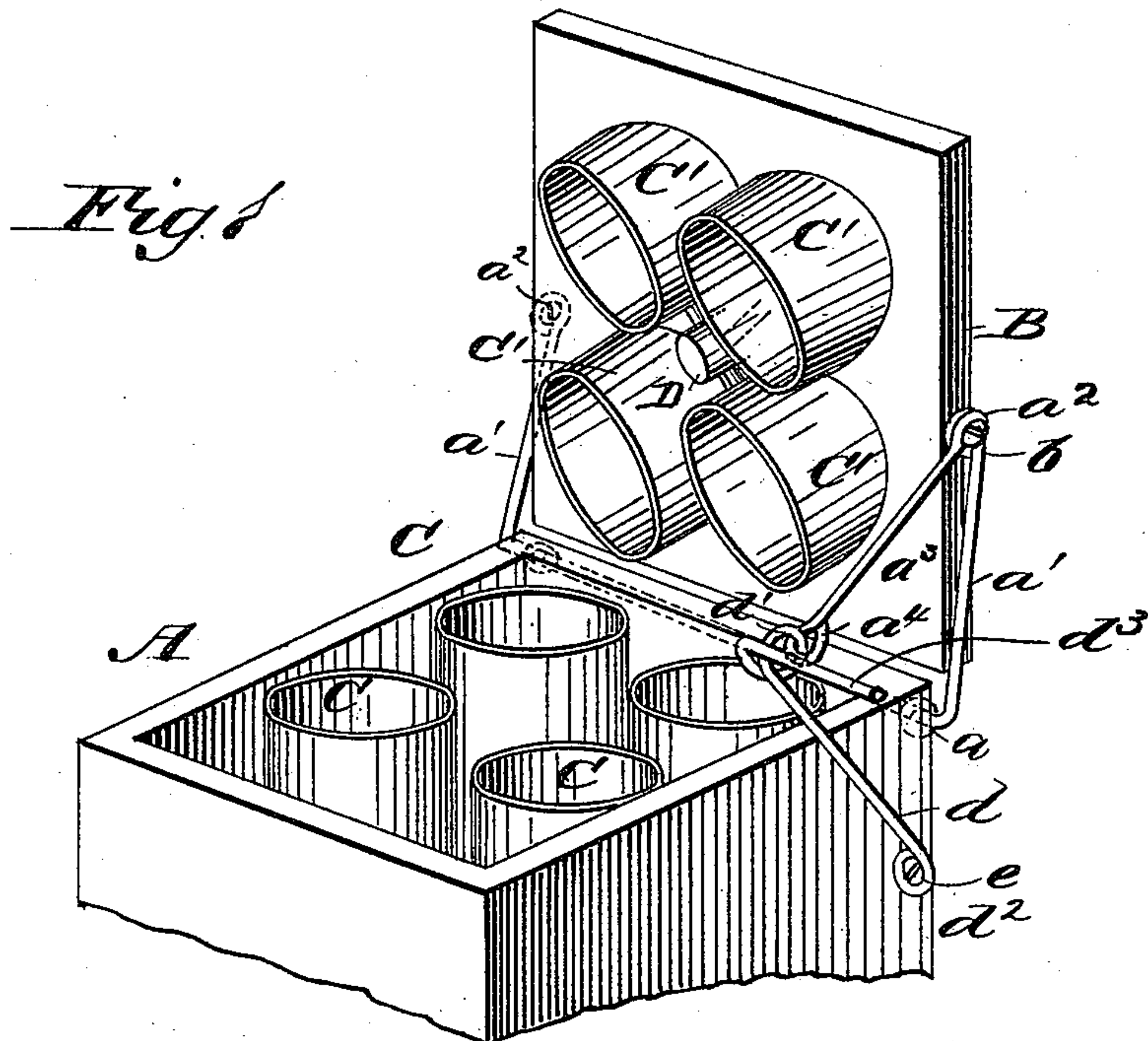


(No Model.)

