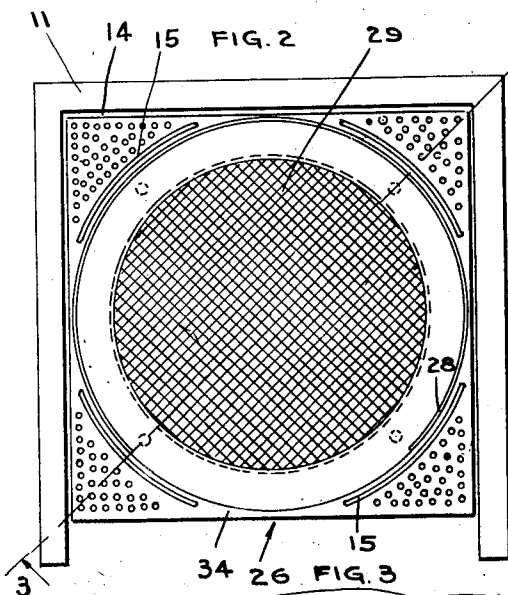
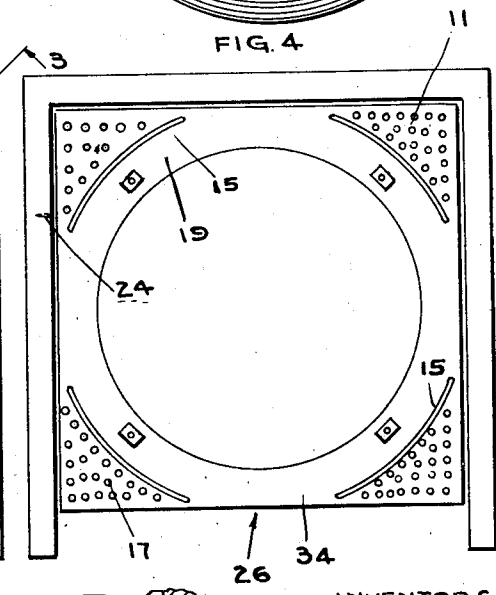
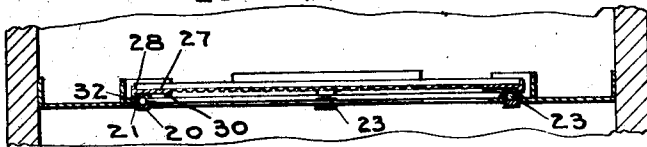
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REFRIGERATOR REVOLVING RECEPTACLE

Filed Aug. 10, 1927

FIG. 1



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UNITED STATES PATENT OFFICE.

LOUIS S. SHAUER AND ROSE SHAUER, OF LOS ANGELES, CALIFORNIA.

REFRIGERATOR REVOLVING RECEPTACLE.

Application filed August 10, 1927. Serial No. 211,951.

Our invention is a refrigerator revolving receptacle.

An object of our invention is the construction of a refrigerator with a revolving receptacle, that is, with shelves which revolve or may be revolved to facilitate placing articles in the refrigerator and removing them therefrom.

Another object of our invention in a revolving receptacle suitable for a refrigerator, is in supporting each of the shelf-like receptacles from the walls of a cooling chamber of a refrigerator, and having these shelves or receptacles supported in a manner to allow them to be revolved. The person inserting or removing things from the shelves being enabled to revolve any one or more of the shelf-like receptacles.

Another object of our invention is constructing the supports for a rectangular shaped cooling chamber with the supports fitting in the corners and adapted to support small articles, and with the shelves constructed circular and resting on the corner supports, their being a suitable inter-connection between the supports and the shelves to force the shelves in a rotary movement, such shelves being preferably mounted on the ball and socket construction.

In constructing our invention we use a rectangular bracket which may fit in the corners of a rectangular cooling chamber of a refrigerator, and this bracket has an arcuate rim to retain articles placed on the bracket. Centrally the bracket is provided with an extension or flange with sockets having balls mounted therein. The shelves or receptacles having a ring or the like on the under surface, such ring having an annular groove forming a ball race and engaging the balls retained in the sockets on the bracket. The shelves have an annular plate supported by the ring and with a rim outside of the plate to prevent articles from falling off the shelf or receptacle. The center portion of the shelf being preferably made of foraminated material such as a woven mesh fabric of metal.

Our invention in its various aspects will more readily be understood from the following description and drawings, in which:

Figure 1 is a perspective view of a refrigerator with the cooling chamber opened.

Figure 2 is a horizontal or plan view of one of the shelves or receptacles showing the supporting bracket.

