(No Model.) 2 Sheets—Sheet 1.

T. YARBROUGH.

REFRIGERATOR.

No. 580,748. Patented Apr. 13, 1897.

Fig. 1.

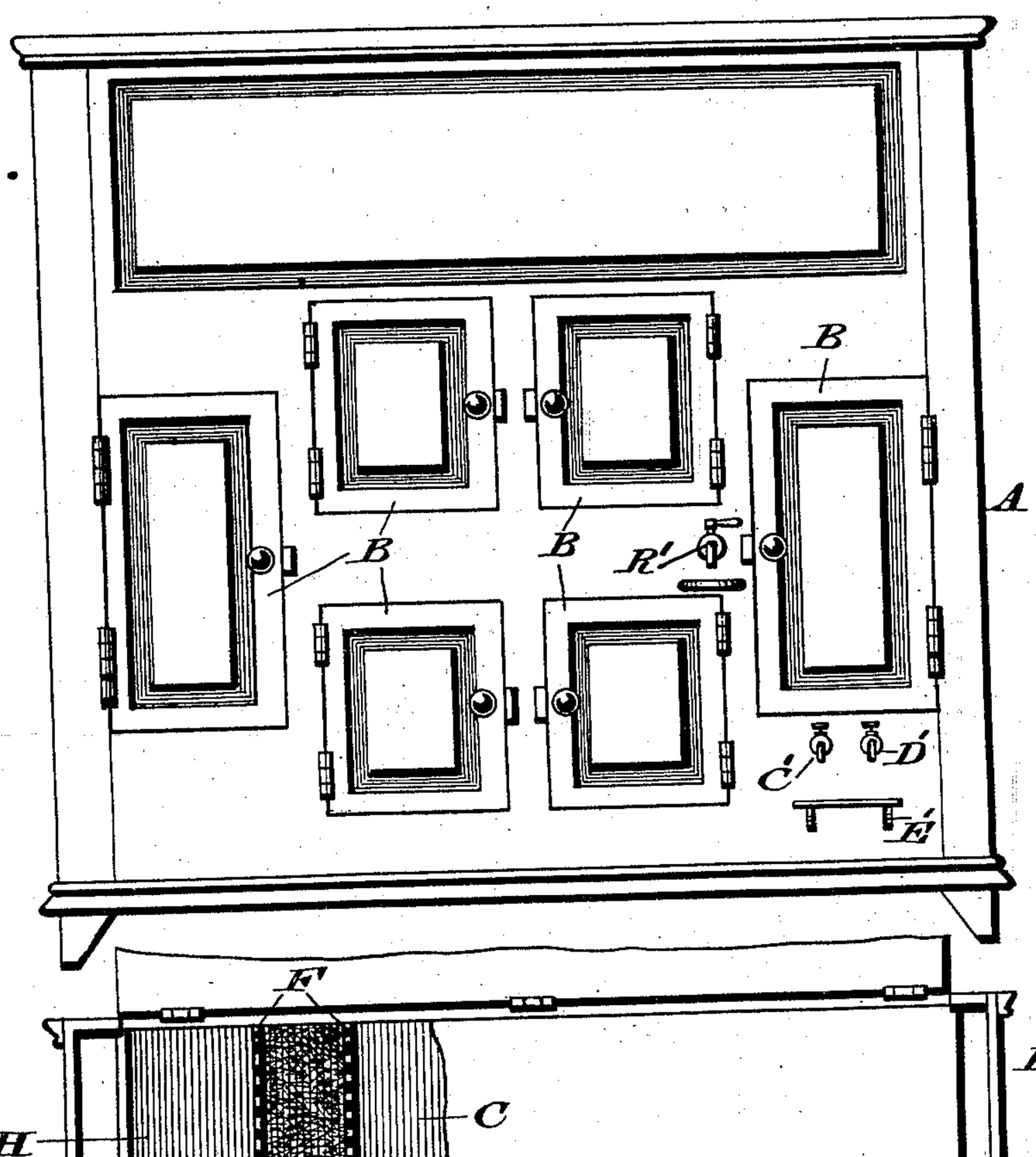
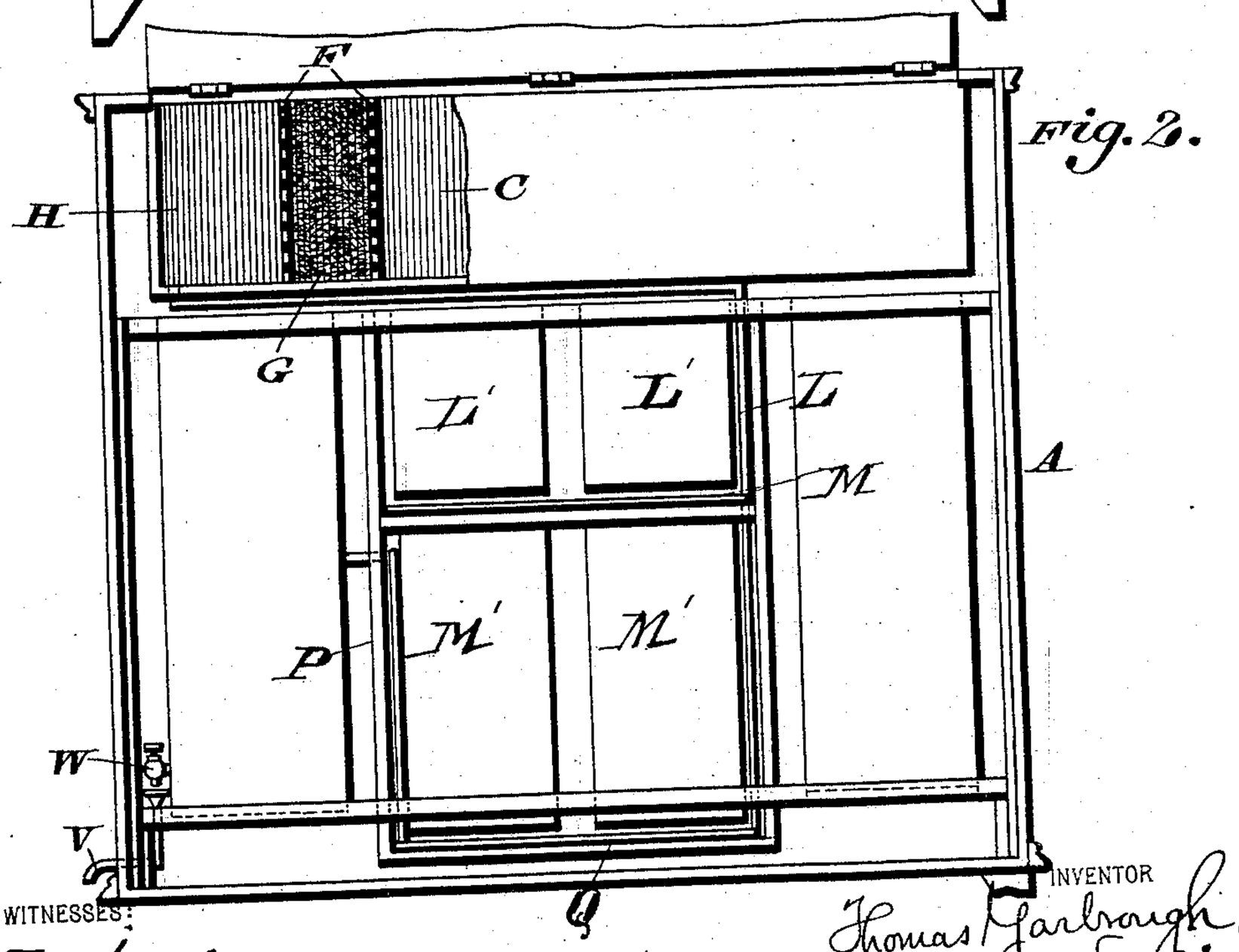


