

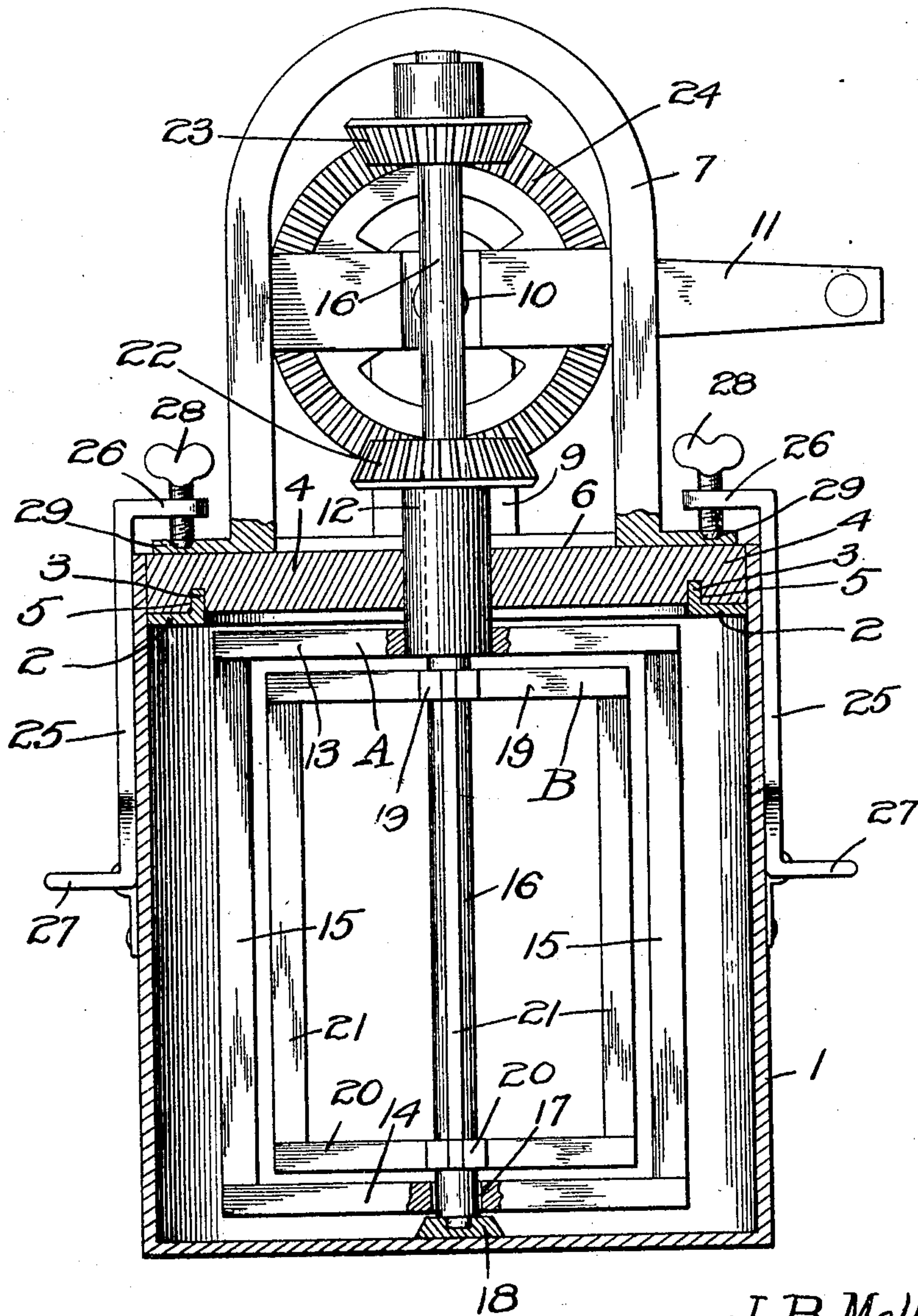
J. B. MELLINGER.
CHURN.

APPLICATION FILED MAY 7, 1908.

Patented Mar. 23, 1909.
2 SHEETS—SHEET 1.

916,349.

Fig. 1.



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2 SHEETS—SHEET 2.

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Fig. 2.

