No. 890,868. PATENTED JUNE 16, 1908.

L. McREYNOLDS.

REFRIGERATOR.

APPLICATION FILED JULY 14, 1906.

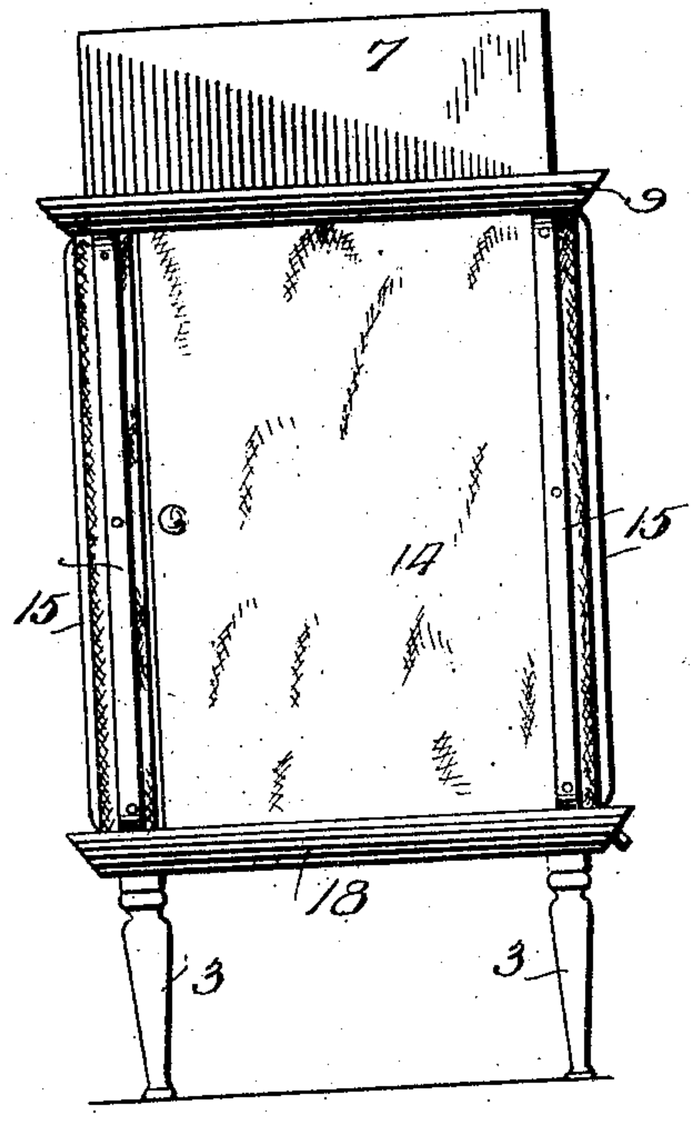


Fig. 1

Fig. 2.

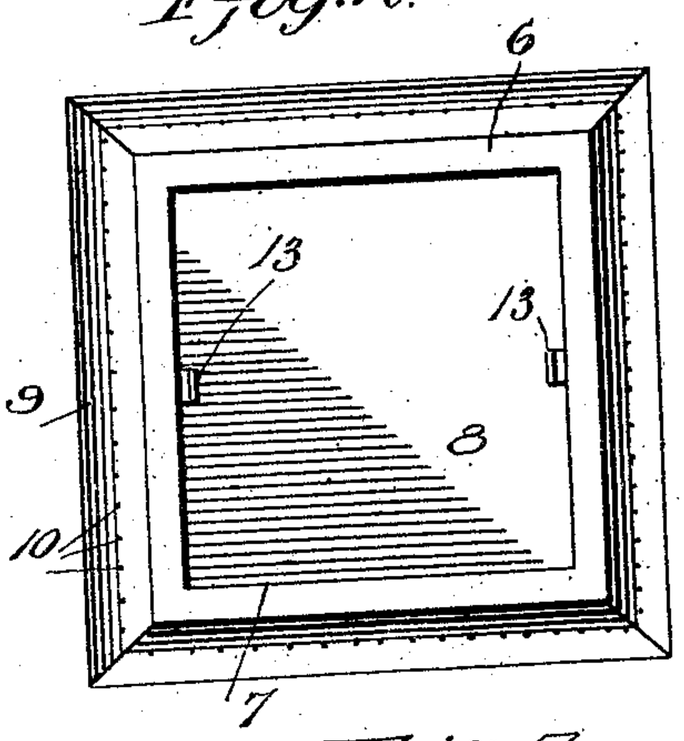


Fig. 3.

