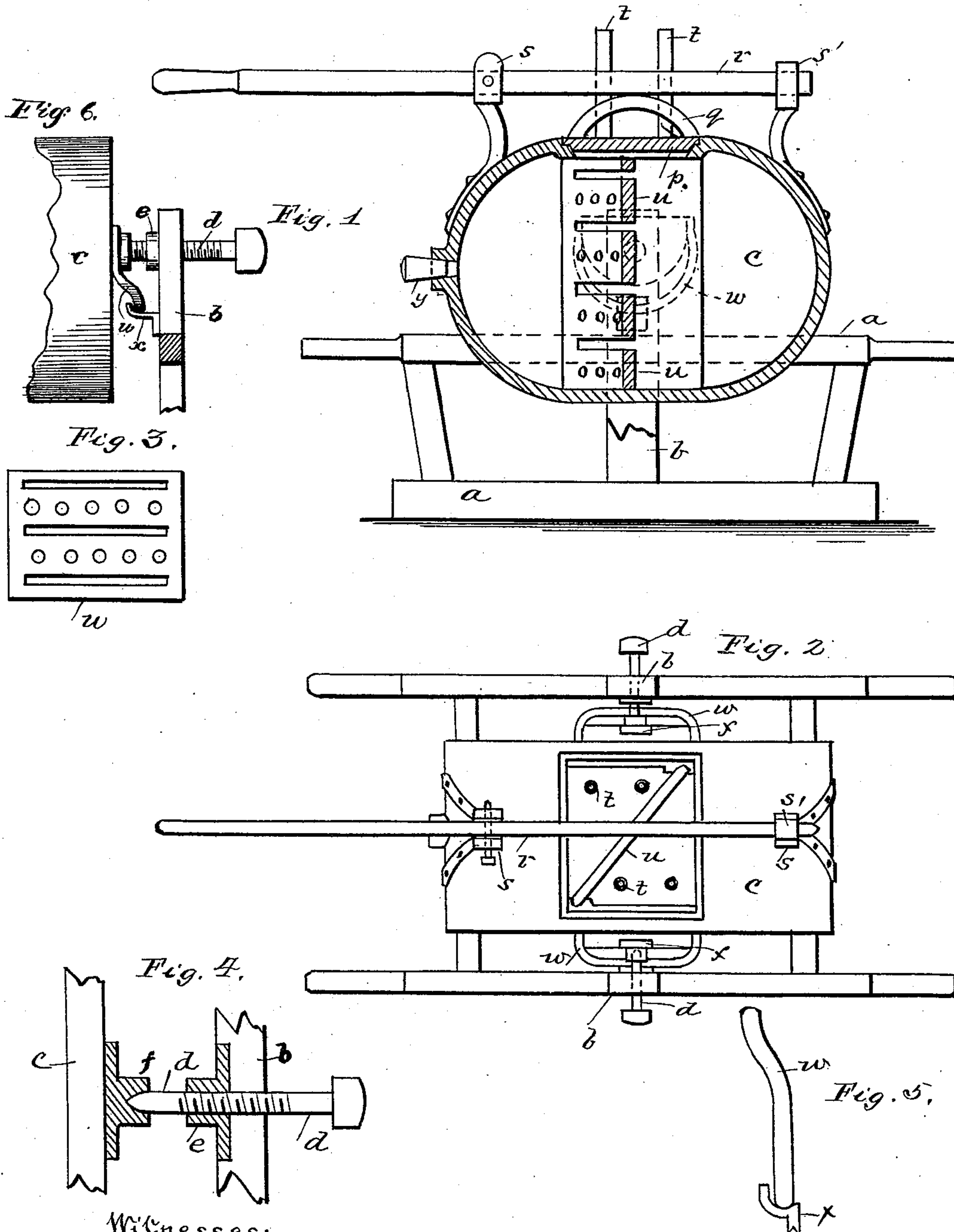


(No Model.)

H. J. McKINNEY.
CHURN.

No. 415,054.

Patented Nov. 12, 1889.



Witnesses:

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UNITED STATES PATENT OFFICE.

HARVEY J. MCKINNEY, OF PATTON, ALLEGHENY COUNTY, PENNSYLVANIA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 415,054, dated November 12, 1889.

Application filed May 6, 1889. Serial No. 309,787. (No model.)

To all whom it may concern:

Be it known that I, HARVEY J. MCKINNEY, a citizen of the United States, residing in Patton township, in the county of Allegheny and State of Pennsylvania, 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in churns; and it consists in an oval oblong barrel or vessel pivoted to a frame and having diagonally-arranged therein a stationary perforated dasher, together with certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side sectional elevation of my improved churn constructed in accordance with my invention. Fig. 2 is a plan view of the same, having the lid or cover removed to show the position of the diagonally-arranged dasher. Fig. 3 is a face view of the dasher. Fig. 4 is an enlarged vertical sectional view of one of the adjustable pivots for the moving churn-body. Fig. 5 is an edge view of one of the guides. Fig. 6 is a side elevation of a part of the churn-body, and showing the guides for sustaining the body and relieving the pivots of a part of the weight and strain.

To put my invention into practice I provide a frame *a*, of suitable size and form of construction, having securely attached thereto two upwardly-extending posts *b*, to which is affixed an oblong vessel *c* by means of adjustable pivots *d*. These pivots *d* are each provided with a screw-thread operating in a nut *e*, securely attached to the posts *b* and centered in small castings *f*, attached to the side walls of the vessel *c*. On the top of this vessel *c* is an opening neatly fitted with a lid or cap *p*, having a semicircular handle *q*, across which and bearing against the same is the operating-lever *r*. This lever *r* is detachably secured in two bearings *s s'*, by one end thereof entering a loop *s'*, and a pin is

passed through the said lever *r* and bearing *s*. Through this lid or cover *p* are passed several small tubes *t*, for the purpose of admitting air to the milk in the churn.

Centrally located within the vessel *c* and arranged in a diagonal position is a removable perforated dasher *u*, which is secured in vertical grooves formed at opposite corners of the top opening.

Attached to the sides of the vessel *c* are two semicircular guides *w*, each of which has a bearing *x* at the base and serves to remove a portion of the weight from the pivots *d* and at the same time prevent any side motion of the vessel *c*.

At a suitable point in the vessel *c* is an opening fitted with a plug *y*, which serves to withdraw the milk after the process of churning has been completed.

In operation the vessel *c* is given a rocking motion by means of the hand-lever *r*, which causes the milk to flow from one side of the vessel to the other through the perforated dasher *u*. The milk in striking this dasher glides along and through the same without any sudden jerk or stoppage, therefore giving an easy continuous rocking motion to the vessel *c*.

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

The churn herein described, consisting, essentially, of the rocking body *c*, provided on its exterior with the circular guides *w*, the bearings *s s'*, carrying the lever *r*, the bearing *f*, and on its inside having the diagonally-arranged perforated dasher *u*, and provided with a cover *p*, having a handle *q*, upon which the lever bears, and the tubes *t*, in combination with a framing *a*, having the adjusting-screws *d*, taking into the bearings, and the supports *x* for the guides, all constructed and operating substantially as a set forth.

In testimony that I claim the foregoing I hereunto affix my signature this 17th day of April, A. D. 1889.

HARVEY J. MCKINNEY. [L. s.]

In presence of—

M. E. HARRISON,
C. C. LEE.