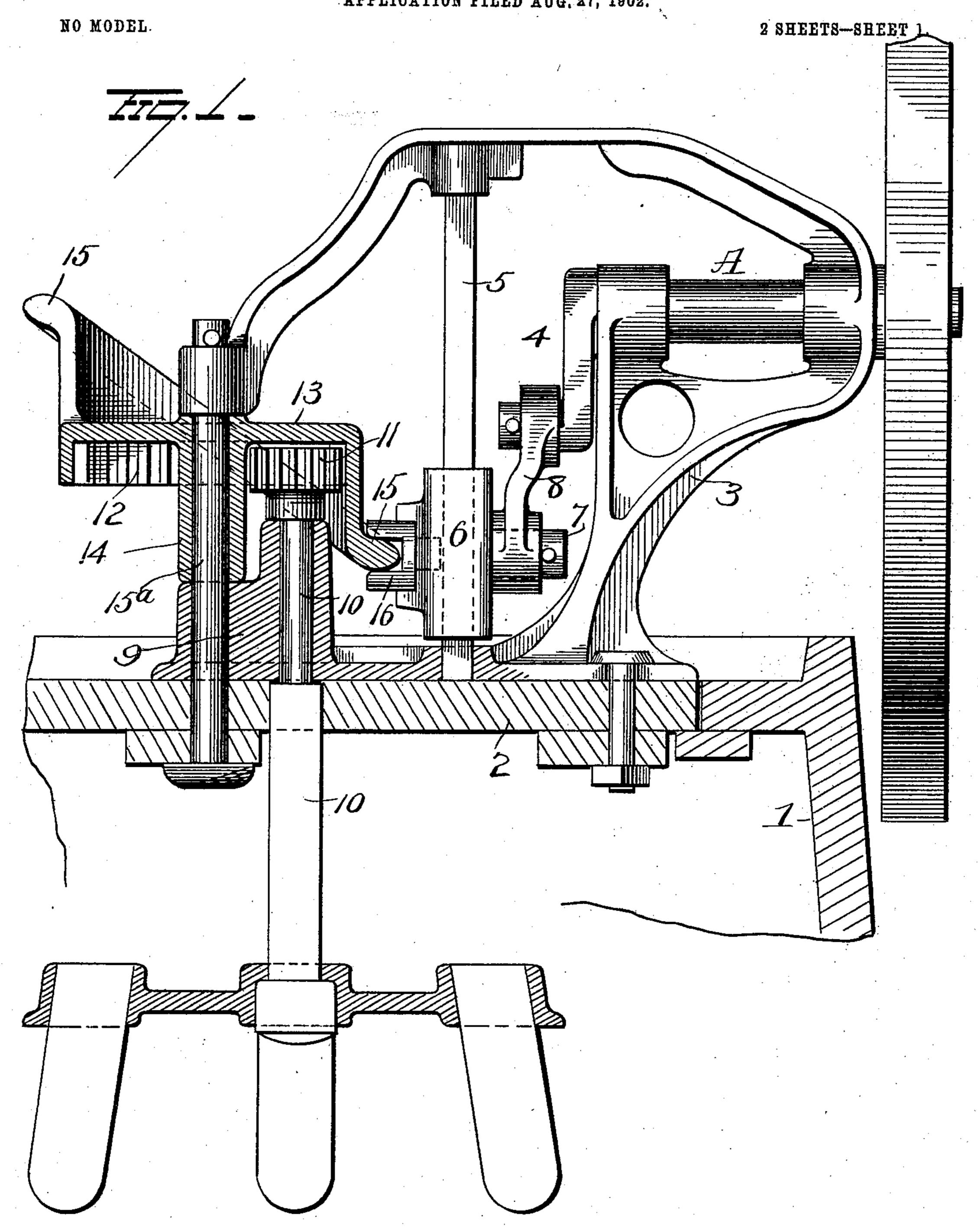
## J. R. CARTER. MECHANICAL MOVEMENT. APPLICATION FILED AUG. 27, 1902.