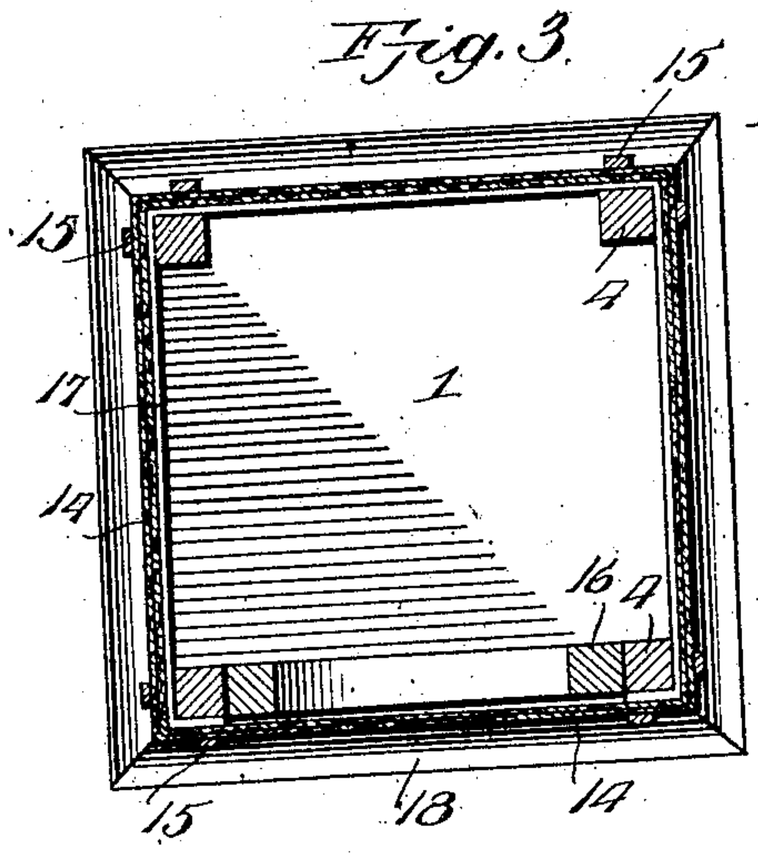
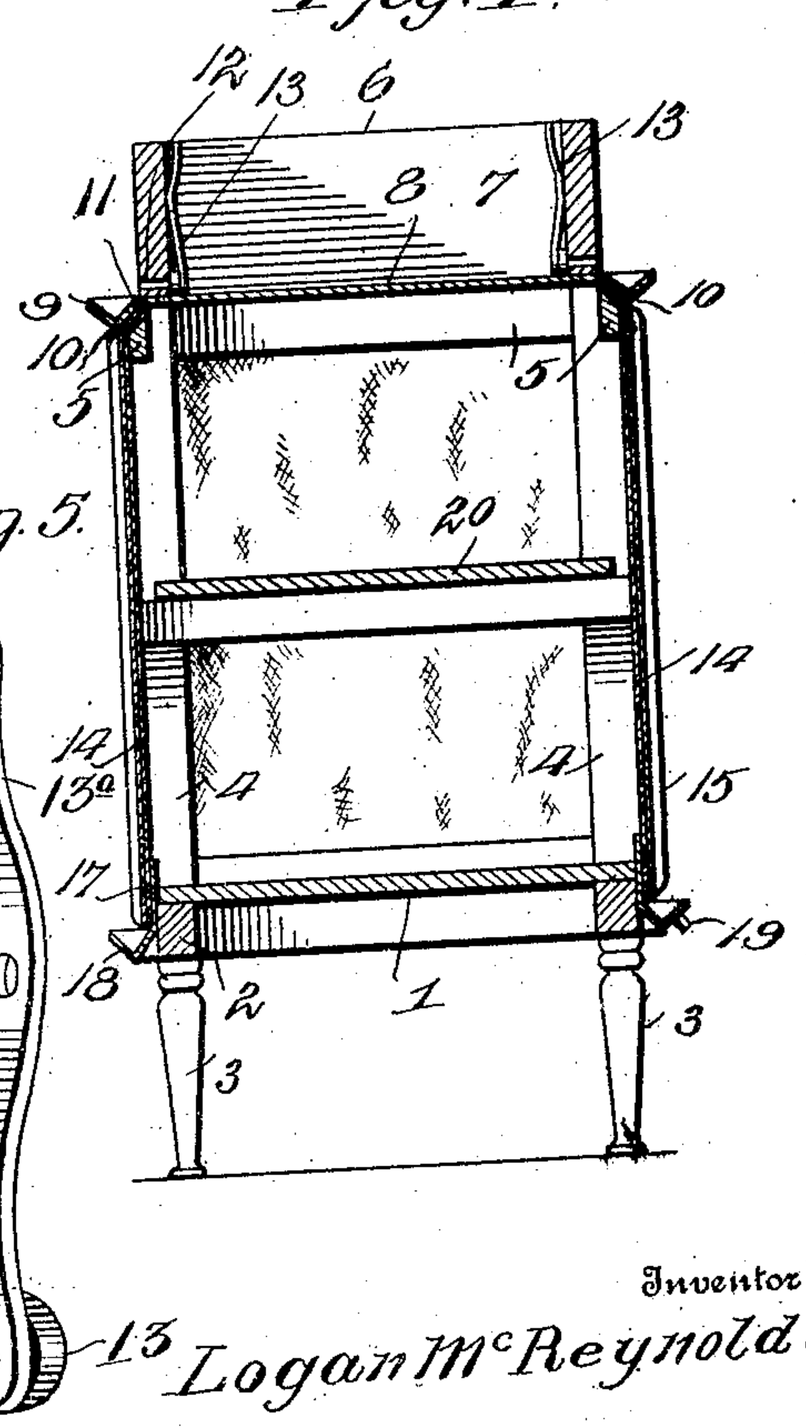


