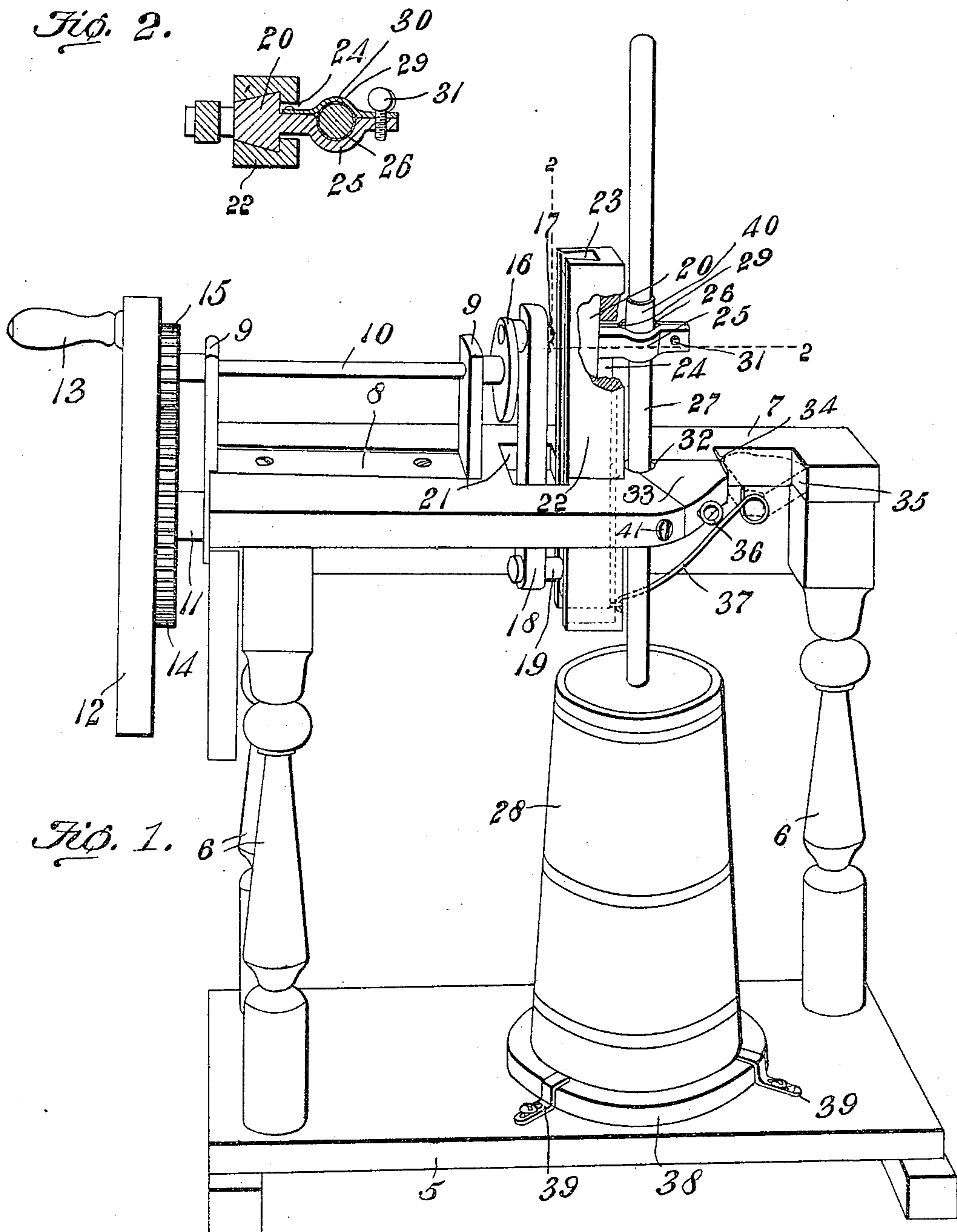


No. 816,621.

PATENTED APR. 3, 1906.

H. L. VAN DUSEN.  
CHURNING MACHINE.  
APPLICATION FILED DEC. 6, 1905.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

HENRY L. VAN DUSEN, OF LOCKHART, TEXAS, ASSIGNOR OF ONE-HALF  
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## CHURNING-MACHINE.

No. 816,621.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed December 6, 1905. Serial No. 290,657.

*To all whom it may concern:*

Be it known that I, HENRY L. VAN DUSEN, a citizen of the United States, residing at Lockhart, in the county of Caldwell and State of Texas, have invented a new and useful Churning-Machine, of which the following is a specification.

This invention relates to churning-machines, and has for its object to provide a simple, inexpensive, and efficient machine of this character by means of which the labor involved in the operation of churning may be materially reduced.

A further object of the invention is to generally improve this class of devices, so as to add to their utility and durability, as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a churning-machine constructed in accordance with my invention. Fig. 2 is a transverse sectional view on the line 2 2 of Fig. 1.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

The improved device consists of a supporting-base 5, to which are secured in any suitable manner uprights or standards 6, supporting a table 7.

Seated in a recess in the top of the table 7 is a casting 8, provided with a pair of spaced vertically-disposed arms 9, in which is journaled a shaft 10, and extending laterally from one end of said casting is a stub-shaft 11, upon which is mounted for rotation a balance or driving wheel 12. The driving-wheel 12 is provided with an operating-handle 13, and secured to and mounted for rotation with driving-wheel is a gear-wheel 14, which meshes with a pinion 15, keyed or otherwise rigidly secured to the shaft 10. Secured to the opposite end of the shaft 10

is a disk or plate 16, provided with a laterally-projecting crank-pin 17 for connection with a pitman 18, the latter being in turn pivotally connected to a stud 19, secured to or formed integral with a reciprocating dove-tailed block or slide 20.

