

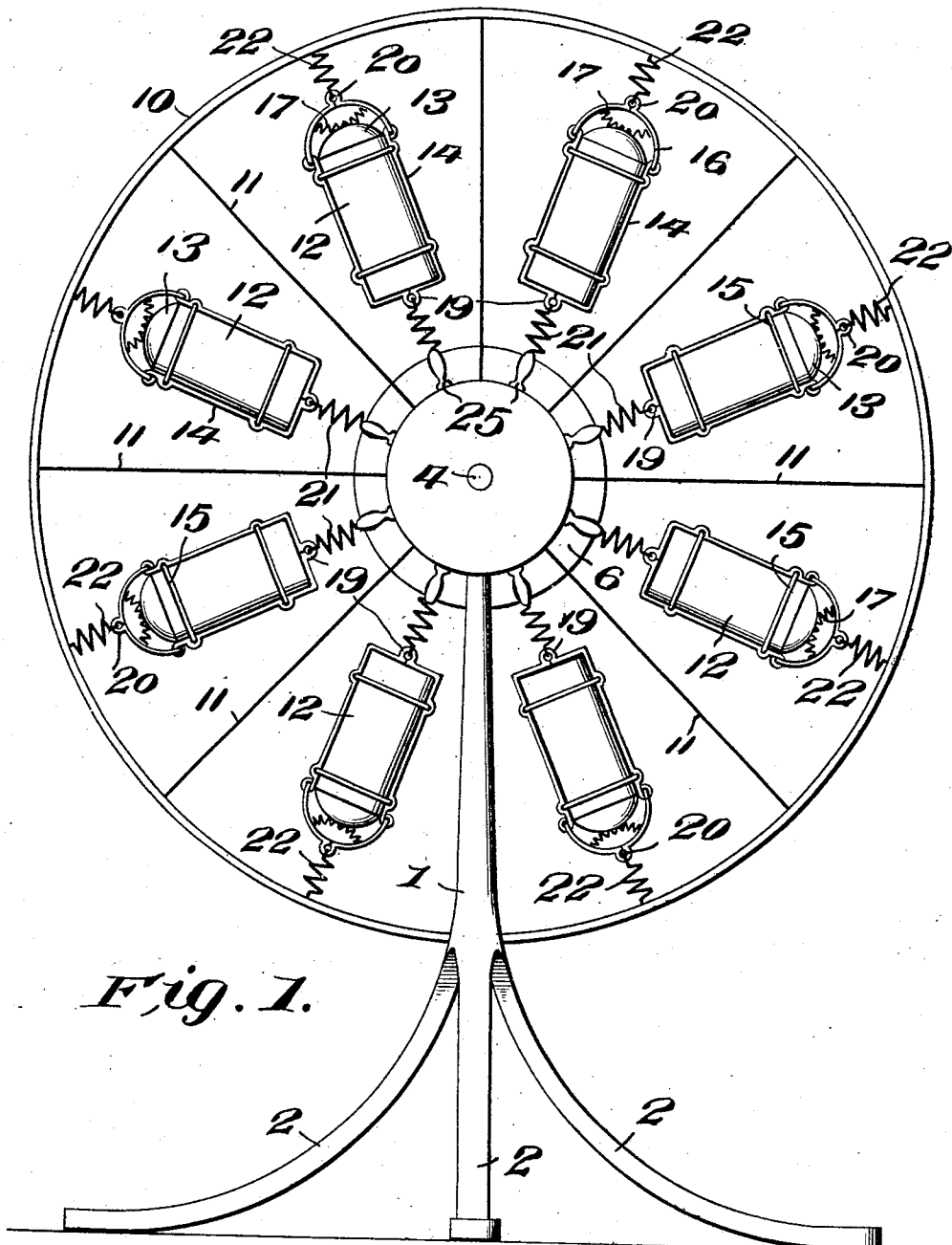
No. 863,009.

PATENTED AUG. 13, 1907.

J. SUPPER.
CHURN.

APPLICATION FILED MAY 22, 1907.

2 SHEETS—SHEET 1.



Witnesses

Thos. W. Tiley
 & F. Head.

