

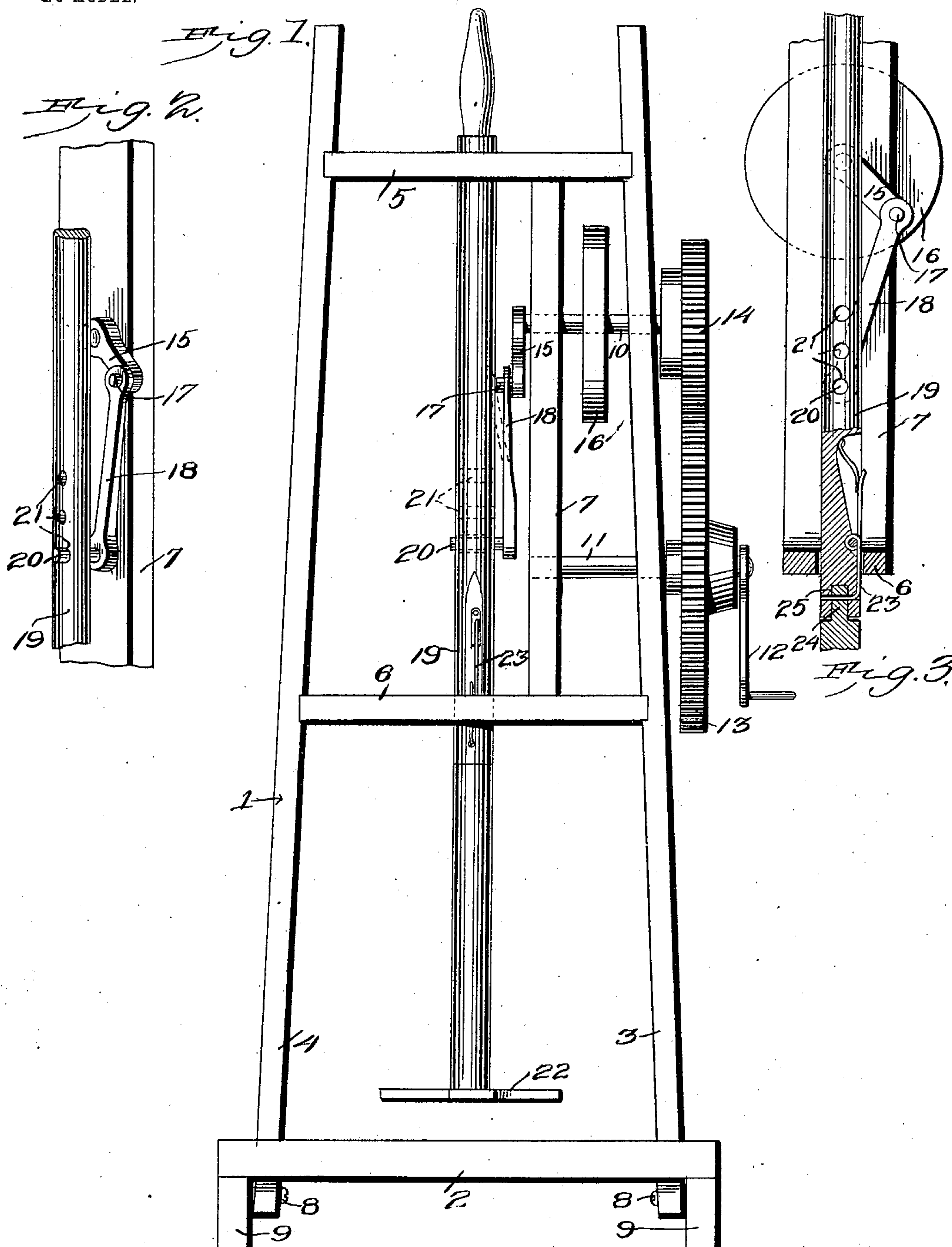
No. 730,752.

PATENTED JUNE 9, 1903.

T. D. A. FAUBION.
MANUAL MOTOR FOR CHURNS.

APPLICATION FILED APR. 14, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS DANIEL ARNOLD FAUBION, OF BRONTE, TEXAS.

MANUAL MOTOR FOR CHURNS.

SPECIFICATION forming part of Letters Patent No. 730,752, dated June 9, 1903.

Application filed April 14, 1902. Serial No. 102,891. (No model.)

To all whom it may concern:

Be it known that I, THOMAS DANIEL ARNOLD FAUBION, a citizen of the United States, residing at Bronte, in the county of Coke and State of Texas, have invented a new and useful Manual Motor for Churns, of which the following is a specification.

The invention relates to improvements in manual motors for churns.

The object of the present invention is to improve the construction of manual motors for churns and to provide a simple and comparatively inexpensive one of great strength and durability capable of enabling a churn-dasher to be rapidly reciprocated, whereby butter is quickly produced.

A further object of the invention is to provide a device of this character which will also permit the dasher-rod to be readily adjusted vertically to arrange it properly with relation to the contents of a churn body or receptacle.

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 claim hereto appended.