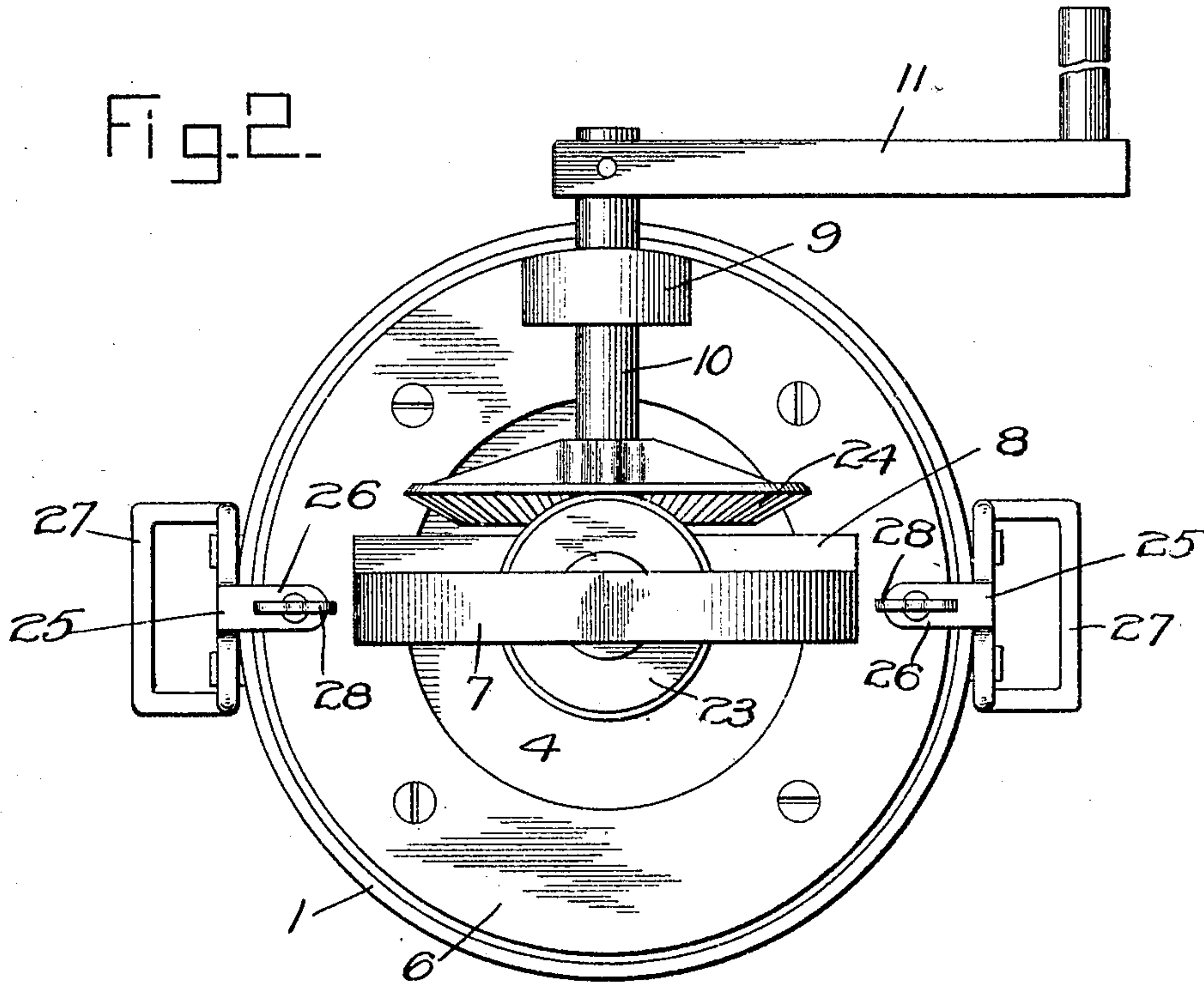
