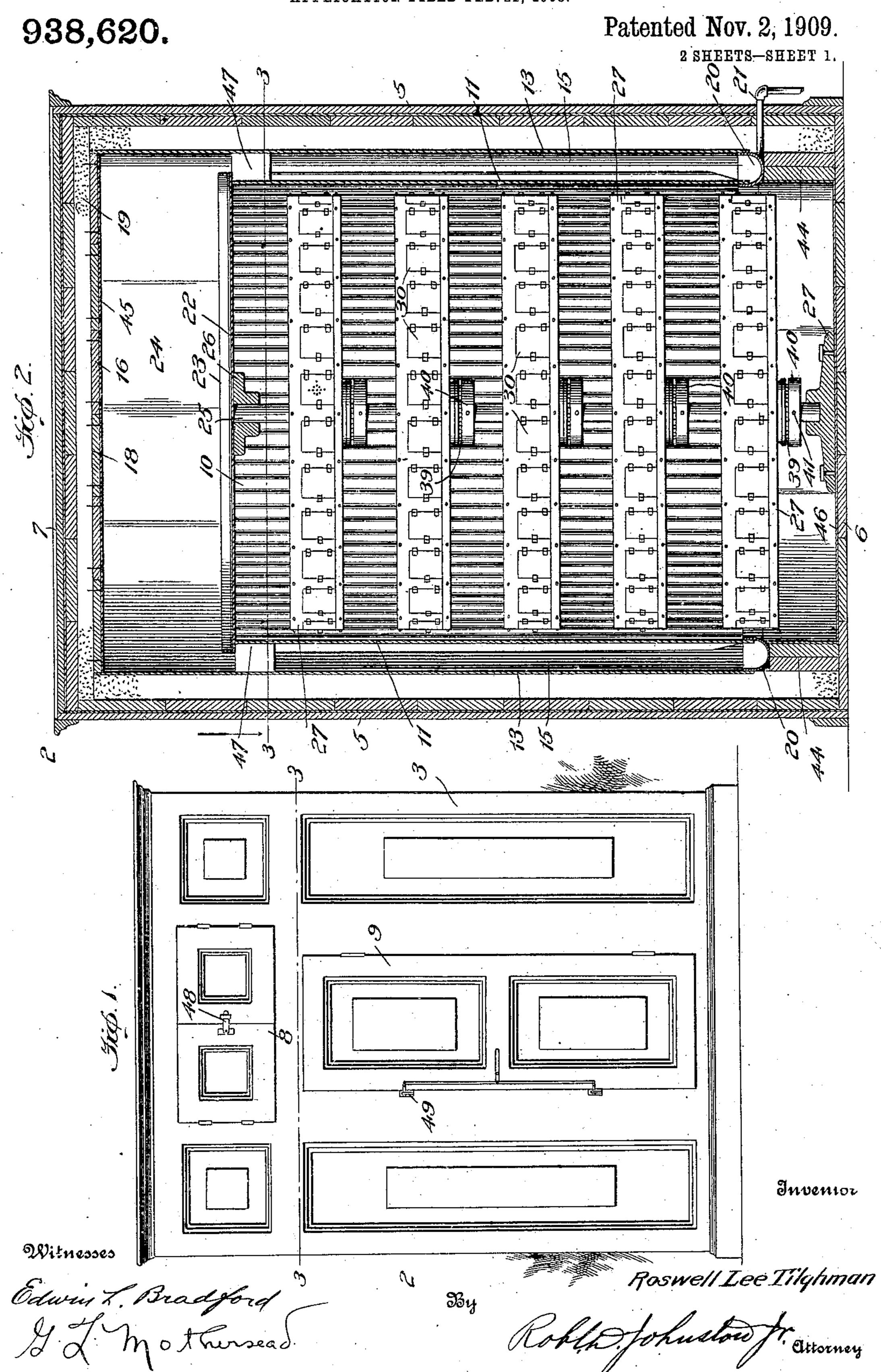
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LOCKER REFRIGERATOR.