Fig. 4.

Fig. 5.



Witnesses

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LOGAN McREYNOLDS, OF EDGAR, NEBRASKA.

REFRIGERATOR.

No. 890,868. Specification of Letters Patent. Patented June 16, 1908.

Application filed July 14, 1906. Serial No. 326,208.

To all whom it may concern:

Be it known that I, LOGAN MCREYNOLDS, a citizen of the United States, residing at Edgar, in the county of Clay and State of Nebraska, have invented new and useful Improvements in Refrigerators, of which the following is a specification.

The invention relates to an improvement in refrigerators, and particularly to a refrigerator in which relatively low temperatures are provided for the process of evaporation.

The main object of the present invention is to simplify and improve the construction of refrigerators of this type so as to provide for the more effective cooling while at the same time reducing the number of parts and simplifying the general construction.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a side elevation of a refrigerator constructed in accordance with my invention, Fig. 2 a top plan of the same, Fig. 3 a transverse section of the same, Fig. 4 a vertical section of the same. Fig. 5 is a detail perspective view of one of the valves and its spring.

Referring particularly to the drawings my improved refrigerator comprises a framework including a base plate 1 supported upon sills 2 in which are secured the usual legs 3. Supported upon the sills 2 are standards or corner posts 4, forming the outline of the refrigerator and being of the height desired for the completed article. The upper ends of the corner posts are connected by horizontally disposed strips 5, thus completing the framework for the refrigerator. The supply tank 6 is arranged to be supported upon the upper end of the framework, comprising side and end walls 7 and a bottom plate 8. The bottom plate 8, preferably metallic, extends beyond the side and end walls of the tank, said extended portion being bent to provide a V-shaped trough, 9 extending entirely around the tank and formed in its lower portion or apex with a series of spaced openings 10 to permit the passage of the water therethrough. The bottom plate 8 is secured to the side walls of the tank and the external dimension of the tank is approximately equal to the distance between the cross strips 5 of the frame. As the trough 9 is formed immediately beyond the outer surface of the side and end walls, the cross strips 5 of the frame are beveled on their outer surfaces for a portion of their height, as at 11, to receive the inclined wall of the trough immediately adjacent the wall of the tank, as clearly shown in Fig. 4. By this construction the tank is centrally disposed above the refrigerator and held in place by the coöperation of the walls of the trough with the inclined faces of the cross strips, the transverse dimension of the trough being such that the apex thereof when in position is disposed in alinement with the outer vertical surface of the cross strips. Two of the opposing walls of the tank are formed with outlets 12 to provide communication between the tank and trough, said outlets being preferably closed by valves 13 secured to the lower ends of the leaf spring 13^a, said leaf springs being pivotally secured at points intermediate their ends to the opposing walls, whereby they may be manually operated when desired to provide for free passage of water, and whereby they are adapted to exert pressure upon the valves 13 to retain them properly seated. It is, of course, understood that the leaf spring is pivoted to permit a swinging lateral movement of the operative end, so that by proper movement of the upper or free end, the lower or operative end of the member may be disposed to close the opening or arranged at either side of the opening as desired.

