

(No Model.)

2 Sheets—Sheet 1.

A. J. ORR.

MILK COOLER.

No. 356,884.

Patented Feb. 1, 1887.

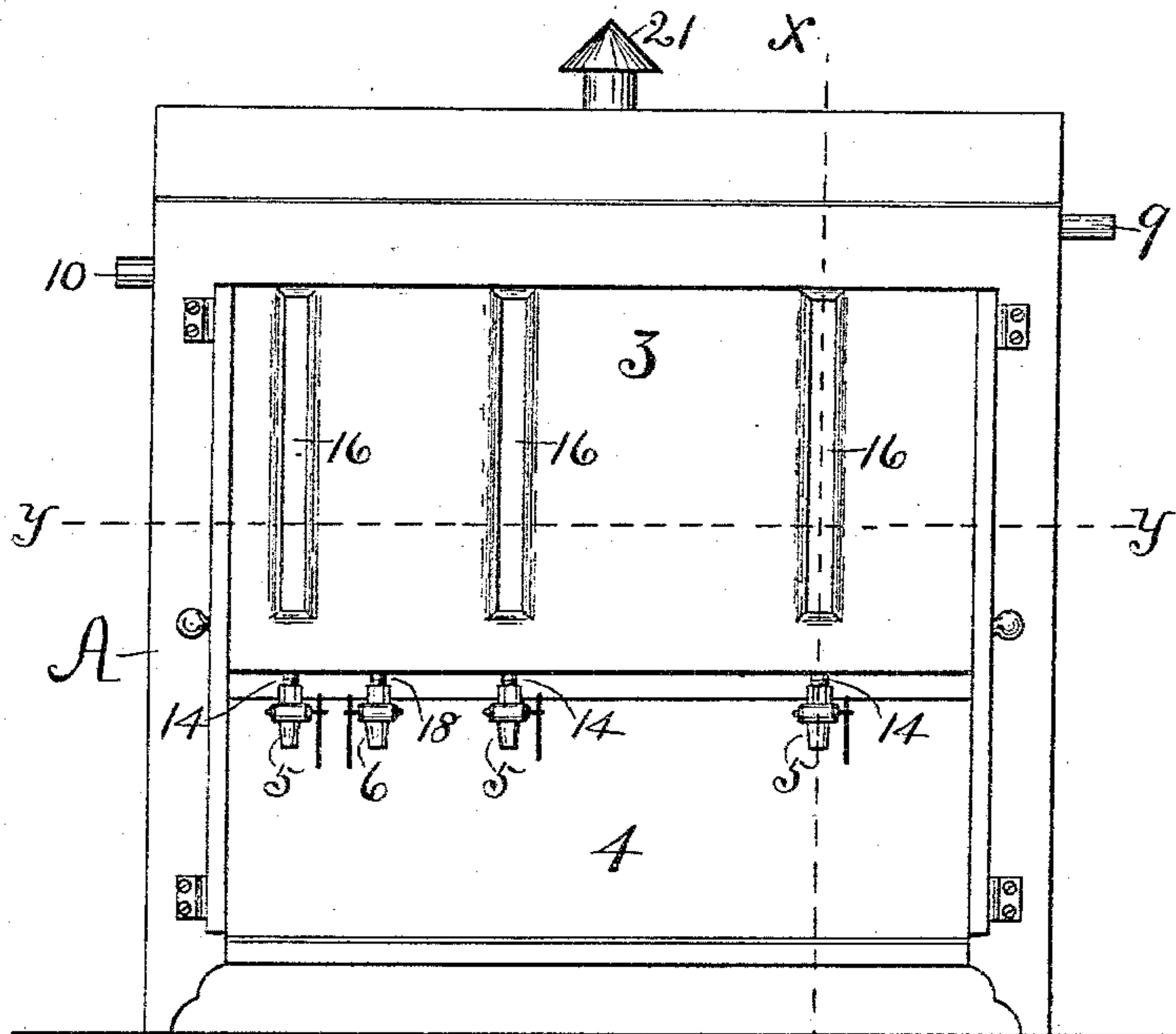


FIG-1-

