No. 816,353. PATENTED MAR. 27, 1906.

J. M. McBRIDE.

CHURN MOTOR.

APPLICATION FILED AUG. 31, 1905.

Fig. 1.

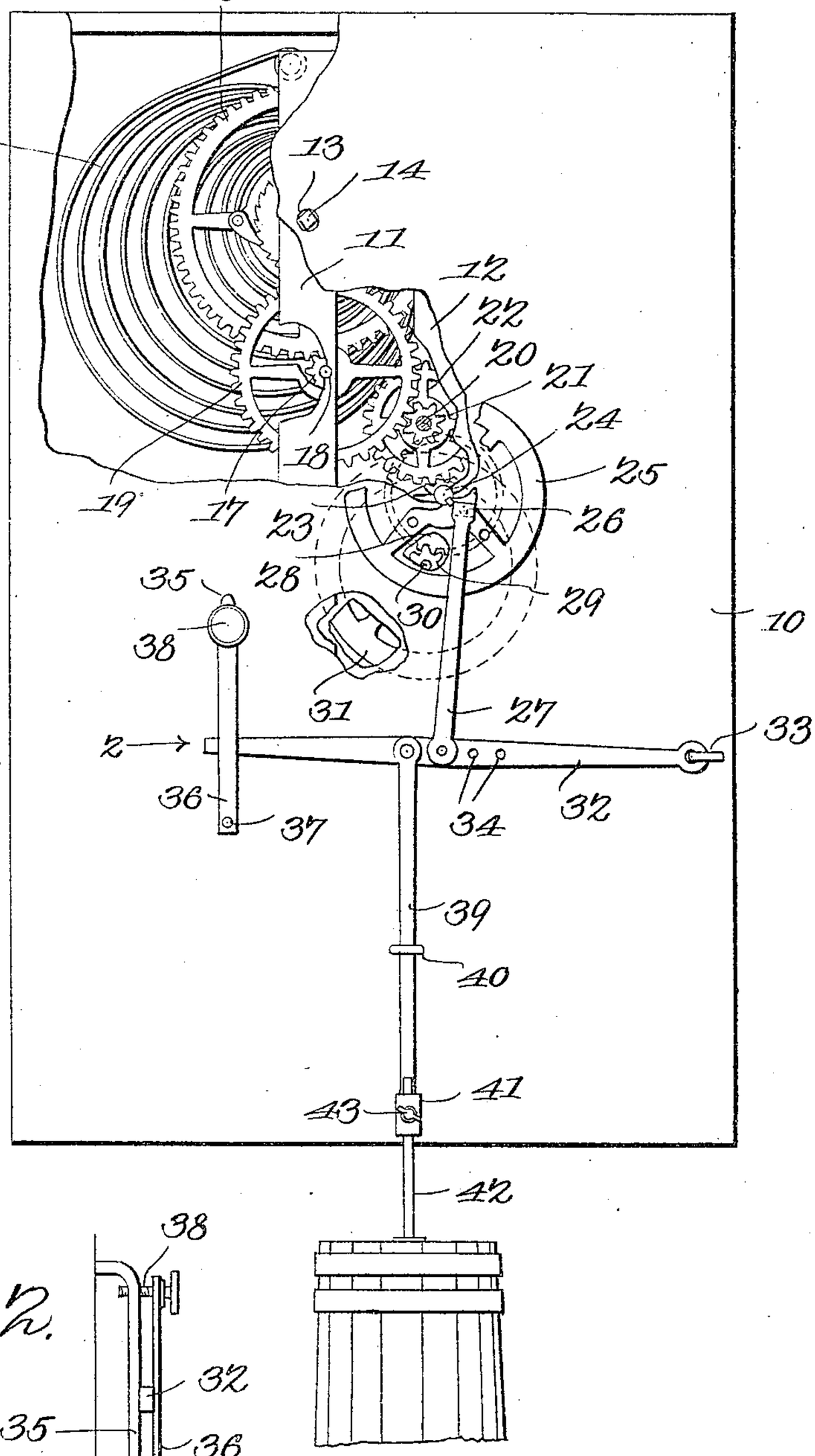
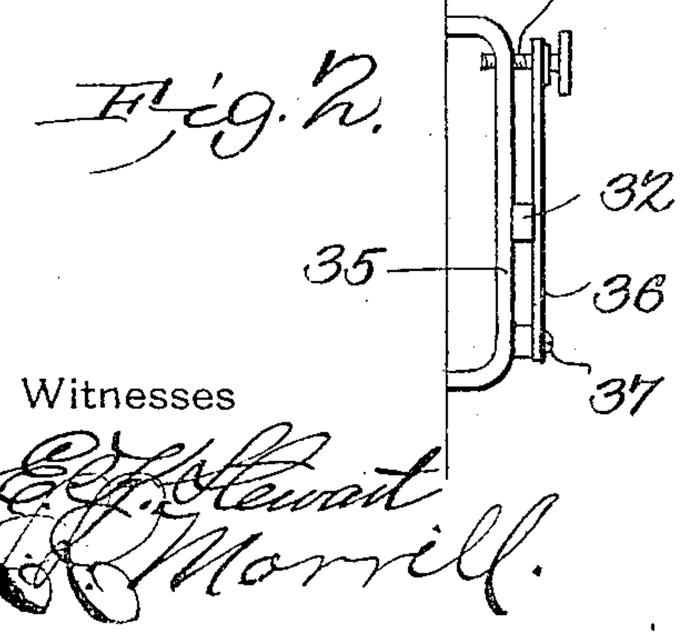


