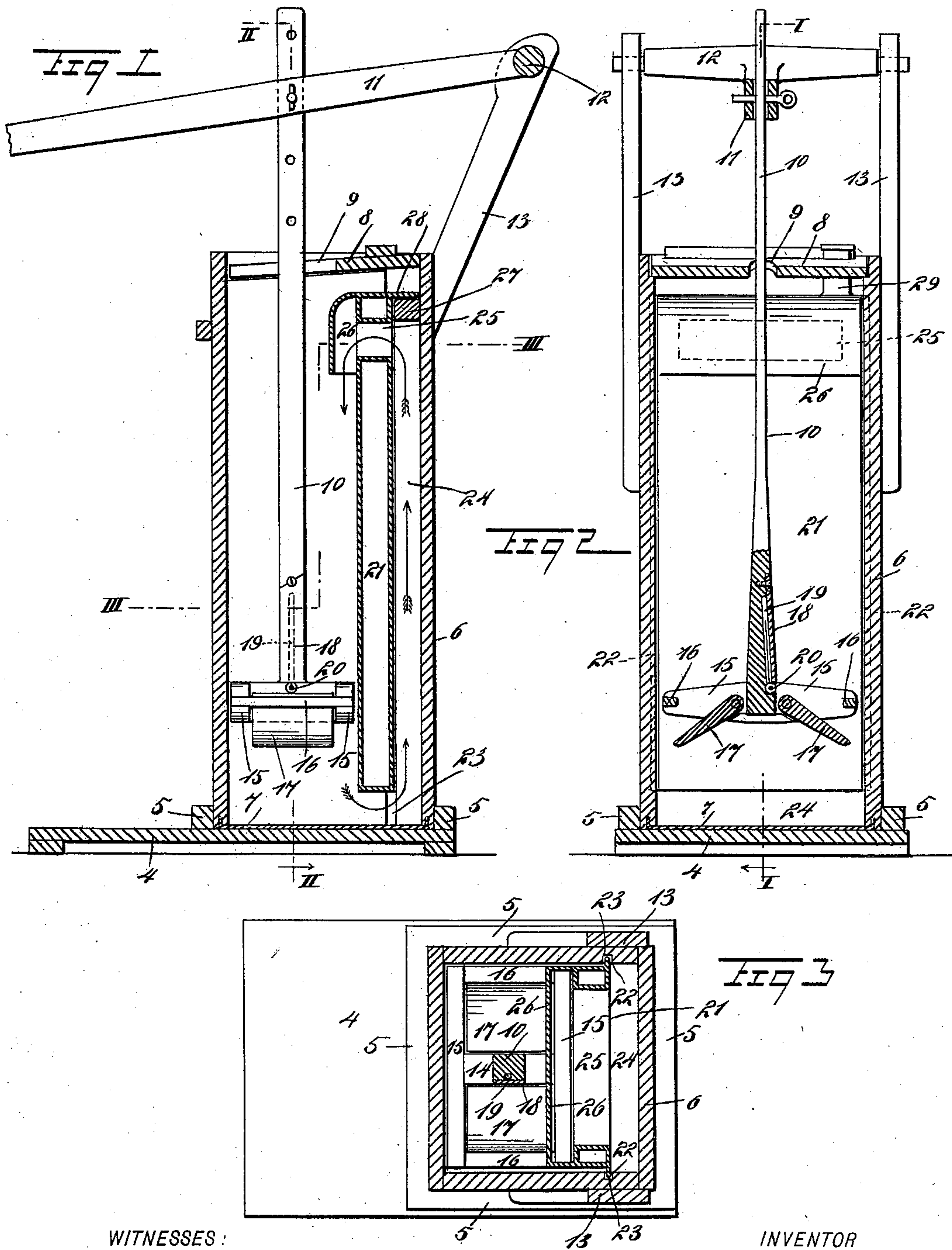


(No Model.)

J. BENNETT.
CHURN.

No. 592,216.

Patented Oct. 19, 1897.



WITNESSES:

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JOHN BENNETT, OF LYNDHURST, CANADA, ASSIGNOR TO HIMSELF AND
JAMES THOMPSON, OF SAME PLACE.

CHURN.

SPECIFICATION forming part of Letters Patent No. 592,216, dated October 19, 1897.

Application filed April 21, 1897. Serial No. 633,167. (No model.)

To all whom it may concern:

Be it known that I, JOHN BENNETT, of Lyndhurst, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Churn, of which the following is a full, clear, and exact description.

This invention is a churn with a reciprocal dasher, serving to create a current of cream around a reservoir, which may contain hot or cold water to regulate the temperature of the cream.

This specification is the disclosure of one form of my invention, while the claims define the actual scope of the conception.

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

Figure 1 is a section of the invention on the line I I of Fig. 2. Fig. 2 is a section of the invention on the line II II of Fig. 1, and Fig. 3 is a section of the invention on the line III III of Fig. 1.