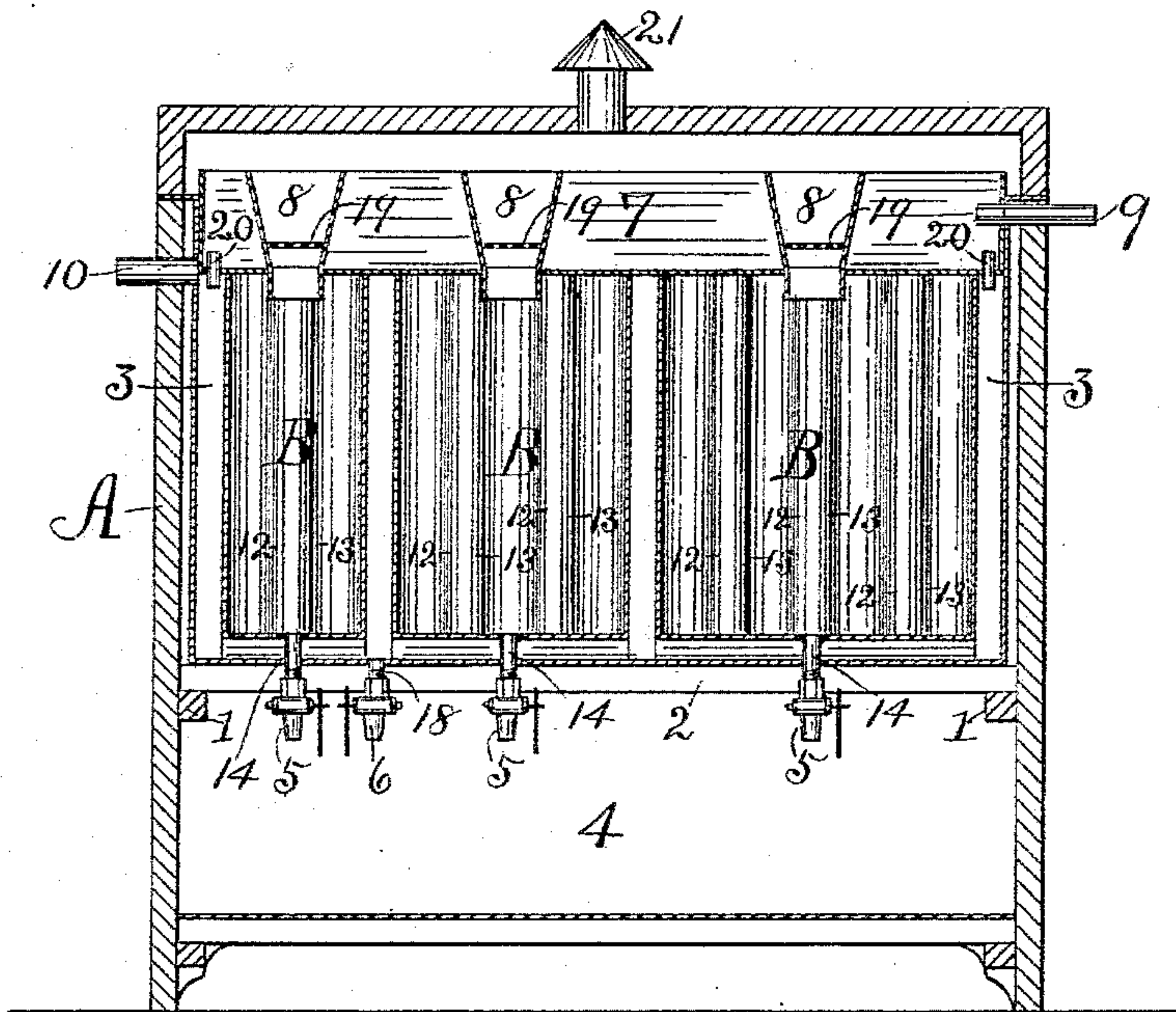


FIG-2-

ATTEST—

Albert Horn
John H. H. H.

INVENTOR—

Andrew J. Orr
per R. W. C. Raymond
his atty.