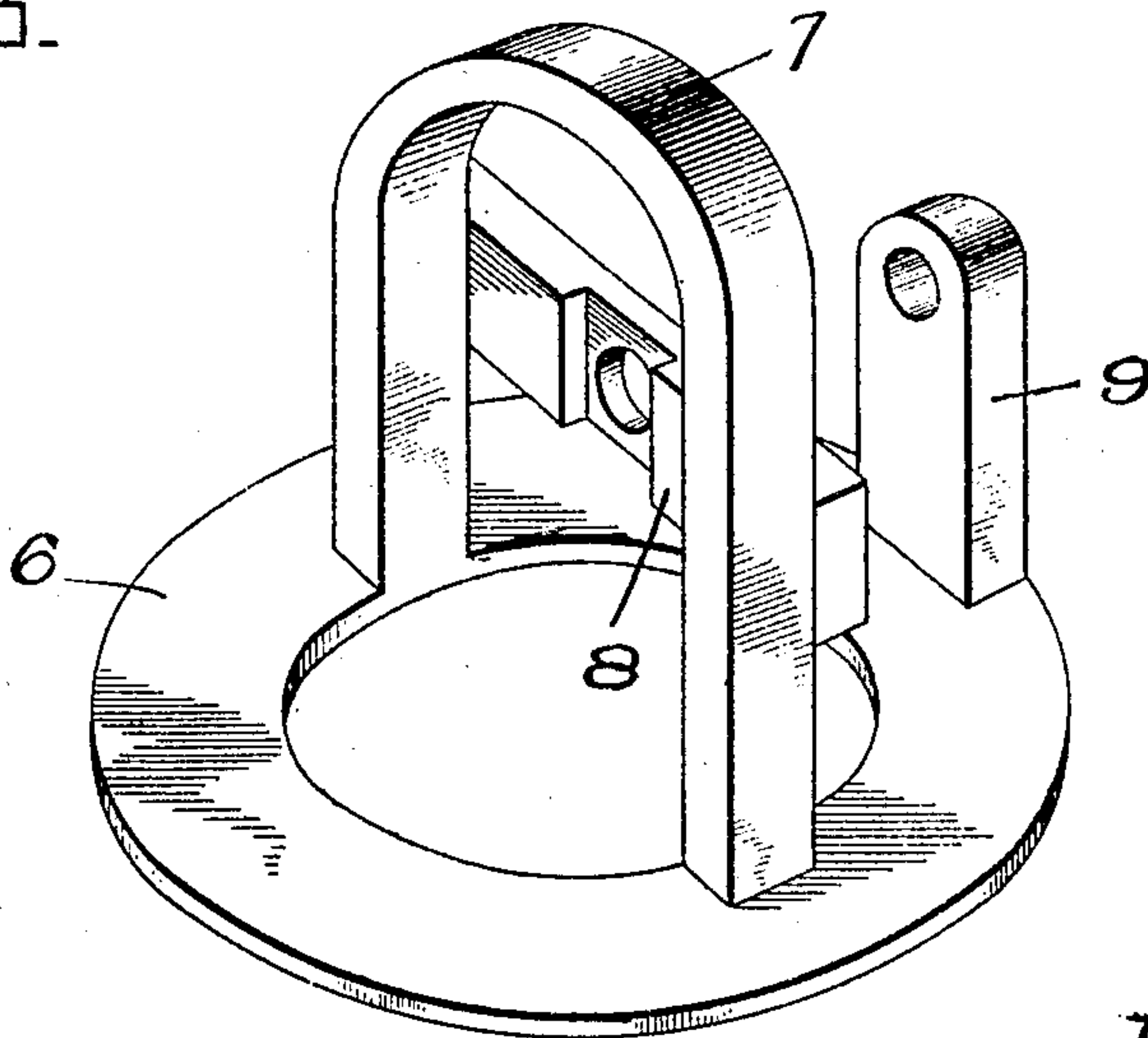