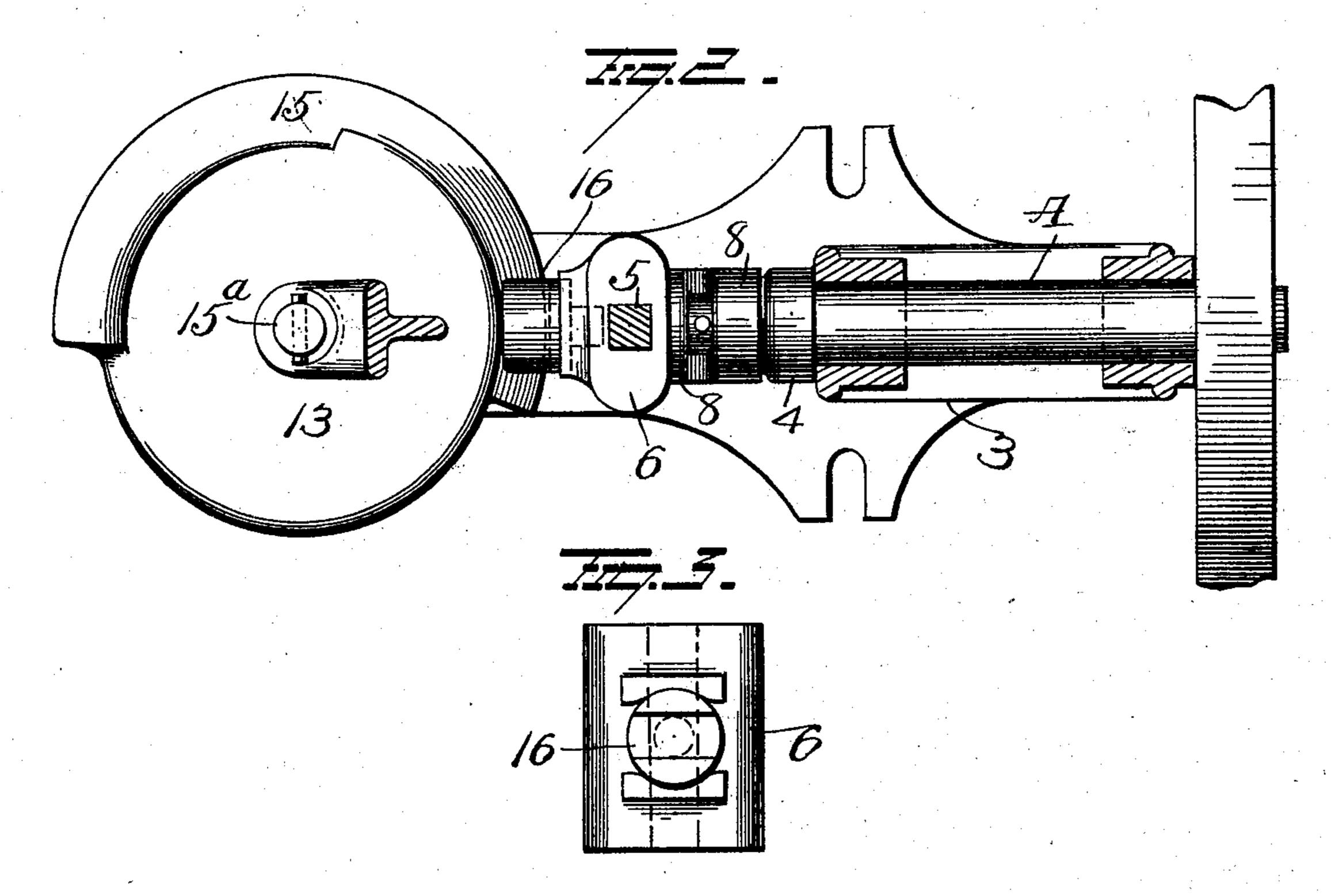
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J.R. Carter Beytfassymon Attorney

## J. R. CARTER. MECHANICAL MOVEMENT. APPLICATION FILED AUG. 27, 1902.

NO MODEL.