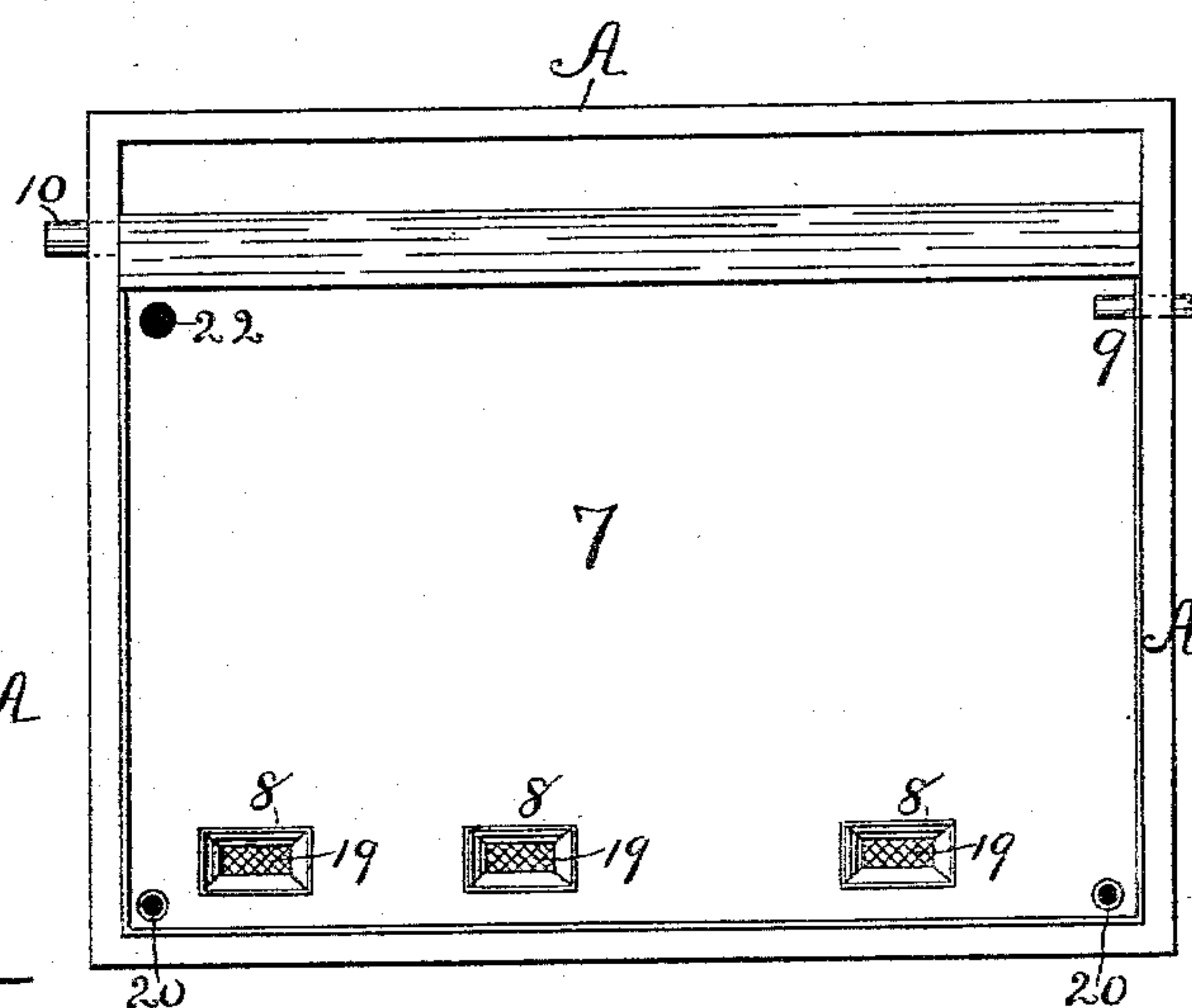
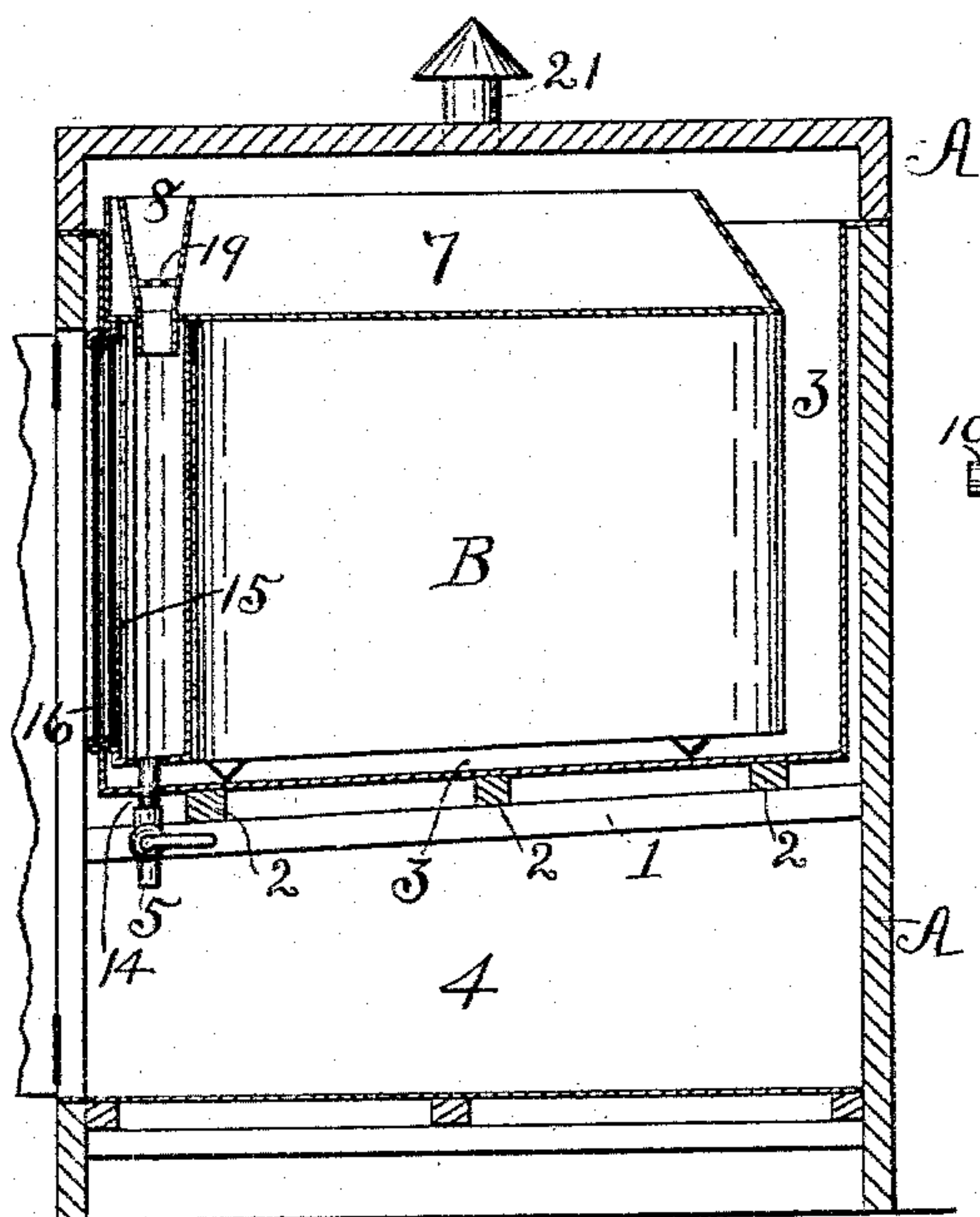