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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REFRIGERATOR.

No. 580,748. Patented Apr. 13, 1897.

Fig. 3.

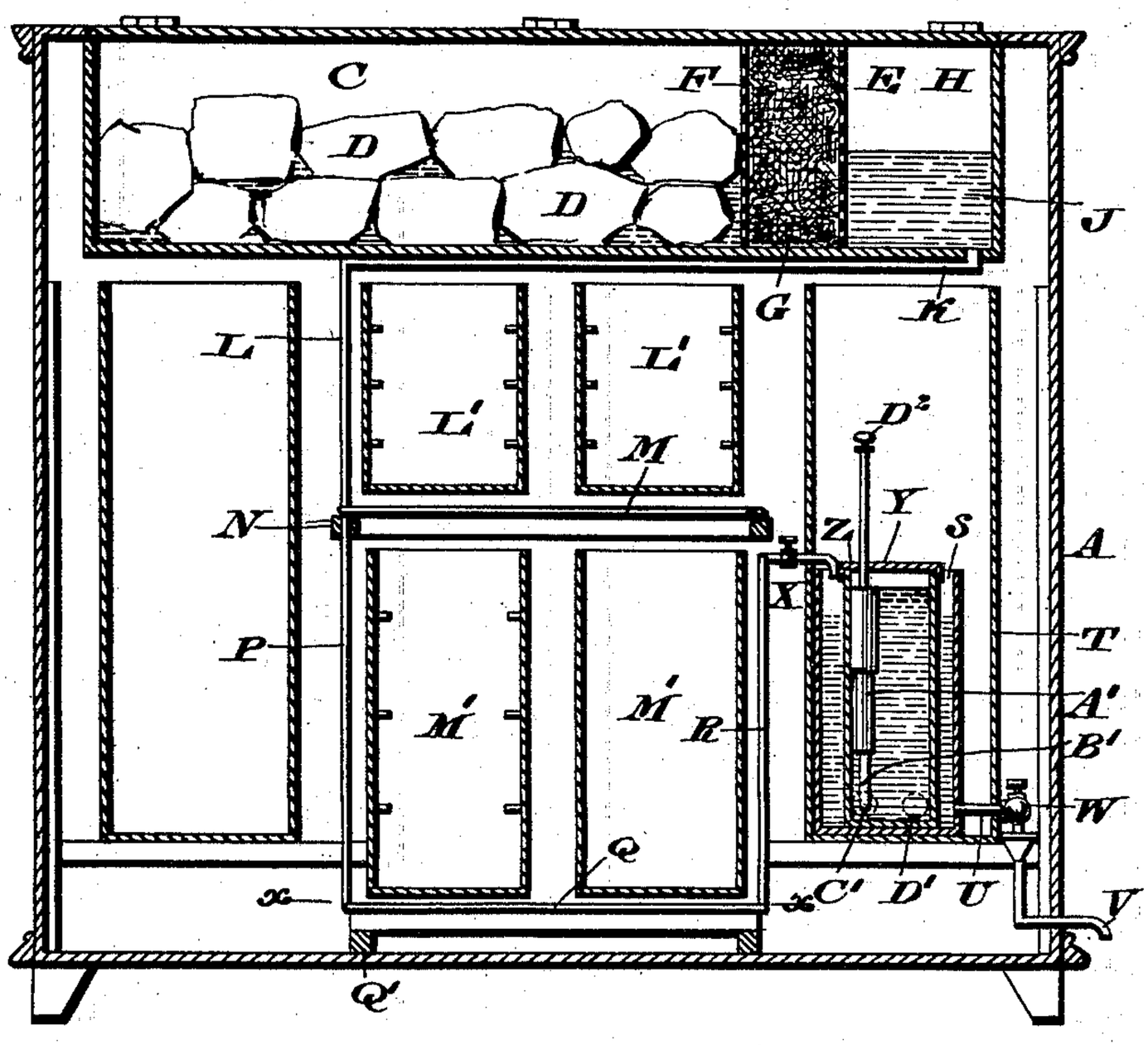


Fig. 4.