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J.R. Carter Bey St. asseymous Attorney

## United States Patent Office.

JOHN R. CARTER, OF AUGUSTA, KENTUCKY, ASSIGNOR TO ERNST H. HUENE-FELD, OF CINCINNATI, OHIO.

## MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 720,561, dated February 17, 1903.

Application filed August 27, 1902. Serial No. 121,245. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. CARTER, a resident of Augusta, in the county of Bracken and State of Kentucky, have invented certain new and useful Improvements in Mechanical Movements; 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 appertains to make and use the same.

My invention relates to an improved mechanical movement, and more particularly to improved mechanism for alternately rotating a driven shaft in opposite directions and especially adapted for use on washing-machines, the object of the invention being to provide improvements of this character which will be of extremely simple construction and most positive in operation.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view, partly in section, illustrating my improvements. Figs. 2 and 3 are views of details.

1 represents the tub of a washing-machine, 30 having a hinged cover 2, on which a frame 3 is secured by means of bolts or screws, as shown. The frame 3 supports a horizontal drive-shaft A, having suitable means on its outer end for turning it and provided at its inner end with a crank-arm 4. An angular vertical bar 5 is supported in the frame and on which is mounted a sliding block 6, having a pin 7 on one side, connected by a link 8

with the crank-arm 4, so that by rotating shaft 40 A the block 6 will be moved an equal distance up and down on bar 5.

A vertical standard 9 is secured upon or

made an integral part of the base of frame 3 and is provided with an arm having a bear45 ing for a driven shaft 10, projecting down through the cover and forming the dasherrod, on which the dasher is secured. A pinion 11 is secured on the upper end of shaft 10

and meshes with an internal gear 12, formed in a depending annular flange on a disk 13, 50 having an elongated hub 14 mounted to revolve upon a rod 15<sup>a</sup>, secured in bearings in standard 9 and top of frame 3. This disk 13 is made with an integral cam 15, engaged by a grooved button or pin 16, swiveled or stationary in sliding block 6, as preferred. It is not necessary to swivel the button, as the angle of the groove therein never changes; but it might be found desirable to swivel the same to avoid any mistake in constructing or 60 assembling the parts.

The operation of my improvements is as follows: Drive-shaft A is continuously revolved in either direction, and the crank-arm 4 and link 8 serve to transmit a reciprocating 65 movement to sliding block 6 to raise and lower the same on bar 5. As this sliding block moves up and down the grooved button 16 engages the edge of cam 15, which is preferably a segment, as shown, to turn disk 14 in 70 opposite directions, and the internal gear 12, meshing with pinion 11 on driven shaft 10, alternately rotates the dasher in reverse directions.

A great many other changes might be made 75 in the general form and arrangement of the parts described without departing from my invention, and hence I do not limit myself to the precise construction set forth, but consider myself at liberty to make such slight 80 changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination with a driven shaft, a pinion secured thereto, and an internal gear arranged to mesh with and rotate said pinion, said gear being constructed with an outwardly-projecting cam, of a sliding block provided with a button or pin that engages and actuates the cam and gear, and mechanism for reciprocating the sliding block, substantially as set forth.

rod, on which the dasher is secured. A pin- | 2. The combination with a driven shaft, a 95 ion 11 is secured on the upper end of shaft 10 | pinion secured thereto, and an internal gear

arranged to mesh with and rotate said pinion, said gear being constructed with an outwardly-projecting cam, of a sliding block provided with a swiveled button or pin that engages the cam, and means for reciprocating the sliding block, substantially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

JOHN R. CARTER.

Witnesses:

S. W. FOSTER, A. W. BRIGHT.