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN B. MELLINGER, OF JUNIATA, NEBRASKA.

CHURN.

No. 916,349.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed May 7, 1908. Serial No. 431,367.

To all whom it may concern:

Be it known that I, JOHN B. MELLINGER, a citizen of the United States, residing at Juniata, in the county of Adams and State of Nebraska, have invented a new and useful Churn; 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.

The invention relates to improvement in churns.

In the accompanying drawing has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the appended claim may be resorted to when desired.

In the drawing—Figure 1 is a vertical sectional view of a churn constructed in accordance with the invention. Fig. 2 is a top plan view. Fig. 3 is a perspective view showing the bearing frame, detached.

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

The vessel 1 which constitutes the body of the churn is preferably of cylindrical shape, and it is provided near its upper edge with an interior annular flange 2, which is of L-shaped cross-section, the inner edge of said flange being upturned to form a circumferential shoulder or offset 3.

The lid 4 of the churn is preferably made of wood, said lid being supported upon the annular flange 2, and being provided in its under side with an annular groove 5 for the reception of the annular shoulder or offset 3.

An extremely tight closure will thus be effected when the lid is in position, and said lid may be very quickly and conveniently adjusted or removed as circumstances may require.

The lid 4 supports a bearing frame which is preferably constructed of metal, and which comprises a base ring 6, supporting an inverted U-shaped arch 7 having a cross-piece 8, and an upright 9 which latter is situated upon the base ring intermediate of the legs of the arch 7, said upright and the cross-bar 8 affording bearings for a shaft 10, which is equipped with a crank 11, whereby it may be conveniently rotated.

A sleeve or collar 12 is supported for rotation centrally in the cover 4, and said sleeve

carries at its lower end a dasher-frame A, which may be composed of upper and lower cross-members 13, 14, having radial arms which are connected by terminal vertically disposed slats 15. A shaft 16 which extends vertically through the sleeve 12 and through a central aperture 17 in the lower cross member 14, is stepped at its lower end in a bearing 18 which is supported centrally upon the bottom of the churn body, a bearing for the upper end of the shaft 16 being provided in the top of the arch 7. The shaft 16 carries a dasher-frame B, which is constructed similar to the frame A, it being composed of upper and lower cross members 19, and 20, having radial arms which are connected by terminal vertically disposed slats 21; the frame B being of such dimensions that it may rotate freely within the frame A.

The sleeve 12 and the shaft 16 are provided with pinions 22, 23, facing each other and meshing with a bevel gear 24, upon the shaft 10, by the rotation of which the sleeve 12 and the shaft 16 carrying the dasher-frames A, B, will thus be rotated in opposite directions.

Hingedly supported upon diametrically opposite sides of the churn-body are two arms 25, provided at their upper or outer ends with laterally extending inward projecting brackets 26, and adjacent to the lower ends with laterally extending outward projecting handles 27. Thumb screws 28 are threaded through the brackets 26, the points of said thumb screws being adapted for engagement with recesses 29, in the base ring 6, of the bearing frame. Thus, when the lid is in position upon the body of the churn, it may be firmly secured by swinging the arms 25 to an upright, approximately vertical position and adjusting the screws 28 to enter the points thereof in the recesses 29; the lid will thus be forced downward upon the supporting flange 2, the annular shoulder of which enters the groove in the under side of the lid, thus making a perfectly tight joint; when the arms 25 are in this position, the handles 27 will project outward from the body of the churn, which may thus be conveniently lifted and moved as may be desired. When it is desired to remove the lid, the thumb screws 28 are loosened, and the arms 25 are swung outward from the body of the churn, being supported in this position by the handles 27.

By manipulating the crank 11 the shaft 10

will be rotated, and the sleeve 12 and the shaft 16 carrying the dasher frame A, B, will be rapidly rotated in opposite directions and the cream which has been placed in the churn will thus be subjected to a thorough agitation whereby butter will be produced very rapidly and in a most satisfactory manner. An important advantage of the improved churn resides in the facility with which it may be cleansed, by simply pouring hot water into the churn-body and operating the dashers to agitate the same, every corner and crevice of the churn being thus cleansed very rapidly and efficiently.

Having thus described the invention, what is claimed is:

A cylindrical churn of the class described, having a lid provided with an annular groove, an interior annular supporting flange mount-

ed on the side of said churn, having an upturned portion adapted to engage said groove, arms pivotally mounted on opposite sides of said churn and having inwardly projecting brackets, provided with thumb-screws arranged opposite said supporting flange, the lower ends of said arms having outwardly projecting handles adapted to engage the side of the churn when released, dashers mounted in said cylinder, and means for operating the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN B. MELLINGER.

Witnesses:

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