

No. 641,959.

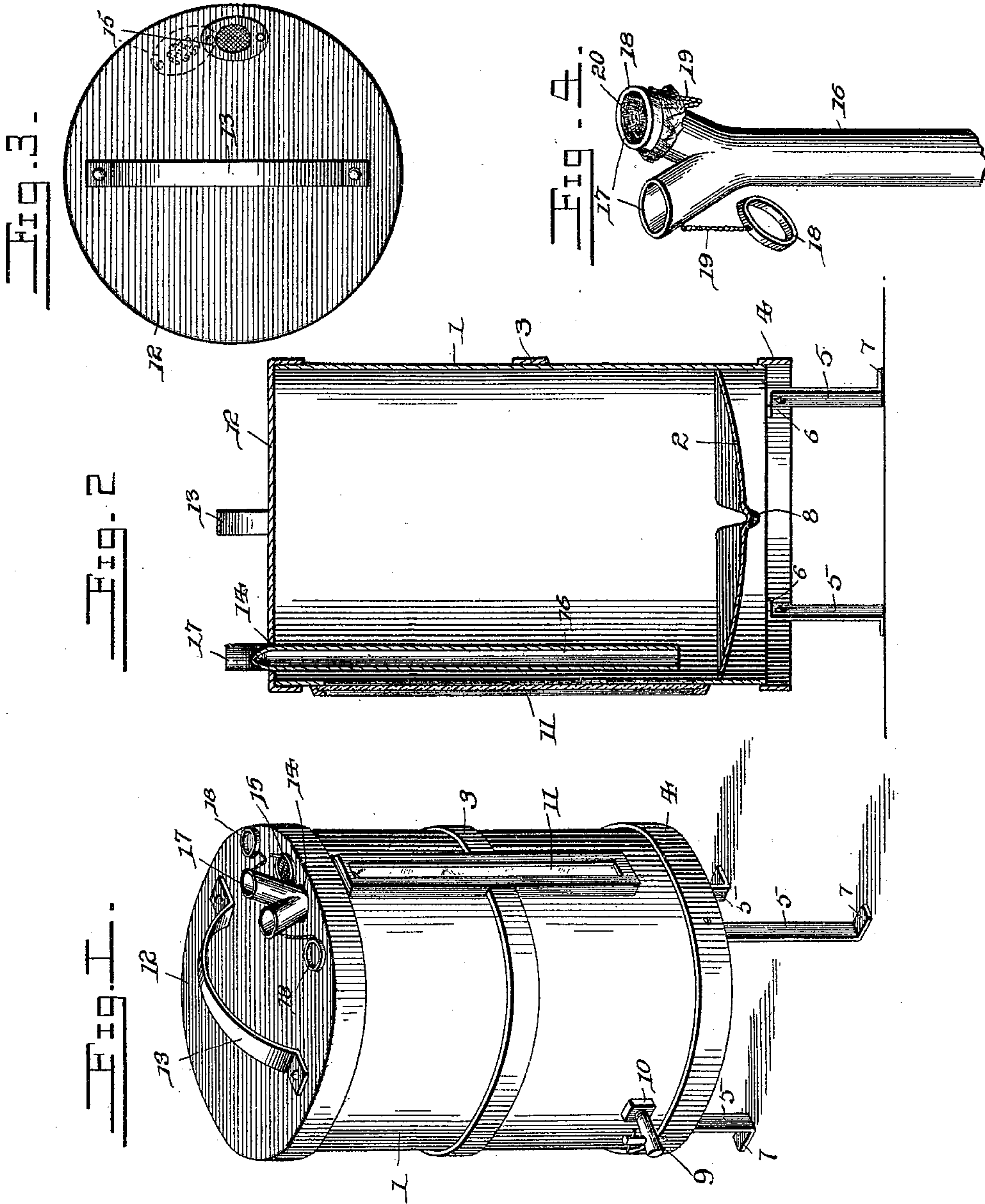
Patented Jan. 23, 1900.

J. D. HENDRICKSON & W. E. KIMBALL.

CREAM SEPARATOR.

(Application filed Oct. 19, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN D. HENDRICKSON AND WILLIAM E. KIMBALL, OF MADISON,
WISCONSIN.

CREAM-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 641,959, dated January 23, 1900.

Application filed October 19, 1899. Serial No. 734,102. (No model.)

To all whom it may concern:

Be it known that we, JOHN D. HENDRICKSON and WILLIAM E. KIMBALL, citizens of the United States, residing at Madison, in the
5 county of Dane and State of Wisconsin, have invented a new and useful Cream-Separator, of which the following is a specification.