The frame of the refrigerator is inclosed by a covering of permutable textile fabric 14, as burlap or the like, which is passed about the frame overlying the corner posts thereof, and secured to said corner posts by strips 15. At one side of the refrigerator frame a rectangular frame 16 is provided and arranged at one side for hinged connection with the approximate corner post 4. The frame 16 provides a door for admission to the interior of the refrigerator, and in securing the burlap about the frame the edge of the material is secured to the corner post 4 against which the free edge of the door abuts, the material being thereupon extended about the frame and over the door frame, terminating at the vertical door post adjacent the post 4 to which the material was first secured. The burlap is thus in an endless strip about the frame and includes the door covering. The lower edge of the burlap or covering terminates below the upper edge of the sills 2, and to said sills in rear of the strip of burlap is secured a plate 17, which extends entirely around the frame and preferably projects a slight dis-

tance above the base plate 1. In alinement with the lower edge of the fabric the plate 17 is projected in the form of a V-shaped trough 18, which as constructed extends wholly around the refrigerator frame and directly underlies the lower edge of the fabric. At a desired point in its length the trough 18 is provided with an outlet 19.

The interior structure of the refrigerator is immaterial so far as the present invention is concerned, it being preferred, however, that one or more shelves 20 be provided for the reception of articles within the refrigerator.

In use water contained in the tank 6 is permitted to flow into the trough 9 and from thence through the openings 10 onto the upper edge of the burlap, saturating the same throughout its length with any excess water finding its way into the trough 18. Owing to the free circulation of air through the fabric walls of the refrigerator and the consequent evaporation of the liquid contained in said fabric the interior temperature is materially reduced, as will be obvious. The ready separation of the tank as a whole from the refrigerator provides for ready access to the latter for cleaning purposes, it being understood that the coöperation of the inclined trough wall with the inclined surface of the cross strips 5 provides for properly positioning the tank with relation to the fabric without additional securing means, the valves 13 affording a means by which egress of water from the tank may be interrupted when it is desired to remove the tank as a whole from the refrigerator.

The refrigerator is of simple construction comprising but few parts which are capable of being cheaply and quickly assembled.

Having thus described the invention what is claimed as new, is:—

A refrigerating apparatus comprising a frame, a fabric wall for the frame, a tank loosely seated upon the upper end of the frame, said tank having perforations in its sides, the bottom plate of the tank being extended to provide an endless trough of V shape in cross section, said trough having perforations in its apex, said perforations being positioned beneath the perforations of the tank, spring valves acting in conjunction with the perforations of the tank, a portion of the frame of the refrigerator being beveled to receive one of the inclined walls of the trough whereby to support the tank and dispose the same above the end of the fabric wall and an endless trough secured to the frame and underlying the lower edge of the fabric wall, said trough having an inner wall disposed in rear of and extending above the lower edge of the fabric.

In testimony whereof, I affix my signature in presence of two witnesses.

LOGAN McREYNOLDS.

Witnesses:
JAMES CHANCE,
H. B. ROUSEY.