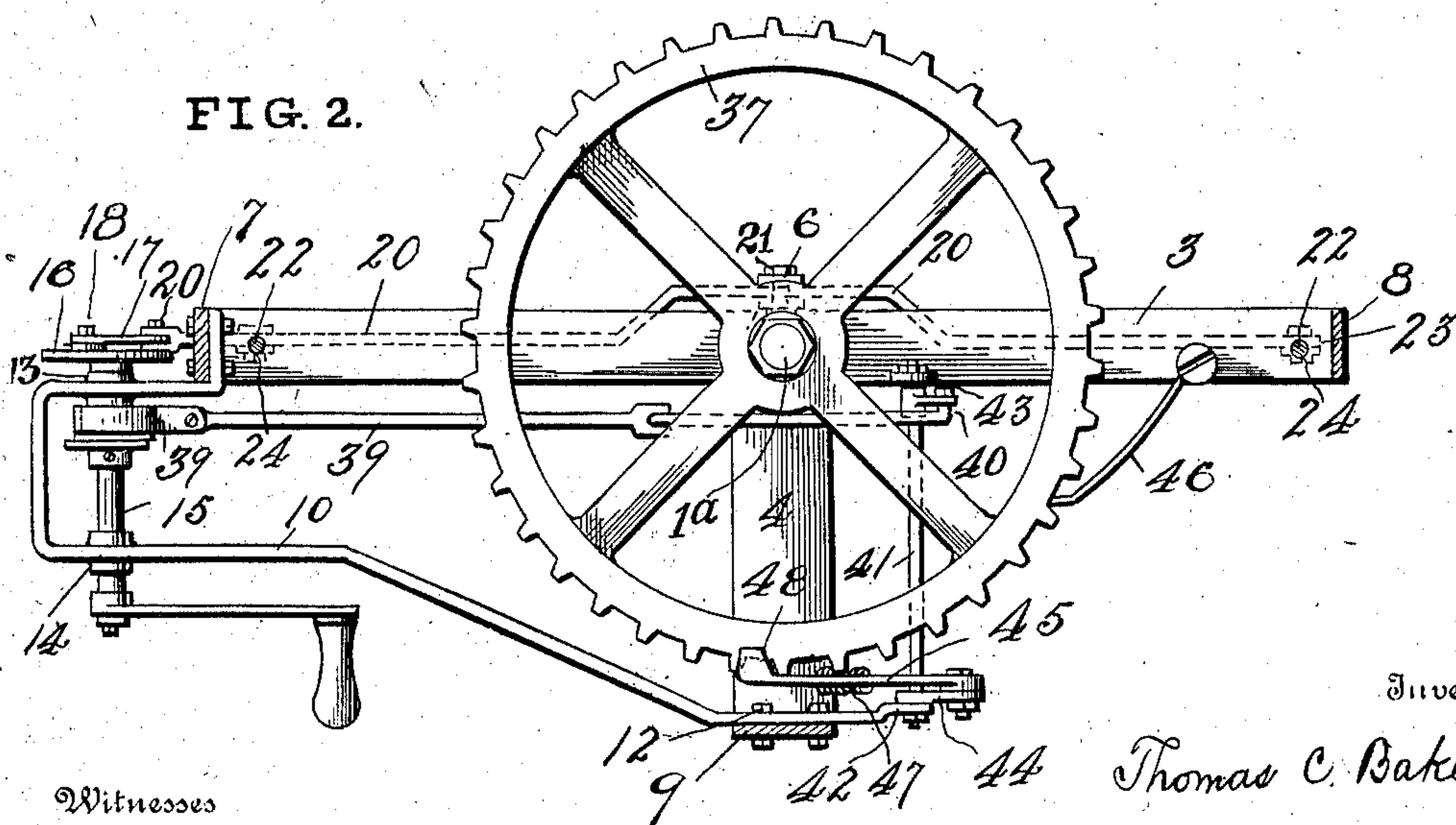
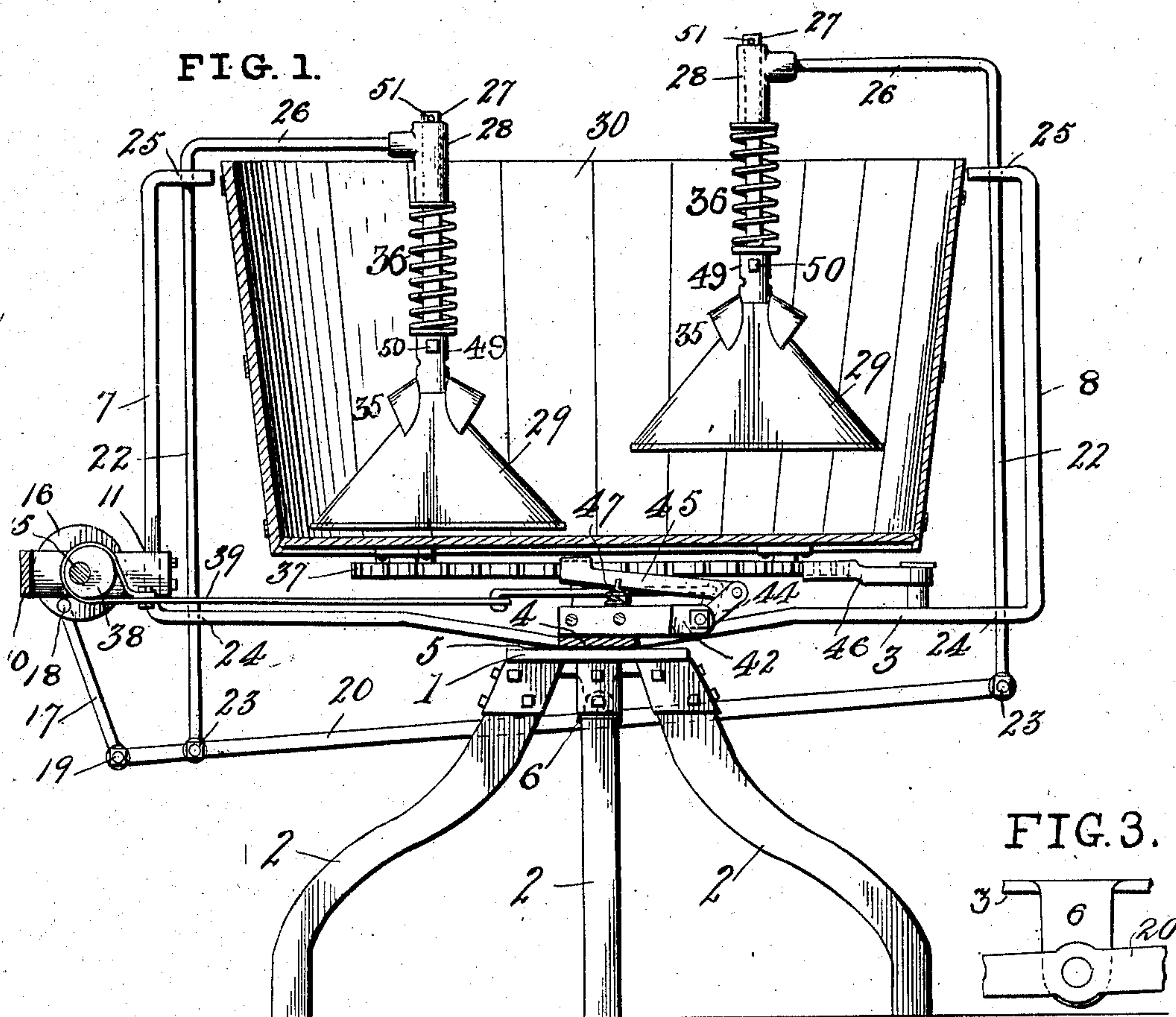


