J. F. WEBB.

REFRIGERATOR.

APPLICATION FILED MAR. 12, 1910.

998,560. Patented July 18, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

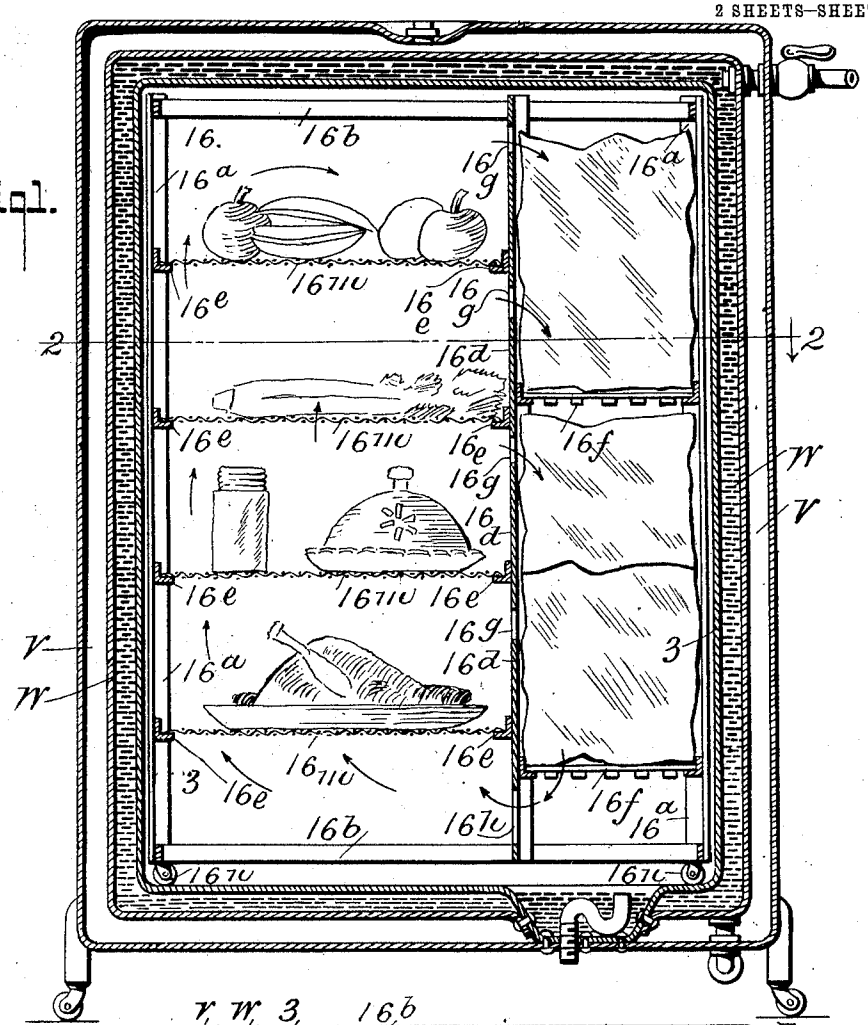
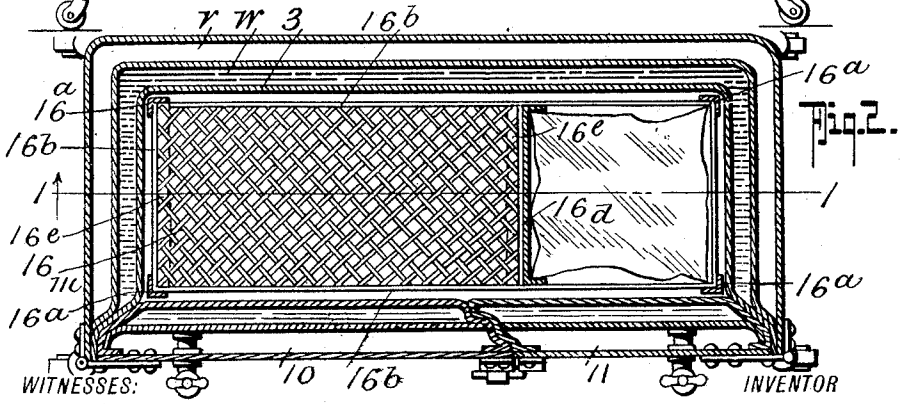


Fig. 2.