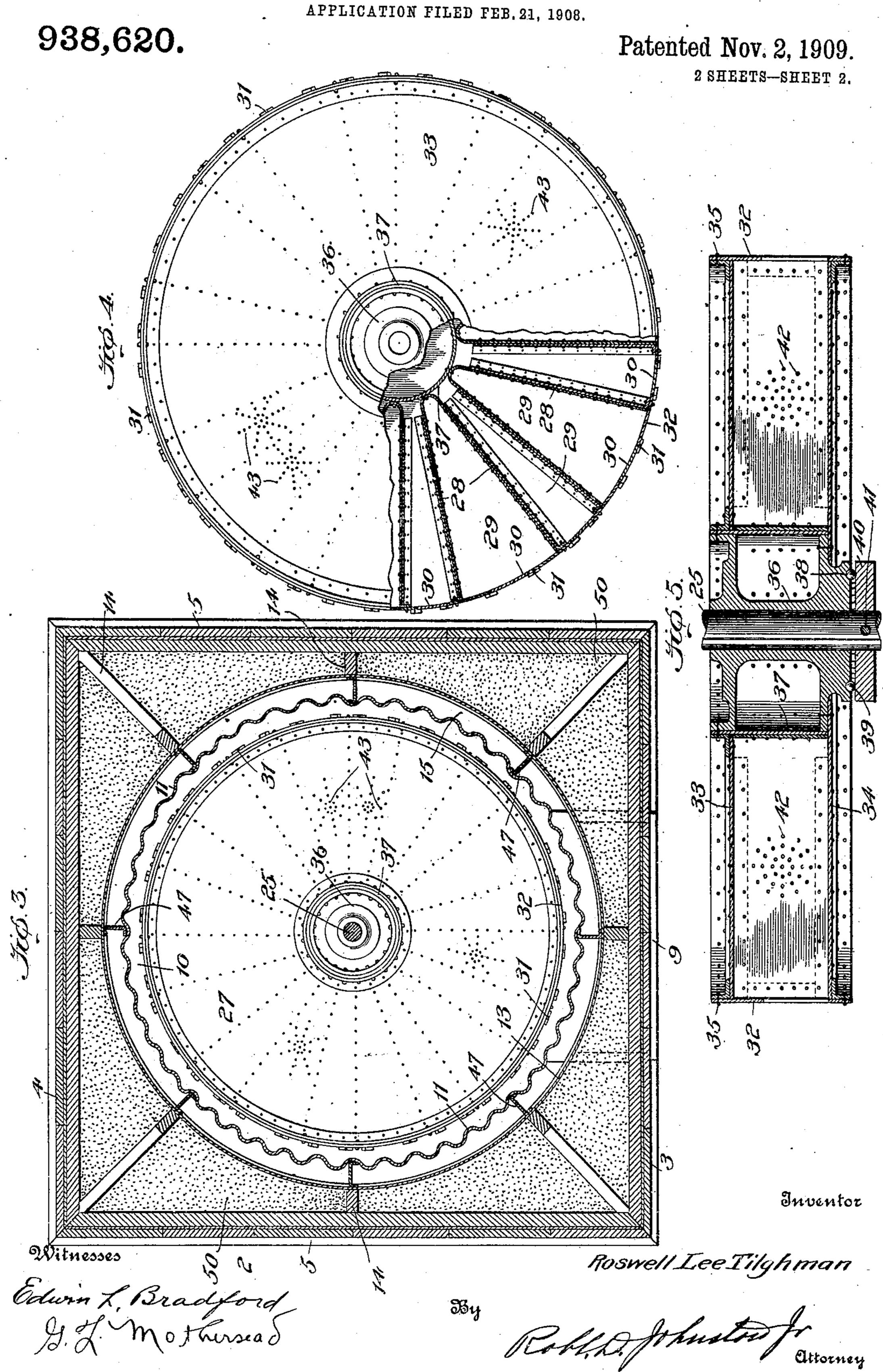
APPLICATION FILED FEB. 21, 1908.



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UNITED STATES PATENT OFFICE

ROSWELL LEE TILGHMAN, OF BIRMINGHAM, ALABAMA.

LOCKER-REFRIGERATOR.

938,620.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed February 21, 1908. Serial No. 416,966.

To all whom it may concern:

Be it known that I, Roswell Lee Tilch-Man, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Locker-Refrigerators, of which the following is a specification.

The invention relates to refrigerators, and more particularly to the class of revolving refrigerators having a plurality of independent compartments for storing bottled stimulants and other liquid or food products.