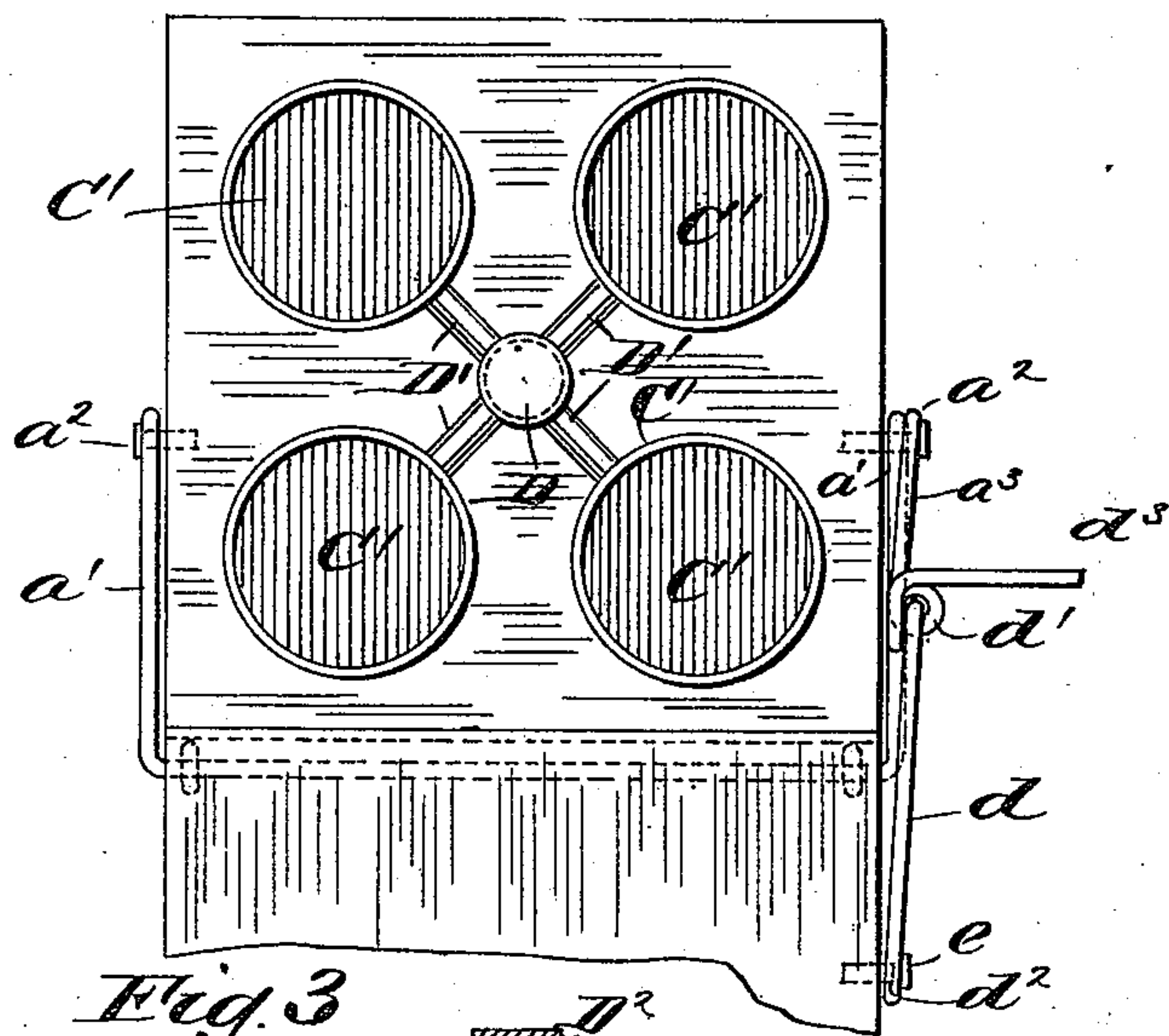
W. W. CONDER.  
MILK COOLER.

No. 451,299.

Patented Apr. 28, 1891.