WITNESSES:

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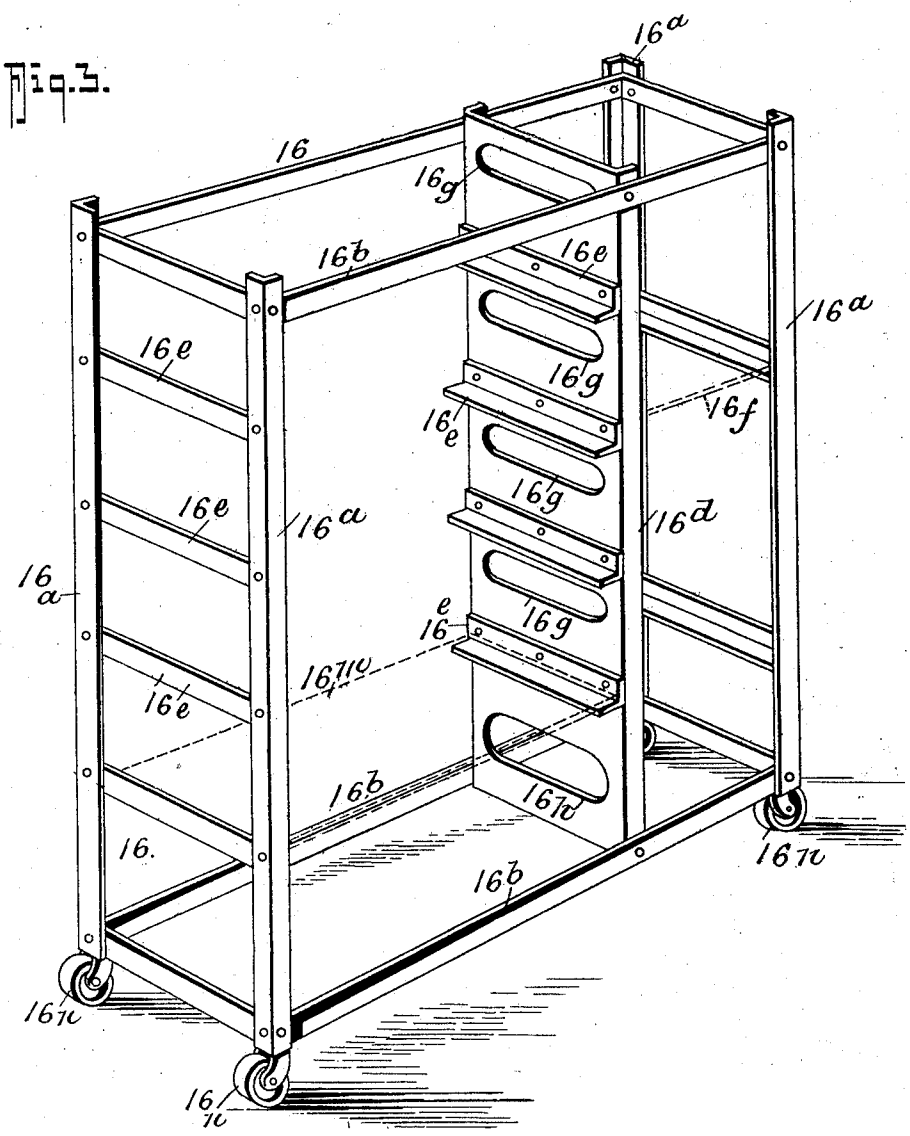
2 SHEETS—SHEET 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JEAN F. WEBB, OF DENVER, COLORADO.

REFRIGERATOR.

998,560. Specification of Letters Patent. **Patented July 18, 1911.**

Original application filed December 18, 1909, Serial No. 533,800. Divided and this application filed March 12, 1910. Serial No. 549,034.

To all whom it may concern:

Be it known that I, JEAN F. WEBB, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This application is a divisional part of my co-pending application filed December 18, 1909, Serial No. 533,800.

The invention resides in providing a frame having shelves to receive the food stuff and ice, which frame may be bodily removable from the refrigerator, and which supports the ice in a position such that it is held close to one side of the refrigerator so that the fluid within the fluid jacket or chamber may be cooled in such manner that effective circulation thereof will be established.

Those novel details of construction, combination and arrangement of parts hereinafter fully described and specifically pointed out in the appended claims, also constitute a part of my invention.

Referring now to the drawings,—Figure 1, is a central vertical longitudinal section on the line 1—1 of Fig. 2. Fig. 2, is a horizontal section on the line 2—2 of Fig. 1. Fig. 3, is a perspective view of the frame which constitutes the subject-matter of the present application.