The primary object of the invention is the provision in a stationary refrigerator of a plurality of drums provided with radial compartments and mounted therein so as to be independently movable with respect to each other.

Another object of the invention is the provision of a refrigerator having superposed and independently movable compartments, each provided with a door for gaining access thereto, said doors of the compartments, respectively, having individual locks, so that each of said compartments or lockers is accessible only by the person who is possessed of the particular key of its lock.

A further object of the invention is the provision of a refrigerator having a plurality of independently movable refrigerating compartments, and an ice chamber or similar refrigerating means substantially surrounding the compartments and within close proximity thereto.

With these and other objects in view the invention, for example, consists in the construction and combination of parts hereinafter fully described and illustrated, which disclose the preferred embodiment of said invention, however, it is to be understood that such changes, variations and modifications may be made as come properly within the scope of the claims hereunto appended, without departing from the spirit of the invention.

In the drawings:—Figure 1, is a front view of the refrigerator. Fig. 2, is a longitudinal sectional view thereof. Fig. 3, is a transverse sectional view. Fig. 4, is a top view of one of the independently rotatable locker drums having the radial compartments, the same being partially in section. Fig. 5, is a sectional view of one of said rotatable compartments or lockers.

Similar reference characters indicate cor-

responding parts throughout the several views in the drawings.

In the drawings the numeral 2, designates the outer casing of the refrigerator which 60 comprises front and back walls 3, and 4, respectively, and walls 5, a bottom 6, and a top 7, which are constructed preferably of wood, however, may be of any suitable material as found desirable. In the front wall 65 3, are hinged doors 8 and 9, the latter door communicates with a refrigerating chamber 10, formed by a circular wall 11, which is of corrugated iron to increase its refrigerating surface. Intermediate the wall 11 and the 70 outer casing 2, is an inner circumferential casing 13, which is preferably of galvanized steel. Said inner casing 13, is braced by brackets as 14, which are connected to the latter and the outer casing 2. The space 15, 75 between said inner casing 13, and the circular wall 11, forms an annular ice receiving cell which is adapted to contain crushed ice, so as to thoroughly cool the chamber 10. It also acts to carry off the drainage from the 80 upper ice chamber, which water passes out through the bottom into the bottom of the main refrigerating chamber. Said inner casing 13, extends upwardly within close proximity to the top 7, of the outer casing 85 and terminates in a supplemental top or wall 16, the latter being spaced from the said top 7, to provide a space 18, for receiving a packing 19, such as saw-dust, cork, etc. Said inner casing at the opposite end is pro- 90 vided with an inclined bottom 20, which conducts the drainage water to a drain pipe 21, leading to the exterior of the outer casing 2, so as to drain off the melted ice water to prevent said ice cell from becoming over- 95. charged therewith.

At the upper end of the circular wall 11, is a covering 22, forming a base upon which. is mounted strips 23, producing a rack for supporting blocks of ice. The space inter- 100 mediate said cover 22 and the supplemental top 16, forms an ice chamber 24, which is accessible through the door 8, for introducing the ice blocks or the like cooling medium. Centrally of the chamber 10, is a vertical 105 shaft 25, the latter being mounted in bearing plates or collars 26, and 27, connected to the covering 22, and the bottom 6, respectively. Mounted upon the shaft 25, at suitable distances apart are independently rotatable 110 drums 27, the latter having radial partitions 28, forming locker compartments 29. Each

compartment has a door 30, hingedly connected as at 31, to the annular wall 32, of the drum. Said drums are shown as composed of upper and lower disks 33, and 34, 5 which are connected to the annular walls 32, by suitable fastenings such as rivets 35; and also the partitions 28, are in like manner

connected to the said disks.

Centrally of the disks 33, and 34, in each 10 drum 27, is a hub 36, having a peripheral band 37, connected thereto and to the disks 33, and 34, which band 37 forms a medium to fasten the end portions of the partitions thereto, and also an inner wall for alternat-15 ing compartments. Said hub 36 surrounds the shaft 25, and is provided with an annular race-way 38 for receiving a plurality of ball-bearings 39, which frictionally contact with a collar 40, the latter being fixedly held 20 on the said shaft 25 by a pin 41 passing transversely through the same and the collar, so as to hold it in position on the shaft. The doors 30 and the partitions 28 are provided with a plurality of circulation open-25 ings 42, or the partitions may be constructed from wire mesh cloth. Furthermore, the top disk 33 of each drum is provided with openings 43 which allow the cold air to circulate through the compartments, thereby 30 keeping the articles stored therein fresh and cool. The top may also be made from wire mesh.