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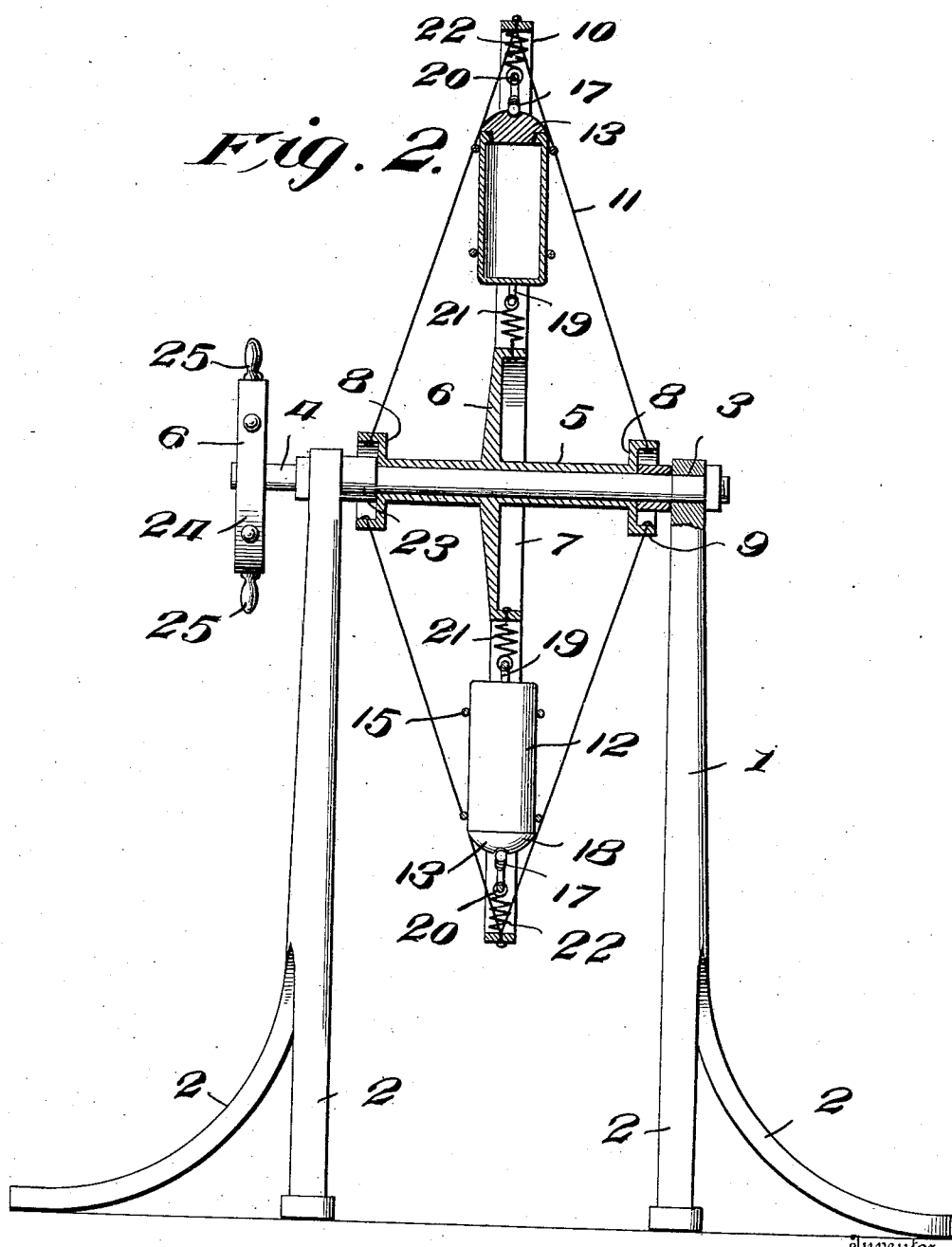
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Witnesses
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UNITED STATES PATENT OFFICE.

JOHN SUPPER, OF LAKEWOOD, NEW JERSEY.

CHURN.

No. 863,009.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed May 22, 1907. Serial No. 375,073.

To all whom it may concern:

Be it known that I, JOHN SUPPER, a citizen of the United States, residing at Lakewood, in the county of Ocean and State of New Jersey, have invented certain new and useful Improvements in Churns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in churns and my object is to provide means for oscillating receptacles when the churn is being rotated.

A further object is to provide means for supporting receptacles on the frame of the churn and a still further object is to provide means for readily operating the churn.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are a part of this application, Figure 1 is a side elevation of my improved churn complete, and, Fig. 2 is a sectional view thereof.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates supporting standards at the bottom of which is formed feet 2, and the upper ends thereof are provided with bores 3, in which is seated a supporting and driving shaft 4.