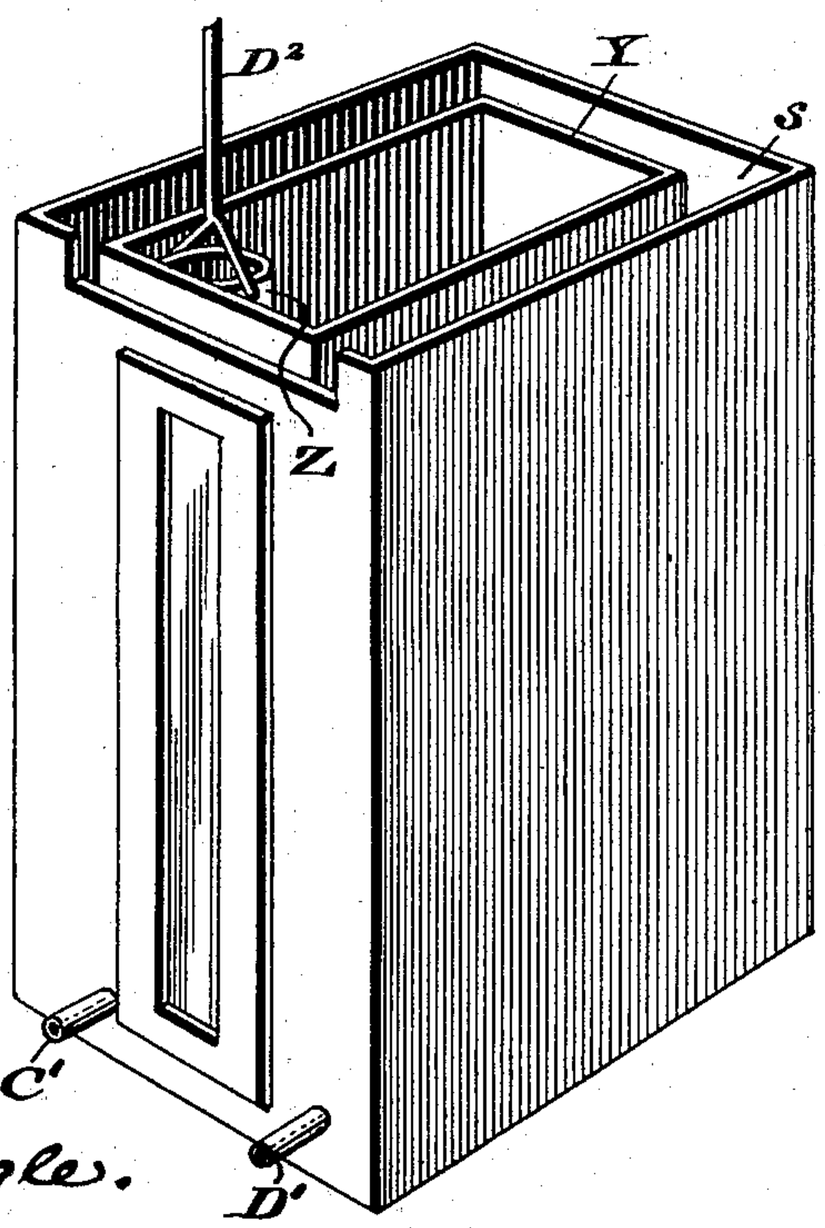
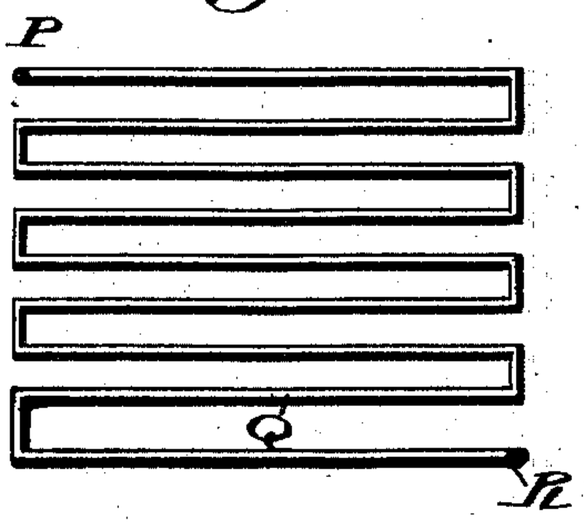


Fig. 5.



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THOMAS YARBROUGH, OF PHILADELPHIA, PENNSYLVANIA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 580,748, dated April 13, 1897.

Application filed May 29, 1896. Serial No. 593,593. (No model.)

To all whom it may concern:

Be it known that I, THOMAS YARBROUGH, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Refrigerators, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to refrigerators; and it consists of the combination and arrangement of parts hereinafter set forth and claimed.