Referring now to the accompanying drawings, in which like letters and numerals of reference indicate like parts in all of the figures the refrigerator casing may be of any approved construction, preferably that disclosed in my co-pending application hereinbefore referred to. It includes a food and ice chamber or compartment formed by the inner shell 3 wherein the present invention is located. The inner chamber W of the casing is a water chamber and the outer chamber V is a vacuum space.

For sanitary reasons I make the inner shell of a single piece with round corners so that the inside thereof may be easily and effectively washed and cleaned, and I provide a frame 16 to support the ice and food stuffs, which frame is bodily removable with its contents from the refrigerator.

The frame 16 is preferably composed of a set of vertical angle irons 16^a joined by rectangular frames 16^b at the top and bottom, and by a metallic partition 16^d that extends transversely the full height of the frame to separate the food and ice compartments. The angle irons 16^a are further braced and joined by horizontal angle irons 16^e—16^e that form shelf supports. The angle irons 16^e carry removable shelves 16^m for the food stuff which shelves are preferably formed of heavy woven wire to permit circulation of the air through the same, one or more sets of angle irons 16^e may be provided to receive shelves 16^f for the ice. The partition 16^d has openings 16^g—16^h for the air to pass in circulating.

By providing the ice chamber at one side of the refrigerator so that the ice will be close to the wall 3, the fluid within the chamber W will be cooled at that place thus setting up an effective circulation to bring all parts of such fluid in the chamber W adjacent to the ice, whereby such fluid is effectively cooled to the lowest practicable degree.

To facilitate the removal of the frame 16 it may be provided with casters 16^n, as indicated.

In practice, the refrigerator is preferably made of pressed steel, galvanized, coppered, or enameled, as may be found desirable.

By providing the outer chamber always as a vacuum chamber the external heat will not penetrate into the refrigerator to any great degree, any heat passing the vacuum chamber will be absorbed by the fluid in the fluid chamber. The fluid in such chamber will be kept cool by the ice within the ice compartment, such heat being absorbed before it can arrive at the inner chamber of the refrigerator.

The water within the water chamber of the door 11 will be cooled by the ice in the ice compartment and that within the water chamber of the door 10 will be cooled by radiation.

The air within the refrigerator will circulate, as indicated, by the arrows in Fig. 1 so as to maintain an even temperature throughout the food stuff compartment.

It will be noticed that I provide the inside frame for the refrigerator with a partition that divides the inner compartment of the chamber into two sections, one of which forms the food compartment and the other the ice compartment, the division being effected by a solid metal partition having openings for circulation of air as described.

From the foregoing description taken in connection with the accompanying drawings, it is thought the complete construction, operation and advantages of my invention will be readily understood by those skilled in the art to which the invention appertains.

It should be understood that slight changes in the details of construction may be made and that changes in the shape and material used for the various parts may also be made without departing from the spirit of the invention, or the scope of the appended claims.

What I claim is:

1. A frame-work of the character stated comprising upper and lower frame sections, corner posts joining said frames together and spacing them apart in different horizontal planes, angle irons carried by said corner posts to form shelf supports, a sheet metal transverse partition secured to said upper and lower frame sections, shelf supporting angle irons carried by said partition, shelving removably held on said angle irons, said partition dividing said framework into two sections, one to receive food stuffs and the other to receive ice, said partition having laterally elongated openings for air circulation, and a refrigerator casing having a chamber to receive said framing, said casing having a door opening through which said frame may be bodily removed as an integral structure.

2. In combination with a refrigerator having a door opening, a frame comprising a set of vertical supports and bracing members connecting said supports, a partition member connected with said bracing members, shelf supports carried by said partition member and said vertical supports, shelves removably mounted on said shelf supporting members, and means for sustaining said frame in virtue of which said frame may be bodily removed from or inserted into a refrigerator, said partition member separating the food stuff carrying shelves from the ice carrying shelves.

3. In combination with a refrigerator having a door opening, a frame comprising a set of vertical supports, and bracing members connecting said supports, a partition member connected with said bracing members, shelf supports carried by said partition member and said supports, shelves mounted on said shelf supporting members, and said partition member having air circulating apertures said frame with its shelves and their contents being bodily removable from said refrigerator through said door opening, and said partition member serving to divide said refrigerator into a food and ice chamber.

4. In combination with a refrigerator having a single chamber in which the food and ice are held and having a door opening, a removable framework held in said chamber for supporting the food and ice, said framework being bodily removable from said chamber through said door opening, said framework being composed of a skeleton framing and a solid metal partition carried thereby to separate the food and ice, said partition having air circulating apertures and shelves supported by said skeleton framing and said partitions.

JEAN F. WEBB.

Witnesses:
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GRACE I. HICKOK.