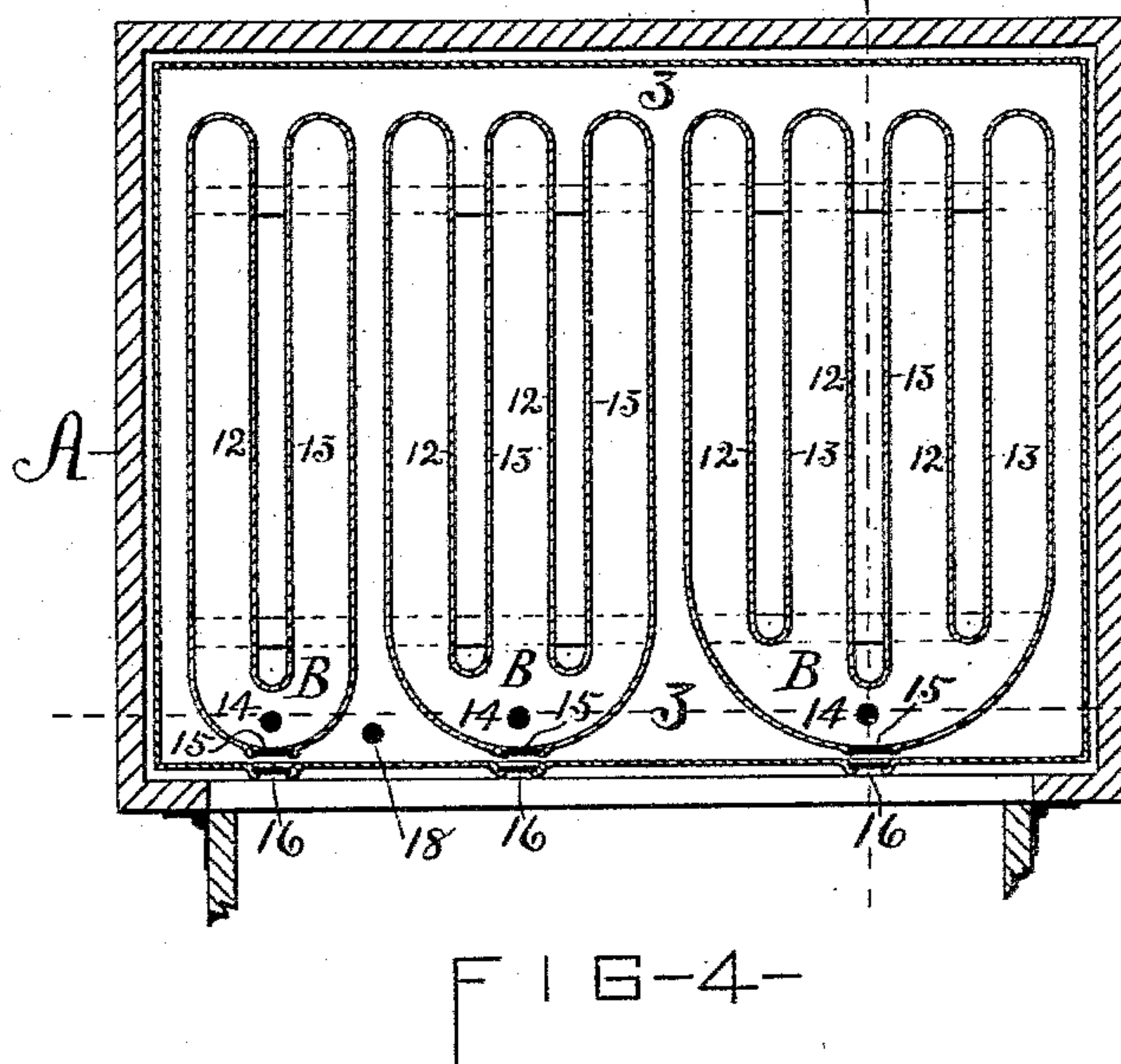
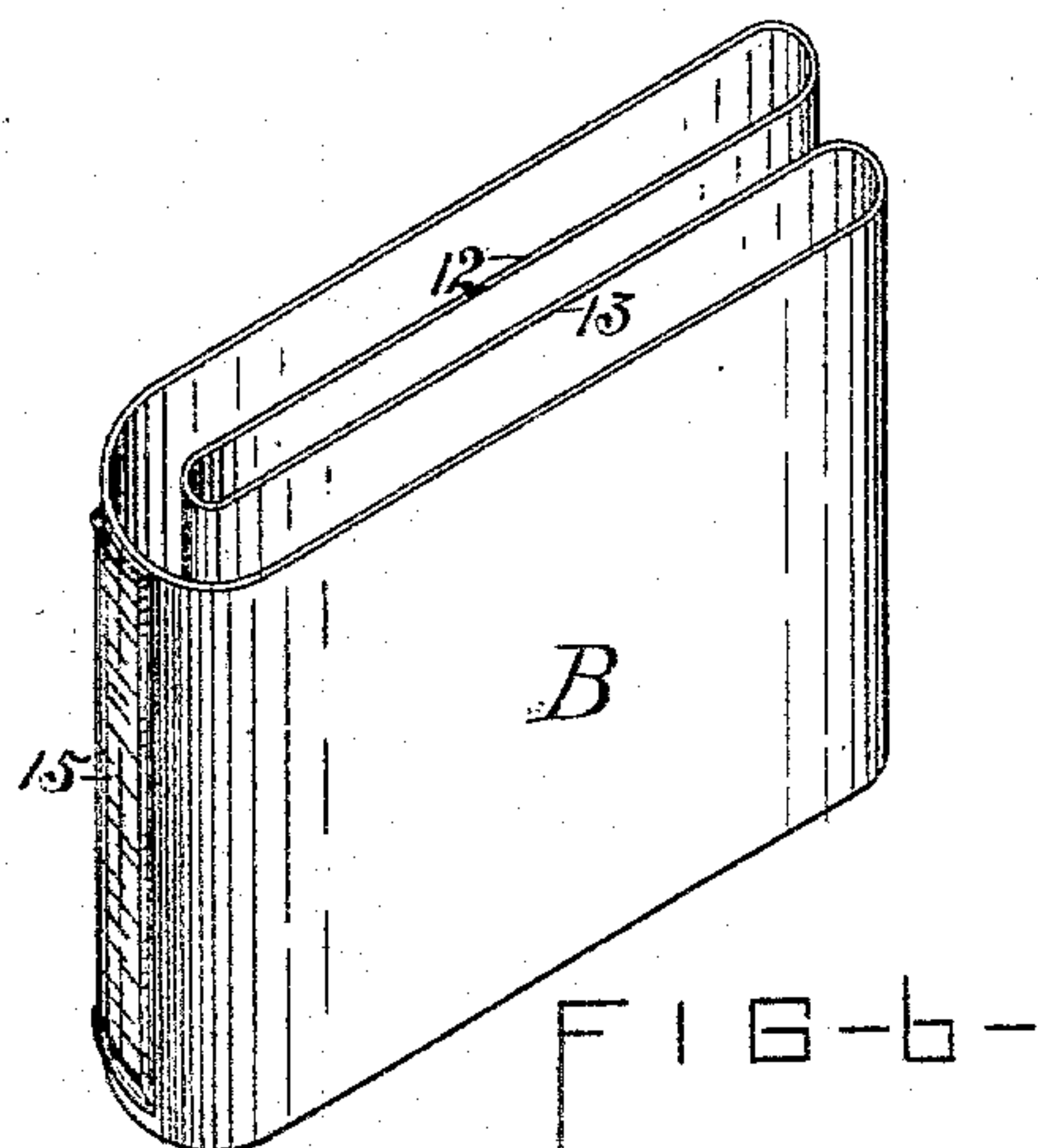
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2 Sheets—Sheet 2.