In the drawings, Figure 1 is an elevation of a manual motor for churns constructed in accordance with this invention. Figs. 2 and 3 are detail views illustrating the construction of the dasher-rod and the means for connecting it with the crank-shaft.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a frame comprising a base 2, standards 3 and 4, and upper and intermediate connecting-pieces 5 and 6, secured to the standards or sides of the frame and supported by an upright connecting-piece 7, which forms inner bearings for shafts hereinafter described. The base of the frame, which is adapted to receive a suitable churn body or receptacle, is provided at opposite sides with openings receiving the lower ends of the sides or standards 3 and 4, which are detachably secured to the base by screws 8 or other suitable fastening devices. The screws 8 pass through sills 9, secured to the base, as clearly shown in Fig. 1, and supporting the body portion of the base above the supporting-surface. The transverse con-

necting-pieces 5 and 6, which are disposed horizontally, are suitably fixed to the sides or standards and are arranged near the center and upper end of the same, as shown, and the upright bar 7 is located at a point between the center of the frame and the standard or side 3.

The upright bar 7 and the side or standard 3 are provided with suitable bearing-openings for the reception of an upper crank-shaft 10 and a lower counter-shaft 11, which is connected with the crank-shaft by gearing and which is provided at its outer end with a suitable crank-handle 12, by means of which the mechanism is operated. The outer end of the drive or counter shaft 11 carries a gear-wheel 13, which meshes with a pinion 14 of the upper crank-shaft 10. The upper crank-shaft 10, which is provided at its inner end with a crank 15, carries an intermediate balance or fly wheel 16, suitably keyed or otherwise fixed to the shaft and arranged between the standard or side 3 and the upright bar 7. The crank 15 carries a wrist-pin 17, which is arranged in a perforation of a resilient pitman or connecting-bar 18, located between the eccentric connection and a dasher-rod 19. The dasher-rod 19 is arranged in suitable guide-openings of the upper and lower transverse connecting-bars 5 and 6 and is spaced from the upright bar 7 a sufficient distance to accommodate the connecting-bar or pitman which is provided at its lower end with a pivot or pin 20. The pivot or pin 20, which is adapted to engage any one of a series of perforations 21 of the dasher-rod, is of a length greater than the distance between the dasher-rod and the upright bar 7, whereby when the pitman or connecting-bar is in its normal position the pivot 20 cannot become accidentally disengaged from the dasher-rod. The upper portion of the connecting-bar or pitman is preferably reduced, and when the crank is swung outward to approximately the position illustrated in Fig. 2 of the drawings its upper portion is adapted to be sprung laterally, as illustrated in dotted lines in Fig. 1 of the drawings, whereby the pitman or connecting-bar is disengaged from the eccentrically-arranged pivot or wrist-pin. After the upper end of the connecting-bar or pitman is released the dasher-rod is adapted to

be partially rotated to carry the lower portion of the connecting-bar or pitman out of the space between the dasher-rod and the frame. The connecting-bar or pitman may then be readily disengaged from the dasher-rod by withdrawing the lower pivot 20 from the perforation. The pitman or connecting-bar may then be connected with the dasher-rod at the desired point to permit a dasher 22 to be arranged properly with relation to the contents of the churn body or dasher, and the upper end of the connecting-bar or pitman may be readily sprung into engagement with the pivot or wrist-pin of the eccentric connection between the crank-shaft and the bar or pitman. The dasher-rod is preferably composed of upper and lower sections detachably connected by a catch 23. The lower section is preferably provided with a tenon or projection 24, which fits within a socket or mortise 25 of the lower end of the upper section, and the catch, which is spring-actuated, is pivotally mounted on the upper section and is provided at its engaging portion with an arm which extends through the lower end of the upper section and the tenon or projection of the lower section. The arm of the catch is arranged at the lower end thereof, and when the upper end or arm of the catch is pressed inward against the upper section of the dasher-rod the arm will be withdrawn from engagement with the tenon or projection of the lower section. This will enable the churn-body and the lower section of the dasher to be readily removed, and it will also permit the lower section of the dasher-rod to be readily coupled to the upper section when the churn-body is placed in position.

It will be clear that the device is exceedingly simple and inexpensive in construction, that it will enable a churn-dasher to be reciprocated with sufficient rapidity to effect a rapid production of butter, that it will enable the dasher-rod to be readily adjusted vertically to arrange it properly with relation

to the contents of a churn-body, and that the lower section may be readily coupled to and uncoupled from the upper section of the dasher-rod.

Instead of operating the churn by hand it may be run by any suitable motive power, and a belt or any other form of gearing may be employed for connecting the churn with such motive power.

What I claim is—

The combination with a frame comprising standards, upper and lower horizontal connecting-pieces and a vertical connecting-piece, of a dasher-rod mounted for reciprocation in bearings in the horizontal connecting-pieces and consisting of upper and lower sections one provided with a tenon and the other with a mortise to receive the same, a spring-controlled catch connecting said sections by engagement through their tenon and mortise-joint, said rod being provided with a plurality of transverse perforations, an operating-shaft journaled in the frame and provided with an eccentric carrying a wrist-pin, a connecting-bar mounted upon the wrist-pin and having a resilient portion, and a pin carried by the connecting-bar for engagement with any one of the series of perforations of the dasher-rod, said engaging pin being of a length greater than the space between the dasher-rod and adjacent vertical connecting-piece, whereby accidental escape of the pin from the rod is obviated, the rod being rotatable to permit the disengagement of the pin from the rod in the manner and for the purposes herein described.

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

THOS. DANIEL ARNOLD FAUBION.

Witnesses:

his
W. X PRUITTS,
mark
R. L. KELLY.