Figure 1 represents a front elevation of a refrigerator embodying my invention. Fig. 2 represents a rear elevation of said refrigerator, the back being removed and a part of the upper portion of the same being shown in sections. Fig. 3 represents a view in which the front of the refrigerator is removed, showing the construction and location of the cooling-chamber, filtering device, and the milk and cream holding tank or compartment and its adjuncts. Fig. 4 represents on an enlarged scale a perspective view of the milk and cream holding compartment and its adjuncts in detached position. Fig. 5 represents a section on line *x x*, Fig. 3, showing the general construction and arrangement of the coils which convey the cooled and filtered water to the jacket surrounding the milk-compartments.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the refrigerator-casing, the same being provided with suitable doors B, which may be of any usual construction.

C designates a chamber or compartment in the upper portion of the casing, in which the ice or other cooling medium D is adapted to be placed and to thereby cool the chambers L′ and M′ of the refrigerator.

E designates a filter which is located near an end of said compartment C, said filter consisting of the perforated upright plates F and suitable filtering material G therebetween.

H designates a chamber formed in the upper portion of the refrigerator, into which the water J, which has been filtered, is adapted to flow, said filter being intermediate the compartments C and H.

K designates a pipe which extends laterally from the compartment H and is connected to the depending branch L, which leads to the coil M.

N designates a support for said coil M, which latter is connected by means of the depending branch P with the coil Q, which is mounted on the supports Q′.

R designates an upright branch leading from said coil Q to the interior of the compartment S, the upper portion of said branch R being provided with a cock X and the branch R′, which is controlled by a suitable valve and leads to the exterior of the refrigerator, as indicated in Fig. 1, whereby the cooled and filtered water can be readily withdrawn.

T designates a tank in which the chamber S, which receives the cooled and filtered water, is located, the latter being drained by means of the pipe U, which is provided with a valve W, said pipe communicating with the drain-pipe V.

Y designates a tank contained within the chamber S, which is provided with a suitable cover and contains within it the telescoping tubes Z, A′, and B′, the general construction and arrangement of the above parts being evident from Figs. 3 and 4, the tubes Z, A′, and B′ being movable relative to each other, so that as the level of the milk contained within the tank Y lowers the tubes Z or A′ can be lowered accordingly, so as to always convey away only the cream at the surface, said tube being readily adjusted vertically by means of the rod D^2, the cream being readily removed by means of the conduit C′, as is evident from Figs. 1 and 4.

D′ designates a valved conduit which leads to the exterior of the casing A′ from the lower portion of the tank Y, through which the milk is withdrawn.

Within the casing and below the ice and water chambers are arranged the storage chambers or compartments L′ and M′, the same having surrounding air-spaces, in which are located the pipe K, coil M, and branch L.

The operation is as follows: The ice or similar material D serves to cool the adjacent compartments, which may be utilized for any desired purpose. The water resulting from the melting of the ice, after being filtered, is conducted through the intermediate pipes to

the tank S, the filtered water also being withdrawn through the branch R′, if desired, and used for drinking purposes. The cream can be at all times withdrawn, no matter how low the surface of the milk gets, by manipulating the tubes Z, A′, and B′, and the milk and cream respectively can be withdrawn through the conduits C′ and D′, as is evident. The water also exercises cooling effect upon the materials contained in the compartments L′ and M′, as is evident.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A refrigerator having an ice-chamber in the upper part thereof, with surrounding air-spaces on its sides and bottom, a filtering-chamber at one end of said ice-chamber with a cold-water-receiving chamber, storage-chambers arranged in said casing, with surrounding air-spaces, a pipe leading from said cold-water chamber and provided with coils in said air-spaces between said storage-chambers and passing around said chambers and discharging outside of said casing.

2. A refrigerator, having in its upper part a compartment with ice-filtering and water chambers therein, storage-chambers arranged in rows with surrounding air-spaces, a pipe leading from said cold-water compartment and having coils in said air-spaces provided with suitable supports between said storage-chambers, a compartment within said casing into which said pipe empties and a pipe leading from said compartment to outside the said casing.

THOMAS YARBROUGH.

Witnesses:
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