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ATTEST—
Albert Horn.
John Rogers

INVENTOR—
Andrew J. Orr.
per Wm B. Raymond
his atty.

UNITED STATES PATENT OFFICE.

ANDREW J. ORR, OF SYRACUSE, NEW YORK.

MILK-COOLER.

SPECIFICATION forming part of Letters Patent No. 356,884, dated February 1, 1887.

Application filed April 12, 1886. Serial No. 198,523. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. ORR, of Syracuse, county of Onondaga, in the State of New York, a citizen of the United States, have
5 invented certain new and useful Improvements in Milk-Coolers, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of the cabinet
10 with doors open; Fig. 2, a vertical transverse section of same; Fig. 3, a vertical section on line *x x*, Fig. 1; Fig. 4, a horizontal section on line *y y*, Fig. 1; Fig. 5, a plan view of top of cabinet and refrigerating-pan, the cabinet-
15 cover being removed; and Fig. 6 is an isometric view of my U-shaped milk-can.

Similar letters or figures of reference indicate corresponding parts throughout the several views.

20 My invention consists of a milk-can having inner vertical walls bent inwardly and forming a U-shaped milk-chamber, said walls being parallel to the vertical side walls and connected to each other and to the side walls by rounded
25 connections, and having a flat open top, the recess extending up to the top.