This invention relates to cream-separators of that class employing a cooling agent for contact with the milk, and thereby to perform the separating process; and it has for its object to provide separate inlets for the milk and the cooling agent, so that the latter may not carry into the receptacle the foreign matter strained
15 from the milk by the strainer provided upon the receptacle, and, finally, to have the several parts detachably assembled together, so as to facilitate the cleansing thereof, and thereby provide a sanitary device.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims; it being understood that
25 changes in the form, proportion, size, and minor details may be made within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a cream-separator constructed in accordance with the present invention. Fig. 2 is a central vertical longitudinal sectional
35 view thereof. Fig. 3 is a top plan view of the cover. Fig. 4 is a detail perspective view of the detachable filling-tube for introducing the milk and the cooling agent into the receptacle.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates a substantially cylindrical can or receptacle having a concaved reëntrant
45 bottom 2 and provided with an intermediate exterior strengthening or stiffening band 3. This can or receptacle is detachably supported upon a stand comprising a ring 4, having leg-standards 5, bolted or otherwise secured to the inner side of the ring. The up-
50 per end of each leg-standard is provided with

an inwardly-projecting lug or shoulder 6 and at its lower end with an outwardly-projecting foot 7. As best shown in Fig. 2 of the drawings, it will be seen that the feet 7 are adapted to rest upon a suitable support, such as a table on the floor of a building, and the lower edge of the can or receptacle 1 is detachably fitted within the ring 4 and rests upon the
55 respective lugs or shoulders 6, so as to firmly support the device and prevent accidental movement thereof.

The concave bottom of the receptacle is provided with a depression or gutter 8, which extends from the center of the bottom downwardly and outwardly to the outer edge thereof, and a suitable faucet 9 is provided through the side of the receptacle and communicates with the lower end of the depression or gutter, so as to effectually drain the interior of the
65 receptacle. In order that the faucet may be detachably secured in place, the side of the receptacle is provided with a fixed nut or enlargement 10, having a screw-threaded opening into which the stem of the faucet is detachably screwed.

Extending longitudinally of one side of the can or receptacle is a vertically-disposed transparent or glass-covered opening whereby the interior of the receptacle may be conveniently
80 viewed for the purpose of discerning the separation of the cream. The upper end of the receptacle is open and may be closed by means of a cover 12, which is preferably flat and provided with a centrally-disposed bowed
85 handle 13, located upon the top of the cover. Near one edge of the cover there is provided a substantially circular opening, and hinged or pivoted to the cover and at one side of the opening is a laterally-movable perforate lid
90 15, which is adapted to cover the opening 14 and provide a strainer therefor and may also be moved to one side, as indicated in dotted lines in Fig. 3, so as to expose the opening.

Detachably fitted in the opening 14 in the cover 12 is a tube 16, which is provided at its upper end with a pair of divergent branch
95 members 17. As shown in Fig. 2, the tube is inserted through the opening 14 in the cover, assuming a vertical position within the receptacle and having its lower open end located adjacent to the bottom of the recep-
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tacle. Also the divergent branch members being too large to pass through the opening 14 bind upon the edges thereof, so as to suspend the tube in position and at the same time 5 permitting of the ready removal thereof. Each branch member 17 is provided with a clamping-ring 18 of slightly greater diameter than the member and connected thereto by means of a chain or other suitable flexible 10 connection 19. The purpose of this ring is best shown in Fig. 4 and is intended to embrace a piece of fabric 20, so as to firmly hold the latter upon the upper open end of the adjacent branch, and thereby provide a de- 15 tachable strainer.

In the operation of the device the milk is introduced into the interior of the receptacle through one of the branch members and the tube 16, and afterward water is introduced 20 through the other branch member and discharged at or near the bottom of the volume of milk contained within the receptacle. By introducing the water at or near the bottom of the receptacle and substantially beneath 25 the milk the latter is not agitated by the introduction of the water. The two inlets or branch members are provided in order that the water may be introduced through a separate inlet, so that any foreign matter collected 30 by the strainer through which the milk is passed may not be carried into the interior of the receptacle and also into the milk by the water which is afterward introduced. When the required amounts of milk and water have 35 been introduced into the receptacle, the tube 16 is withdrawn from the cover, and the opening 14 is closed by means of the perforate lid

15. The device is then permitted to stand until the cream has become separated from the milk by reason of the difference in tem- 40 perature between the latter and the water, which separation may be readily discerned through the transparent opening 11. Besides preventing ingress of foreign matter through the opening 14, the perforate lid 15 also pro- 45 vides a ventilator to permit of the escape of the animal heat contained in the milk. The water, milk, and cream are alternately drawn off through the inclined gutter 8 and faucet 9.

What we claim is— 50

1. A cream-separator, having a filling-pipe, provided with a pair of inlets, and strainers therefor, one of the inlets receiving the milk, and the other inlet receiving a liquid cooling agent. 55

2. A cream-separator, comprising a receptacle, a cover having an opening formed therein, a filling-pipe fitting in the opening, and having a pair of divergent branch inlet members, frictionally engaging the walls of the 60 opening, and removably suspending the pipe within the receptacle, and strainers for the inlet members, one of the latter receiving the milk, and the other inlet member receiving a liquid cooling agent. 65

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JOHN D. HENDRICKSON.
WILLIAM E. KIMBALL.

Witnesses:

M. EVANS,
C. H. TENNEY.