Figure 3 is a diagonal vertical section on the line 3—3 of Figure 2 in the direction of the arrows.

Figure 4 is a plan view of the bracket with the shelf or tray removed.

Figure 5 is an underneath view of the revolving shelf or tray.

Figure 6 is an enlarged detail on the line 3—3 of Figure 2 showing the mounting of the bracket and the connection of the trays to such bracket.

The bracket used in our construction is designated by the numeral 11 and is substantially rectangular in shape, fitting in the corners of the cooling compartment 12 of the refrigerator 13, the central part being open. The bracket preferably has upwardly extending rims on the two sides and the back and is without a rim on the front. There are a series of segmental arcuate rims 15, which, if desired, may be made continuous into one rim. These rims allow articles such as bottles to be inserted in the corners of the bracket and retained thereon. The floor 16 of the bracket is preferably perforated at the corners as indicated at 17. It is, however, advisable to have the rim 15 discontinuous in the front so that articles may readily be inserted on the trays, as hereunder described.

Internally the bracket has an arcuate flange or extension 19 preferably in the same plane as the floor 16, and has cups 20 supported in apertures 21. Each cup is illustrated as having a small flange 22 bearing on the arcuate extension or flange 19, and in each cup there is mounted a ball 23. The bracket may be secured to the side walls of the cooling chamber by means of screws 24 or by a series of pins 25 on which the bracket rests. It is to be understood that the supporting screws and the pins may be placed at different heights in the cooling chamber so that the revolving trays or shelves may be of different elevations.

Each of the shelves or trays is designated by the numeral 26 and is constructed with an annular plate 27 having an upstanding rim 28. The center part of the tray is constructed of foraminated material such as wired gauze or other woven wire material indicated at 29, and secured by means of a gripping flange 30, to the annular plate 27 (see Figure 6). A metal ring 31 is secured to the under side of the annular plate 27 fitting against a downwardly extending flange 32. This ring has a

groove 33 forming a ball race in which the balls 23 may fit.

The manner of mounting and functioning of our revolving trays, shelves or receptacles is substantially as follows. After the brackets have been suitably positioned, the trays are mounted thereon with the balls of each of the brackets engaging in the groove or ball race of each of the trays. This allows the trays to be readily rotated, for although the balls are held in a fixed position relative to the brackets, they may rotate in the cups of such brackets and allow rolling or partial rolling or sliding of the ring 33 of the trays on the balls. This allows the trays to be rotated either direction, facilitating placing supplies on the trays and the removal of supplies therefrom. It is desirable that a section of the rim 28 be omitted as indicated at 34, as when this part is facing the front of the cooling chamber, articles may be more readily placed on the trays and removed therefrom than when the rim is continuous and when the tray is rotated, so that this section is covered by the rims 15 of the bracket, or is adjacent the walls of the cooling chamber, articles are prevented from falling off the revolving trays.

It is apparent that the brackets and the trays may be made in different character from that set forth, and these may be, if desired, of solid material; and in addition, the balls, instead of being mounted in small cups, can be mounted in races which give a somewhat elongated run-way for the balls on the brackets. Moreover, if desired, the bracket may be constructed to have a continuous run-way so that the balls will not be held stationary but will allow free rolling of the tray on the bracket without necessitating a slipping action.

Various changes may be made in the principles of our invention without departing

from the spirit thereof, as set forth in the description, drawings and claims.

We claim:

1. A receptacle comprising in combination a bracket structure, rectangular in plan and adapted to be secured to three sides of a rectangular container, said bracket having a large circular opening in the center with a horizontal structure adjacent said opening, vertical segmental rims spaced outwardly from the opening and separated one from the other, and a circular tray with means to support the tray on the said horizontal portion of the bracket adjacent the opening for a rotary movement, the tray having a peripheral rim cut away at one section to allow ready inserting and removing of articles, the rim on the tray and the segmental rims on the bracket being adjacent each other.

2. A receptacle comprising in combination a bracket structure, rectangular in plan and adapted to be secured to three sides of a rectangular container, said bracket having a large circular opening in the center and having a horizontal flange adjacent said opening, a series of cups mounted in said flange, each cup having a ball therein, and a circular tray having a circular ring on its under side with a groove therein, forming a ball race, said race engaging the balls in the cups and allowing rotation of the said tray, the tray having a rim on its periphery cut away at one section to allow ready inserting and removing of articles, and the bracket having a series of segmental arcuate rims concentric with the rim of the tray and each segment being adjacent one of the corners of the bracket.

In testimony whereof we have signed our names to this specification.

LOUIS S. SHAUER.
ROSE SHAUER.