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH MARION McBRIDE, OF POTEAU, INDIAN TERRITORY.

CHURN-MOTOR.

No. 816,353. Specification of Letters Patent. Patented March 27, 1906.

Application filed August 31, 1905. Serial No. 276,635.

To all whom it may concern:

Be it known that I, JOSEPH MARION McBRIDE, a citizen of the United States, residing at Poteau, in Choctaw Nation, Indian Territory, have invented a new and useful Churn-Motor, of which the following is a specification.

This invention relates to churn-motors, and has for an object to provide a device of the class embodying new and improved features of utility, economy, and efficiency.

A further object of the invention is to provide improved means for governing the speed of a spring-motor.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a view in side elevation of the improved churn-motor with part of the casing on framework broken away to show the parts. Fig. 2 is a detail end elevation of the brake.

Like characters of reference indicate corresponding parts in both of the figures of the drawings.

In its preferred embodiment the improved churn-motor forming the subject-matter of this application comprises a casing 10 of any approved form and size and having mounted therein the frame-pieces 11 and 12. In the frame-pieces are journaled the parts of the spring-motor comprising the shaft 13, squared, as at 14, for the application of a key or other winding means and carrying the spring 15 and gear 16. The gear 16 engages a pinion 17 upon the shaft 18, which carries the gear 19. The gear 19 engages the pinion 20 upon the shaft 21, which carries the gear 22. The gear 22 engages a pinion 23 upon the shaft 24, which extends without the casing and has a pitman-wheel 25 mounted thereon, carrying the pin 26, forming a crank to which the link 27 is pivotally secured. The shaft 24 also carries a gear 28, engaging a pinion 29, carried by a shaft 30, upon which is mounted the balance-wheel 31.

Upon the casing is pivoted the lever 32, as at 33, and provided with a series of holes 34, arranged in a row longitudinally thereof and in one of which the end of link 27 opposite the pin 26 is pivotally secured. Adjacent the side of the casing opposite the pivot 33 is secured a brake comprising an outstanding bar or bearing-plate 35, to which is secured the adjustable brake-lever 36, as by the screw 37, and between which the lever 32 is embraced and pressure thereon regulated by the screw 38. To any desired one of the holes 34 is secured a plunger 39, passing through any approved form of guide, as 40, and carrying a sleeve 41, adapted to be clamped upon the staff or dasher 42 of a churn in any approved manner, as by the screw 43. It will be understood that by changing the link 27 or the plunger 39 to other of the holes 34 the length of stroke of the dasher may be adapted to the churn used, and by tightening or loosening the screw 38 the speed may be controlled.

Having thus described the invention, what is claimed is—

1. A churn-operating mechanism comprising a casing, a motor arranged within the casing, a shaft projecting through the walls of the casing and provided with a crank-arm, a bearing-plate secured to the casing, a horizontally-disposed lever having one end thereof pivoted to said casing and its free end movable in a vertical plane over the surface of the bearing-plate, a link pivotally secured to the lever intermediate its ends and connected to the crank-arm, a pitman secured to the lever and provided with means for attachment to a churn-dasher, a brake-lever carried by the bearing-plate, and means for moving the brake-lever in contact with the free end of the horizontal lever.

2. A churn-operating mechanism comprising a casing, a motor arranged within the casing, a shaft projecting through the walls of the casing and provided with a crank-arm, a bearing-plate secured to and spaced from the casing, a horizontally-disposed perforated lever having one end thereof pivoted to the casing and its free end movable in a vertical plane over the surface of the bearing-plate, a link pivoted in one of the perforations in the lever and connected with the crank-arm, a pitman secured to the lever and provided

with means for attachment to a churn-dasher, a brake-lever having one end thereof secured to and spaced from the bearing-plate, and an adjusting-screw threaded in the free end of the brake-lever and the adjacent portion of the bearing-plate for moving said brake-lever in contact with the horizontal lever.

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

JOSEPH MARION McBRIDE.

Witnesses:

J. W. FREDERICK.

J. J. TUCKER.