Fixed to the shaft 4 between the standards 1 is a hub 5 at the central portion of which is formed a disk 6, said disk having a flange 7 extending laterally from one face thereof and at the periphery of the disk and each end of the hub 5 is provided with an auxiliary disk 8 which are likewise provided with auxiliary flanges 9.

Surrounding the disk 6 and spaced a distance therefrom is a band 10, which is held in position by means of brace rods 11, which are secured at one end to the band and at their opposite ends to the auxiliary flanges 9 and by properly placing the brace rods around the band and auxiliary flanges, said band is rigidly fixed at a predetermine distance from the flange 7.

Suspended around the flange 7 and between said flange and the inner faces of the band 10 are a plurality of receptacles 12, in which the cream is deposited to be churned, said receptacles having a cover 13 at one end thereof to hold the cream in the receptacles and said receptacles are engaged by a U-shaped frame 14 which extends along opposite sides of the receptacle and below the bottom thereof and is held in position on the receptacle by means of rings 15 carried by the frame 14, and the upper end of the frame is provided with a bail 16 which is so arranged as to extend over the cover 13 and has secured thereto a spiral spring 17 which is employed to direct pressure on the lid and hold the lid firmly in position on the receptacle. In

order to prevent the spring from leaving the cover, said cover is provided with a channel 18 in which the bowed portion of the spring is seated thereby holding the cover in position on the receptacle under pressure.

In order to suspend the receptacle between the flange 7 and the band 10, I provide the lower end of the frame 14 and the central portion of the bail 16 with eyes 19 and 20 respectively to which are secured springs 21 and 22 respectively, the opposite end of the spring 21 being secured to the flange 7, while the upper end of the spring 22 is secured to the band 10, said springs being coiled and it will be readily seen that by so mounting the frames and the receptacles that an oscillating movement will be given thereto as the receptacles travel around the shaft 4 the cream passing from one end to the other of the receptacles causing a sufficient jar upon the ends thereof to act upon the springs.

In order to hold the hub 5 between the standards 1 and prevent longitudinal movement thereof I locate collars 23 between the disk and the standards 1, said collars surrounding the shaft 4. One end of the shaft 4 is extended a distance beyond the supporting standards and has secured thereto a wheel 24 which is provided around its periphery with a plurality of spokes so that by grasping said spokes the shaft 4 and parts carried thereby may be readily rotated and may be rotated in either direction.

In operating my improved form of churn the bail 16 is moved to one side and the cover removed from the receptacle after which the receptacle is filled and the cover replaced thereon and positively held in position by seating the spring 17 in the groove 18 and by providing the wheel as shown for operating the churn, physical exercise is obtained by operating the churn and if desired various forms of pictures may be secured to the brace rod 11 which will lend attractiveness to the churn as well as present a pleasing effect to the eye as the churn is being operated.

It will thus be seen that I have provided a very efficient form of churn and one which can be readily and cheaply constructed and applied to use.

What I claim is:

1. The herein described churn comprising a pair of supporting standards, a shaft rotatably mounted in the upper ends of said standards a hub on said shaft, a disk on said hub, a band surrounding said disk and at a distance therefrom, a plurality of receptacles between said disk and band and means to yieldingly support said receptacles.

2. A churn of the class described, the combination with a pair of standards having bores at the upper ends thereof, of a shaft rotatably mounted in said bores, a hub fixed to said shaft, a band around said hub and a distance therefrom, means to support said band, a plurality of receptacles between said hub and band, means to yieldingly support said receptacles and means to rotate said shaft.

3. In a churn of the class described, the combination with a pair of standards having bores in the upper ends thereof, of a shaft rotatably mounted in said bores, a hub fixed to said shaft, a disk on said hub, a flange on said disk,

- a band surrounding said disk and at a distance therefrom, means to support said band, a plurality of receptacles between said disk and band, a frame for said receptacles, a spring connecting said frame to said flange, a bail on said frame, a cover for said receptacle, means carried by the bail to hold said covers in a closed position, a spring disposed between said bail and the band and means to rotate said shaft whereby the receptacle will be rotated and the contents thereof actuated.
- 10 4. A churn of the class described comprising the combination with standards and a shaft rotatably mounted in said standards, of a band surrounding said shaft, means to support said band, a plurality of receptacles yieldingly mounted between said shaft and band, a supporting frame for each of said receptacles and means to rotate said shaft whereby the contents of the receptacles will be agitated. 15
- In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.
- JOHN SUPPER.
- Witnesses:
ERNEST E. LE COMPTE,
HARRY E. NEWMAN.