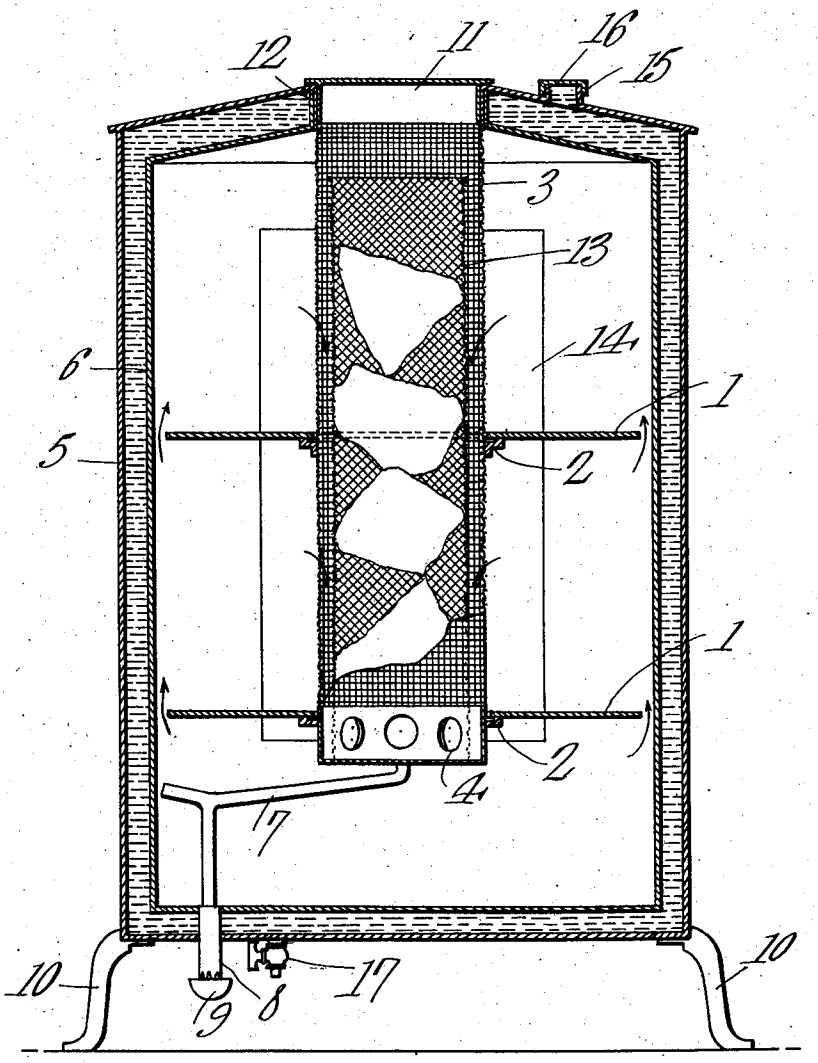
W. H. BURK.

REFRIGERATOR.

APPLICATION FILED SEPT. 8, 1911.

1,027,400. Patented May 28, 1912.



Witnesses

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WILLIAM H. BURK, OF FOSTORIA, OHIO.

REFRIGERATOR.

1,027,400. Specification of Letters Patent. Patented May 28, 1912.

Application filed September 8, 1911. Serial No. 648,298.

To all whom it may concern:

Be it known that I, WILLIAM H. BURK, a citizen of the United States, residing at Fostoria, in the county of Seneca and State of Ohio, have invented a new and useful Refrigerator, of which the following is a specification.

This invention relates to refrigerators, and has for its object to provide for an improved refrigerator of circular contour having an axial ice compartment therein and revolving shelves arranged around the said ice compartment.

A further object is to provide a novel means for the circulation of air within the refrigerator.

This invention is embodied in certain novel constructions and arrangement of parts as hereinafter described and as pointed out in the appended claim, the invention being illustrated in the accompanying drawing, wherein similar reference characters indicate similar parts, and wherein the refrigerator is shown in vertical section through the center thereof.

Referring in detail to the drawing, the casing of the refrigerator comprises the outer shell or wall 5 and the inner shell or wall 6 forming a compartment therebetween and having an opening 12 through the top thereof. A door opening 14 passes through the side of the said casing. A nipple 15 is provided on the top of the outer wall 5 through which the compartment between the walls 5 and 6 may be filled with water or any other suitable fluid and a cap 16 is provided for closing the passage through the said nipple. The casing of the refrigerator is cylindrical in form and the opening 12 in the top thereof is arranged at the center or at the axis of the refrigerator casing. A cylindrical perforated support 3 depends from the said opening and is provided at its lower end with a plurality of peripheral openings 4. This support forms the ice compartment and within the same is arranged a cage 13 which seats on the lower end thereof and is spaced from the sides of the said support. This cage is adapted to hold the ice therein and keep the ice out of contact with the sides of the support. A cover 11 is inserted into the upper end of the support 3 and forms a closure for the opening 12. This cover when removed allows the insertion of ice into the ice compartment. A plurality of rings 2 are mounted on the support 3 and a circular shelf 1 is mounted on each of the said rings to rotate or revolve around the support, the periphery thereof being spaced from the casing of the refrigerator. A drain pipe 7 is connected to the bottom of the support 3 and passes into the sleeve 8 which passes through the bottom of the casing and is provided with the usual cup 9 on the lower end thereof for permitting the escape of drain water but preventing the inlet of air. The casing is preferably mounted on legs 10 and a drain valve 17 is provided on the lower end or bottom thereof for permitting the compartment between the shells 5 and 6 to be emptied.

The edibles or other objects to be preserved are placed on the shelf 1, which by being rotated can be completely filled around the same. The air within the refrigerator circulates in a novel manner, the warmer air rising around the peripheries of the shelves and the cold air passing downward between the cage 13 and the support to pass through the opening 4 at the lower end of the support thus forming a continuous circulation of air and permitting the air to pass into the support and around the ice of the cage. The ice in being contained in the cage is prevented from coming in contact with the support. This circulation of air thoroughly cools the air within the refrigerator and the water or other liquid contained within the casing of the refrigerator becomes cooled and remains cool and sweet. The air in being permitted to pass through the support 3 prevents sweating of the inside of the refrigerator.

The refrigerator is economical for the reason that it necessitates only a small supply of ice to retain the interior at a low degree of temperature, is convenient in its use and is hygienic and simple in its construction.

What is claimed is:—

In a refrigerator, a cylindrical casing having a door-opening in its side, a cylindrical foraminous support depending therein, a cage arranged within the support and spaced from the sides thereof and adapted to contain the ice, a plurality of rings secured to the support, and a circular shelf arranged on each of the said rings and hav-

ing its periphery spaced from the sides of the casing, whereby the cold air may circulate downwardly in the space between the cage and support and the air pass upwardly between the shelves and the casing to form a continuous circulation around the shelves.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. BURK.

Witnesses:
C. L. Du Poy,
Samuel Wade.