No. 832,029.

PATENTED OCT. 2, 1906.

T. C. BAKER.
WASHING MACHINE.
APPLICATION FILED JAN. 3, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS C. BAKER, OF WASHINGTON, KANSAS.

WASHING-MACHINE.

No. 832,029.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed January 3, 1905. Serial No. 239,436.

To all whom it may concern:

Be it known that I, THOMAS C. BAKER, of Washington, in the county of Washington and State of Kansas, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My invention relates to washing-machines.

In particular my improvements relate to that type of washing-machine in which pounders reciprocate in a clothes-receptacle.

The invention will first be fully described in detail and the features of novelty then set forth in the claims.

In the drawings, Figure 1 is a side elevation and partial section of my improved washing-machine. Fig. 2 is a top plan view with the tub and legs omitted and the vertical standards and rods in cross-section. Fig. 3 is a detailed view of the rod 20 and frame part 6, serving as a mounting therefor.

Referring to the drawings, 1 is a horizontal base-frame supported by legs or standards, such as 2.

3 is a frame member extending across the machine below the tub and secured to the legs 2. 4 is another frame member secured to the legs or standards and extending at right angles to the member 3.

6 is a depending vertical portion of the framework.

7, 8, and 9 are vertical upward projections of the framework or standards.

10 is a supplemental horizontally-disposed frame rigidly secured to standard 7 at 11 and to standard 9 at 12 and having bearings 13 and 14, into which a shaft 15 is journaled.