Immediately below the inclined bottom 20 is an annular block 44, which forms a sup-35 port for the walls 11 and 13, and prevents the downward sagging of the same, and which is mounted upon the bottom 6 of the refrigerator casing. The inner sides of the supplemental top 16 and the bottom 6 are 40 provided with a lining 45 and 46, respectively, preferably of sheet galvanized steel. To brace the wall 11, and the inner casing 13, are brackets 47 which hold the wall and casing spaced from each other. The doors 45 8 and 9 of the refrigerator casing 2 are provided with locks 48 and 49, respectively.

Between the outer casing 2 and the inner casing 13 is a packing of saw-dust, cork or other suitable material, as 50, however, any 50 other non-conducting material may be used

if found more desirable.

The design and arrangement of the refrigerator may be variously modified without departing from the gist of my invention, 55 which consists in the inclosed arrangement of multiple compartment drums which are independently rotatable.

Having described the invention, what I

claim is:—

1. A refrigerator comprising a casing, a carrier movably mounted in the casing and containing a plurality of individual compartments, separate doors for each compartment, spaced annular inner and outer walls between the carrier and said casing, and con-

centrically arranged with respect to the axis of said carrier to form air circulating spaces, a disk mounted at the upper edge of the inner wall to provide an ice chamber at the upper portion of the casing, a channeled bot- 70 tom secured to the lower edges of said walls to form a water receiver for the ice chamber,

and a door for said casing.

2. A refrigerator comprising a casing, a plurality of spaced movable carriers within 75 said casing, and containing a plurality of individual compartments, separate doors for each compartment, spaced annular inner and outer walls between the carriers and the casing, and concentrically arranged with re- 80 spect to the axis of said carriers to form air circulating spaces, a supporting plate secured to the upper edge of the inner wall to provide an ice chamber at the upper portion of the casing, a channeled bottom se- 85 cured to the lower edges of said walls to form a water receiver from the ice chamber, the walls of each compartment being exposed to the refrigerating medium circulating within the casing.

3. A refrigerator comprising a casing, a plurality of spaced carriers movably mounted within the casing, and containing a plurality of individual compartments, separate doors for each compartment, spaced annular 95 inner and outer walls between the carriers and said casing and concentrically arranged with respect to the axis of said carriers to form air circulating spaces, a supporting ----plate secured to the upper edge of the inner 100 wall to provide an ice chamber at the upper portion of the casing, a channeled section secured to the lower edge of said walls to form a drainage receiver for the ice chamber, each of said compartments being sur- 105

rounded on all sides by perforated walls. 4. A refrigerator comprising a casing, a plurality of spaced carriers movably mounted within the casing and containing a plurality of individual compartments, spaced 110 annular inner and outer walls between the carriers and said casing and concentrically arranged with respect to the axis of said carriers to form air circulating spaces within the casing, a supporting plate secured to 115 the upper edge of the inner wall to provide an ice chamber, a channeled section secured to the lower edges of said walls to form a drainage receiver for the ice chamber, each of said compartments being surrounded on 120 all sides by perforated walls, and lock carrying doors for the compartments.

5. A refrigerator comprising a casing, a shaft journaled centrally therein, a plurality of collars fixed to the shaft and spaced 125 from each other, each collar containing an annular raceway concentrically arranged with respect to the said shaft, hubs loosely journaled on the shafts and having spaced parallel flanges, drums secured to the flanges 130

of said hubs, radially disposed partitions within each drum forming individual compartments therein, ball bearings between the hubs and said collars and movable in the 5 raceways in the latter, the walls of said compartments containing a series of openings, spaced annular inner and outer walls arranged between the drums and said casing to form air circulating spaces therebetween, 10 a supporting plate secured to the upper edge of the inner wall to form an ice chamber at

the top of the casing, and a channeled bottom secured to the lower edges of the inner and outer walls to form a water receiver for the ice chamber.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROSWELL LEE TILGHMAN.

Witnesses:

Annie L. Peace, R. D. Johnston, Jr.