My object is to improve the construction of the cooler by making the greater part of the interior in removable sections to facilitate
30 cleaning, and also to improve the milk-can by increasing the area of cooling-surface, and also to obtain a flow of the cooling-liquid around the milk-can at all points of its outer surface, and especially in front between the milk-can
35 and the lining of the case. It is constructed as follows:

A is the cabinet, consisting of a wooden case provided with transverse joists 1, upon which I mount the longitudinal stringers 2, the joists
40 and stringers together constituting an inclined supporting-frame to carry the water-tank 3, and located upon an incline above the bottom of the cabinet, about as shown, thus creating the chamber 4. This water-tank is constructed
45 of sheet metal, water-tight. I provide this cabinet with doors in front to permit access to the faucets 5 6 and to the chamber 4, as well as to observe the condition of the milk or cream through the glass ports of the case or water-
50 tank. This cabinet has also a removable cover to permit access to the ice-pan 7 and funnels 8. It is also provided with a water-inlet, 9,

opening into the ice or water pan 7, and an overflow-pipe. 10, located at about the top of the milk-can B.

B is my milk-can, constructed of sheet metal, with vertical sides or walls and tight flat inclined bottom, which bottom is provided with the supporting-ribs shown in Fig. 3. The walls of this can are bent inward from one end
60 so as to create a U-shaped milk-chamber, the sides of which chamber are separated by the walls 12 13, and these walls are separated from each other to create a water-space between them. This is the construction shown in Fig. 65
6 and at the left of Fig. 4.

In Fig. 4 I show two duplications or extensions of my construction, in that the central milk-can is shown as having two sets of inwardly-bent walls, 12 13, creating three parallel milk-chambers communicating with each
70 other, and in the milk-can on the right I show three sets of inwardly-bent walls, creating four parallel milk-chambers, all communicating with each other. In either construction 14 is
75 the faucet-pipe, only one being necessary, even for the largest milk-can. Upon these pipes I screw the faucets 5, the pipes extending down through holes in the bottom of the water-tank,
80 provided with a suitable packing to make a water-tight joint, and the faucets are removably secured below, and when the faucets are unscrewed the milk-cans can be lifted out of the cabinet for scalding or other cleansing.

In the front of the milk-can I cut a vertical
85 port or slot, which I cover and close with a sheet of glass, 15, making a water-tight joint in any desired manner. This slot and glass 15 extends from the bottom to the top, or very nearly so, and the glass permits the inspection
90 of the cream.

In the side of the water-tank I cut also a vertical port or slot, which is covered by a sheet of glass, 16, mounted thereon by a water-tight joint in any ordinary manner, and these
95 glasses 15 16 coincide with each other.

In the bottom of the water-tank I insert a draw-off pipe, 18, upon which I secure the faucet 6, by which I draw off the water in this tank.

In the funnels 8 I place the removable or stationary strainers 19, through which the milk can be strained into the milk-cans. These funnels are secured to the bottom of the ice
100

and water-pan, and when I remove this pan they come with it. In the bottom of this refrigerating-pan I locate suitable pipes, 20, to conduct the cold water down around the exterior of the milk-chambers or about the tank, 5 and these pipes 20 extend above the bottom of the pan, so as to insure a certain depth of cold water thereon when desired.

21 is the general ventilating-shaft, and 22 is 10 a draw-off pipe from the ice or water pan.

I am aware that cylindrical milk-cans having in one side a vertical recess extending about two-thirds the way up from the bottom, and having inclined and converging sides to 15 the recess and a rounded back and an upwardly-inclined top, have been heretofore invented and patented; but that is not my invention.

What I claim as my invention is—

A milk-cooling can constructed with parallel vertical outer sides connected by a rounded 20 front, parallel vertical inner walls extending inwardly partially across the can, as shown, and upward to the top, and connected to the sides and to each other by rounded vertical 25 walls, and having a flat open top and a bottom connected to the sides and walls, substantially as shown and described.

In witness whereof I have hereunto set my hand this 31st day of March, 1886.

ANDREW J. ORR.

Witnesses:

ROBT. H. ABBOTT,
W. E. ABBOTT.