16 is a wheel mounted on the shaft 15, preferably on the outer side of the horizontal frame 10.

17 is a link pivotally connected at one end to the outer portion of the wheel 16 at 18 and at the other end to one extremity 19 of a horizontally-disposed rod 20, which is pivoted at 21 to the depending vertical frame portion 6. Vertically-reciprocating rods 22 are pivotally secured at 23 to the pivoted rod 20. These rods 22 are preferably slidably mounted in the horizontal frame portion 3 and the vertical standards 7 and 8 at 24 and 25.

The rotation of the shaft 15 through the above-described link mechanism alternately raises and lowers the opposite ends of the pivoted rod 15 and in consequence reciprocates the vertical rods 22 in alternation. The rods 22 are preferably angularly bent near

their upper ends, so as to form the horizontal portions 26. Short vertical rods 27 are preferably slidably secured to the horizontal portions 26 by any suitable means, such as sleeves or bearings 28, and are held against vertical downward displacement by any suitable means, such as pins run through perforations 51.

The vertical rods 27 support a pair of plungers or pounders 29, which are alternately lowered into a clothes-receptacle or tub 30 and raised therefrom by the reciprocation of the rods 22 and 27. The pounders are secured to the rods 27 by means of sleeves or casings 49, provided with set-screws 50 or any other suitable means. Springs 36 normally bear downwardly on the sleeves 49.

The tub 30 is rigidly mounted on a ratchet-wheel 37, which is mounted rotatably on the framework and turns on a pin 1^a. On the shaft 15 is rigidly mounted a cam 38, with a cam-strap 39 surrounding the same and disposed horizontally below the ratchet-wheel 37. The free end of the cam-strap 39 is pivotally connected to a short link 40, which latter is rigidly secured to a short shaft 41. Shaft 41 is journaled in bearings in rigid projections 42 and 43, secured, respectively, to frame portions 9 and 3. A second short link 44 is rigidly secured at one end to the shaft 41 and at the other end is pivoted to a pawl 45, engaging the ratchet-wheel 37. Preferably a supplemental pawl 46 is rigidly mounted on the frame portion 3 to engage the ratchet-wheel 37 at another point.

The rotation of the shaft 15 through the rotation of the cam 38 fixed thereon and the consequent reciprocation of the cam-strap 39 oscillates the link 40. This oscillatory movement is transmitted through the shaft 41 to the link 44, which operates the pawl 45, and thereby rotates the ratchet-wheel 37. The pawl 45 is preferably provided with a coil-spring 47, secured at one end to the pawl 45 and at the other end to the frame portion 4. This spring 47 normally bears downwardly on the pawl 45, which is prevented from falling below the ratchet-wheel by the projection 48.

With every complete revolution of the shaft 15 both pounders 29 are alternately depressed and lifted once and the clothes-receptacle 30 is rotated a small fraction of a revolution corresponding to the space between two consecutive ratchet-teeth. The shaft 15 may be rotated by hand or power.

Standard 9 is well adapted to support a

clothes-wringer in case it is desired to use a wringer.

It is understood that I contemplate any changes in the above-described device which may come within the scope of the claims.

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

1. In a washing-machine, the combination of a clothes-receptacle, a pair of pounders, vertical reciprocable mountings for said pounders, springs interposed between said pounders and their respective mountings, a rock-arm centrally pivoted below the clothes-receptacle and connected near either end with one of said poulder-mountings, a rotary shaft, a crank thereon, a pitman connecting said crank with one end of said rock-arm for oscillating the same, a circular rack connected with said clothes-receptacle, a rock-shaft bearing a pawl engaging said rack, an eccentric on said rotary shaft, and a connection between said eccentric and said rock-shaft.

2. In a washing-machine, the combination of a tub, a rotary mounting therefor, a circu-

lar rack carried by the tub, and a pawl mechanism for moving the rack to rotate the tub, pounders within the tub, vertical rods without the tub, one for each poulder, and each having a horizontal arm provided with a bracket through which passes a stem upon which the corresponding poulder is mounted, and a spring intermediate each poulder and its bracket, serving to normally retain the poulder in its lowest position relative to its supporting parts; a frame providing a vertical mounting for each of said vertical rods whereby said rods are so guided as to have a vertical reciprocating motion; a crank, and means intermediate the crank and the vertical rods for reciprocating them, and means intermediate the crank and the pawl mechanism for moving the pawls and thereby rotating the tub.

In testimony whereof I have affixed my signature in the presence of two witnesses.

THOMAS C. BAKER.

Witnesses:

JAS. T. FRAZIER,

PATRICK H. FLAHERTY.