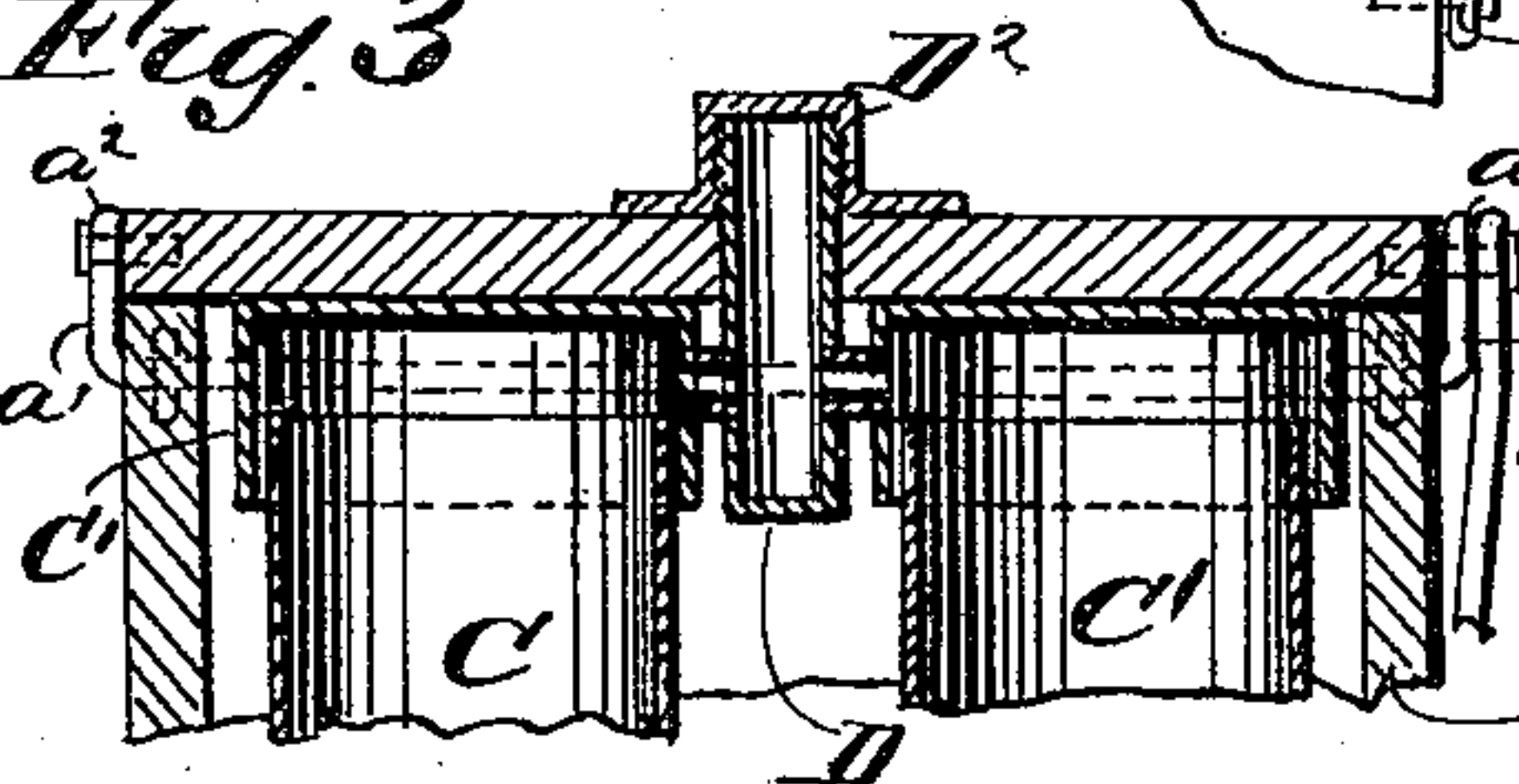


*Fig. 2.*



*Fig. 3*

WITNESSES:  
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INVENTOR:

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# UNITED STATES PATENT OFFICE.

WILLIAM W. CONDER, OF TILLAMOOK, OREGON.

## MILK-COOLER.

SPECIFICATION forming part of Letters Patent No. 451,299, dated April 28, 1891.

Application filed July 26, 1890. Serial No. 360,038. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. CONDER, of Tillamook, in the county of Tillamook and State of Oregon, have invented a new and Improved Milk-Cooler, of which the following is a full, clear, and exact description.

