

F. C. SCHMIDT.
REFRIGERATOR.
APPLICATION FILED NOV. 13, 1909.

2 SHEETS--SHEET 1.



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977,332.

Patented Nov. 29, 1910.

2 SHEETS—SHEET 2.

Fig. 5.

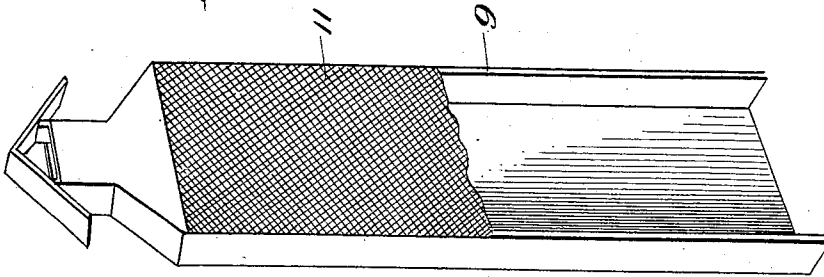


Fig. 2.

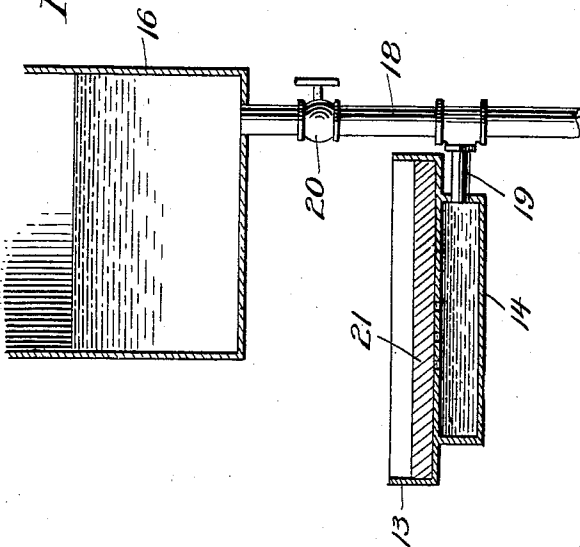
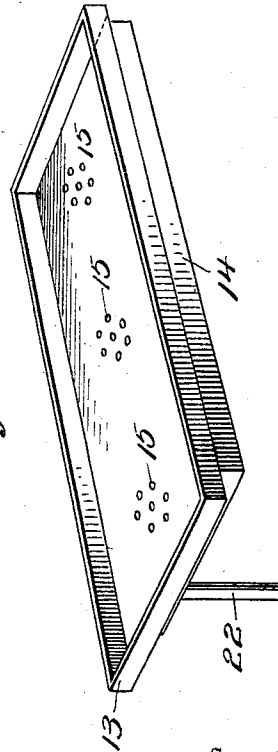


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK C. SCHMIDT, OF BEEVILLE, TEXAS.

REFRIGERATOR.

977,332.

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To all whom it may concern:

Be it known that I, FREDERICK C. SCHMIDT, a citizen of the United States, residing at Beeville, in the county of Bee and State of Texas, have invented new and useful Improvements in Refrigerators, of which the following is a specification.

This invention relates to improvements in refrigerators.

The primary object of the invention is the provision of a refrigerator in which milk may be cooled without the use of ice, the invention comprehending a refrigerator which consists of a casing, a plurality of pans located in the casing, liquid-absorbent pads located in the pans, and a reservoir communicating with the pans.

A further object of the invention is the provision of a refrigerator of the above stated character which shall be simple, durable and efficient of construction, and which may be manufactured and sold at a comparatively low cost.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, wherein:—

Figure 1 is a view in front elevation of a refrigerator constructed in accordance with my invention. Fig. 2 is a sectional view taken on a plane extending vertically through one of the pans and reservoir. Fig. 3 is a detail perspective view of one of the pans. Fig. 4 is a detail perspective of one of the absorbent pads, and Fig. 5 is a detail perspective view of one of the flues.

Referring to the drawings by reference numerals, 1 designates the bottom, 2 the top, and 3 the back of the casing of my improved refrigerator. The sides of the casing are not shown in the drawing. The front of the casing is adapted to be closed by screen doors 4 which are hinged to the sides of the casing. The casing is mounted upon the legs 5, and at a point below the bottom 1 thereof is a shelf 6. The shelf 6 is designed to support drip pans 7 and 8. Flues 9 are secured to the back 3 of the casing and extend through the top 2 thereof, the upper ends of the flues terminating in cowls 10. The flues 9 are each fully open at one side. Reticulated panels 11 extend across the open sides of the flues. The screen doors 4 and the flues 9 permit air to circulate freely through

the casing. Shelves 12 are secured within the casing, and mounted thereon and upon the bottom 1 are pans 13. As shown in Fig. 2 of the drawings, each pan 13 is provided on its under side with a water receptacle 14. The water receptacles 14 communicate with the pans 13 through the openings 15 formed in the bottoms of the pans. A reservoir 16 is mounted upon the top 2 of the casing and is provided with a removable closure 17. A pipe 18, which communicates at its upper end with the reservoir 16, extends down through the casing, the lower end of the pipe terminating above the drip pan 7. Branch pipes 19 are in open communication with the pipe 18 and the water receptacles 14. Valves 20 are mounted in the pipe 18 to provide means by which the supply of water to one or more of the water receptacles 14 may be cut off or established. Absorbent pads 21 are located in the pans 13. Each pan 13 is provided with a drip pipe 22. The drip pipe of the uppermost pan 15 discharges into the intermediate pan and the drip pipe of the lowermost pan discharges into the drip pan 8.

In practice, the reservoir 16 is filled with water, after which the valves 20 are opened. When the pads 21 become thoroughly saturated with water the valves 23 are closed to cut off the supply of water to the water receptacles 14. Receptacles containing the milk to be cooled are placed in the pans 13 upon the absorbent pads 21. The water carried by the pads 21 will absorb the heat of the milk and the resulting vapor will be carried off through the flues 9. When the water in the receptacles 14 falls below a certain level by reason of its absorption by the pads 21, the valves 20 are opened to permit the water to flow from the reservoir 16 to the water receptacles 14. The reservoir 16, pipe 18, pans 13, and water receptacles 14, may be drained by opening a valve 23 which is located at the lower end of the pipe 18.

Changes in the form, proportions and minor details of construction may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. A refrigerator including a pan provided with a water receptacle and communicating therewith through a plurality of openings in the bottom of the pan, a drip

pipe for the pan, a liquid-absorbent pad located in the pan, and means for supplying water to the water receptacle.

2. A refrigerator including a plurality of
5 pans provided with water receptacles, liquid-absorbent pads located in the pans, a reservoir, a pipe communicating with the reservoir and with the water receptacles, and valves located in the pipe.

10 3. A refrigerator including a pan provided on the under side thereof with a water receptacle, the bottom of the pan being pro-

vided with openings to establish communication between the pan and the water receptacle, a liquid-absorbent pad located in 15 the pan and means for supplying water to the water receptacle.

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

FREDERICK C. SCHMIDT.

Witnesses:

E. S. BOATRIGHT,
FRANK L. DRAB.