An opening 21 is formed in the table 7 for the reception of the pitman 18, and communicating with said opening is a smaller opening in which is seated a guiding member or bar 22, provided with a vertically-disposed dovetailed guiding-recess 23 for the reception of the block or slide 20.

Formed in one side of the bar 22 and communicating with the recess 23 is a slot 24, and projecting through said slot and preferably formed integral with the block 20 is an arm or stationary clamping member 25, having a socket 26 formed therein, adapted to receive the dasher 27 of a churn 28.

Secured to the arm or stationary member 25 is a spring-clip or movable clamping member 29, provided with a mating socket 30, the two members being clamped in engagement with the dasher by a set-screw 31, as shown.

The table 7 is provided with a circular opening 32 to permit free vertical movement of the dasher 27, and one wall of the opening is formed by a block 33, hinged to the table at 34, so that the block may be swung outwardly on the hinge 34 to permit the ready removal of the dasher after the same has been detached from the clamping members. A recess 35 is formed in one edge of the table to receive the block when the latter is moved to open position, while a screw-eye or similar device 36 is carried by the block for locking said block in closed position.

In order to assist the operator in the act of churning and to prevent the pitman from stopping on dead-center after each churning operation, there is provided a coil-spring 37, one end of which is fastened to the bottom of the table 7, while the opposite end thereof is secured in any suitable manner to the sliding block 20.

The churn is supported in proper position on the base 5 by means of a ring or collar 38, fastened by adjustable clips 39, so that the ring may be moved laterally to center the dasher with respect to the clamping members.

A collar or bushing 40 is preferably placed on the dasher 27 in order to prevent undue

wear on the same by engagement with the clamping members, and a screw or bolt 41 extends through one edge of the table and engages the guiding member 22 to prevent accidental displacement of said guiding member.

Attention is called to the fact that by having the one end of the table reduced or cut away at one side thereof and the uprights or standards arranged in triangular form, as shown, the churn may be quickly placed in position on or removed from the supporting-base.

The machine may be employed for operating any style of churn in which a reciprocating dasher is used and may be constructed of wood, metal, or other suitable material and operated either manually or by means of a belt connected to an engine or other suitable source of power.

From the foregoing description it is thought that the construction and operation of the machine will be readily understood by those skilled in the art, and further description thereof is deemed unnecessary.

Having thus described the invention, what is claimed is—

1. In a machine of the class described, the combination with a base adapted to support a churn, of a table secured to and spaced from the base and provided with an opening for the reception of the churn-dasher, a block pivoted to the table and forming one wall of the dasher-receiving opening, and means for reciprocating the dasher, there being a recess formed in the table adapted to receive the pivoted block when moved to open position.

2. In a machine of the class described, the combination with a base adapted to support a churn, standards secured to the base and arranged in substantially triangular form, a table-top secured to the standard and having one end thereof reduced and provided with an opening for the reception of the churn-dasher, a block pivoted to the table-top and forming one wall of the dasher-receiving opening, and means for reciprocating the dasher, there being a recess formed in the reduced end of the table-top for the reception of the pivoted block when the latter is moved to open position.

3. In a machine of the class described, the combination with a base adapted to support a churn, of a table secured to and spaced from the base and provided with an opening for the reception of the churn-dasher, a guiding member secured to the table, a slide mounted for vertical movement in the guiding member and provided with a fixed and movable clamping member for engagement

with the churn-dasher, means for reciprocating the slide, and a block pivoted to the table and forming one wall of the dasher-receiving opening.

4. In a machine of the class described, the combination with a base adapted to support a churn, of a table secured to and spaced from the base and provided with an opening for the reception of the churn-dasher, a guiding member supported by the table, a slide mounted for vertical movement in the guiding member and provided with a fixed and a movable clamping member for engagement with the churn-dasher, a block hinged to the table and forming one wall of the dasher-receiving opening, a spring engaging the table and slide, respectively, and means for reciprocating the slide.

5. In a machine of the class described, the combination with a base adapted to support a churn, of a table secured to and spaced from the base and provided with an opening for the reception of the churn-dasher, a guiding member supported by the table and provided with a dovetailed recess, a correspondingly-shaped slide mounted for vertical movement in the recess and provided with a fixed clamping member, a spring-clip secured to the fixed clamping member for holding the churn-dasher in engagement therewith, a screw engaging the free ends of the clamping member and clip, a block pivoted to the table and forming one wall of the dasher-receiving opening, and means for reciprocating the slide.

6. In a machine of the class described, the combination with a base adapted to support a churn, of a table secured to and spaced from the base and provided with an opening for the reception of the churn-dasher, a guiding member secured to the table, a slide mounted for vertical movement in the guiding member and provided with means for engagement with the churn-dasher, a driving-wheel having a gear-wheel secured thereto and movable therewith, a bracket secured to the table, a shaft journaled in the bracket and provided with a pinion meshing with the gear-wheel, a crank-pin carried by the shaft, a pitman connecting the crank-pin and the slide, and a spring secured to the table and slide, respectively.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY L. VAN DUSEN.

Witnesses:

G. W. MILLS,

C. J. P. McDOWELL.