My invention relates to improvements in milk-coolers, and is intended as an improvement on the device for which I filed an application for Letters Patent of the United States October 2, 1889, said application being numbered 325,743 and allowed December 2, 1889.

The object of my invention is to provide means whereby the cover of the main tank and the covers of the milk-receptacles may be easily operated, and also to provide a simple arrangement to permit the escape of animal heat from the milk in the milk-receptacles.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken perspective view of the tank and milk receptacles, showing the tank-cover open. Fig. 2 is a front elevation of the same, and Fig. 3 is a broken transverse section of the device with the tank-cover closed.

The tank A is provided with milk-holding vessels C, which are united at the bottom into a common receptacle, as shown and described in my former application above referred to. The cover B is hinged to the tank A, as described below, and on its under surface are depending flanges C', adapted to fit closely upon the vessels C and serve as covers for the same, the above-described parts being substantially as shown in my former application and forming no part of this invention.

A rod *a* extends across the back portion of the tank A, near the upper end thereof, being pivoted in suitable keepers, and each end of the rod is bent to form the part *a'*, which extends parallel with the sides of the cover B, said parts having suitable eyes *a<sup>2</sup>*, by means of which they are attached to the cover. On

one side of the cover B the rod *a* is also formed into a depending arm *a<sup>3</sup>*, having a terminal eye *a<sup>4</sup>*, which engages or interlocks with an eye *d'* of the rod *d*, said rod having its lower end formed into a terminal eye *d<sup>2</sup>*, which is pivoted by a screw *e* to the rear side of the tank A, and having its upper end formed into a suitable crank *d<sup>3</sup>*, so that by moving the crank the rod *d* and the part *a<sup>3</sup>* of the rod *a* will be moved and the cover B raised or lowered, as the case may be.

The rods *a* and *d* are formed preferably of iron of sufficient strength to bear the weight of the cover, and it is obvious that the shape of the rods may be changed without departing from the principle of my invention, and that a greater or less number of members may be used.

A pipe D projects through the cover B, being centrally fixed therein, said pipes having its lower end provided with branch pipes D', which open from said pipe into the flanges or covers C' of the various milk-holding vessels C. The pipe D projects above the upper surface of the cover B, is screw-threaded, as shown, and provided with a suitable cap D<sup>2</sup>, which is internally screw-threaded, so as to fit nicely upon the upper end of the pipe D. It will thus be seen that when the cover B is closed the flanges C' will fit closely upon the milk-holding vessels C, and that by removing the cap D<sup>2</sup> from the pipe D the animal heat from the milk in the vessel C will pass through the branch pipes D' and pipe D and into the outer air. It will also be found in practice that the arrangement of the rods *a* and *d* will permit the easy operation of the cover B, and that the connected ends of said rods will press against the sides of the tank and hold the cover B in position thereon. In practice the tank A is filled with cold water in the manner described in my former application.

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

1. In a milk-cooler, the combination, with a tank carrying milk-holding vessels, and a cover hinged to the tank and provided with depending flanges adapted to inclose said vessels, of a pipe centrally fixed in the cover and

having branch pipes connecting with the flanges of the cover, substantially as described.

2. In a milk-cooler, the combination, with a tank carrying milk-holding vessels, and a  
5 cover hinged thereto and provided with depending flanges adapted to inclose the tops of the vessels, of a pipe projecting through the cover, said pipe having at its lower end branch pipes connecting with said flanges  
10 and having its upper end provided with a suitable cap, substantially as described.

3. In a milk-cooler, the combination, with the tank A and cover B, of the rod  $a$ , pivoted

on the tank and provided with arms  $a'$ , having eyes  $a^2$  thereon, which are fixed to the sides 15 of the cover, and the member  $a^3$ , depending from the cover B and formed into a terminal eye  $a^4$ , and the rod  $d$ , having an eye  $d'$  to engage the eye  $a^4$ , an eye  $d^2$ , pivoted to the side of the tank, and a suitable crank  $d^3$ , by means 20 of which the rods  $a$  and  $d$  and the cover B may be operated, substantially as described.

WILLIAM W. CONDER.

Witnesses:

J. H. WHITING,

I. T. MAULSBY.