A base-board 4 is provided with cleats 5, arranged in a square figure and holding the lower end of the churn-body 6, which is a vertically-elongated four-sided structure, with a metallic base 7 rested flat upon the upper side of the plate 4 and having flanges sunken in the lower edges of the sides of the body 6, by which construction a hermetic chamber is formed.

The top of the body 6 is closed by a lid 8, having a slot 9, through which the dasher-rod 10 is movable. The dasher-rod 10 is pivoted to an operating-lever 11, the transverse head 12 of which is mounted in standards 13, respectively carried in diagonal positions by sides of the body 6. The lower end of the rod 10 carries a transverse head 14, the ends of which respectively carry bars 15, running parallel with each other and spanned at their ends by cross-bars 16. Pivottally mounted between the bars 15 are the dasher-plates 17, which open downwardly as the dasher moves upward, and as the dasher moves downward the plates 17 close against the cross-bars 16. The lower end of the dasher-rod 10 has a removable plate 18 covering a thermometer 19, the bulb 20 of which is continually exposed at the lower end of the plate 18. The plate

18 may be easily removed to expose the tube of the thermometer when it is desired to note the indications thereof; but normally the thermometer is covered to prevent it from being engaged with the cream and butter within the churn-body 6. A hollow partition 21 has side flanges 22 respectively running in vertical grooves 23, formed in the inner surfaces of opposite sides of the body 6 of the churn. By these means the partition 21 is held immovably in place, and the arrangement of the grooves 23 is such as to leave a vertically-elongated passage 24 on the side of the partition 21 opposite the side occupied by the dasher. The lower edge of the partition 21 is raised above the bottom plate 7 of the body 6, so that the two compartments communicate at the bottom. The upper portion of the partition 21 is provided with a passage 25, establishing communication between the upper end of the space 24 and the remainder of the churn by means of an apron 26 to which the passage 25 leads. A cleat 27 is carried by the rear wall of the body 6 of the churn and in position to be engaged by the ledge 28 at the upper portion of the partition 21, whereby the partition 21 may be supported in proper vertical position.

The operation of the dasher within the churn causes the cream to circulate throughout the body in a manner indicated by the arrows in Fig. 1. By means of a feed-nipple 29 the hollow partition 21 may be filled with liquid at such a temperature as will properly regulate the temperature of the cream. The agitation of the cream against the partition effectually churns the cream, while the peculiar construction of the dasher tends to make the circulation of the cream perfect.

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

1. The combination with the churn having a body portion, of the hollow partition within said body portion, said partition providing passages at the top and bottom of the body and through which the cream may circulate, and having an inlet-opening for water, whereby to regulate the temperature of the cream.

2. A churn having a body portion, a hollow partition run longitudinally within the body

portion and dividing the same into two passages, the partition having an opening in its upper end through which the cream may pass from one passage to the other and being suspended from such end with its lower end separated from the contiguous wall of the churn to establish communication at the lower portions of the passages, a dasher working in one of the passages to effect a continuous circulation of the cream through the passages and a feed-nipple for the temperature-regulating liquid.

3. The combination with a churn having a rectangular vertically-elongated body portion, of a hollow partition run vertically through said body portion near one side thereof and dividing the churn into two compartments, the partition having an opening in its upper portion by which to establish communication between the compartments, an apron covering the opening and projecting downwardly past the same, and means for filling said hollow partition with a liquid for regulating the temperature of the cream.

4. A churn having a vertically-elongated body portion, a partition run vertically in the body portion and having an opening there-through, an apron carried by the partition and running past the opening to guide the cream in its passage from the opening, and a ledge carried by the partition and capable of engaging a portion of the churn-body to support the partition.

5. A churn, the body portion of which has vertical grooves in opposite side walls, a hollow partition provided with flanges beyond

its hollow portion and arranged to register in said grooves, a cleat on one wall of said body, and a ledge run out from the partition and resting upon said cleat, whereby the partition is suspended at a distance from the bottom of the body.

6. A churn having a body portion, a hollow partition within the body portion, the partition being slidably arranged in the body portion and having an opening in its upper portion and through which the cream may circulate, an apron extending from one side of said partition and downwardly past the opening therein, a horizontal ledge extending from said partition opposite the said apron, and a cleat in said body portion and on which said ledge rests, said cleat holding the bottom of said partition at a distance from the bottom of the body.

7. The combination in a churn having a body portion, of a dasher mounted to reciprocate in said body portion and arranged to force the cream in but one direction, namely, downwardly, and a hollow partition located in said body portion and providing passages at the top and bottom of the body through which the cream may be circulated by the reciprocal movement of said dasher, said partition being provided with an inlet-opening whereby a fluid may be admitted to the interior of the same to regulate the temperature of the cream as it is circulated.

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Witnesses:

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