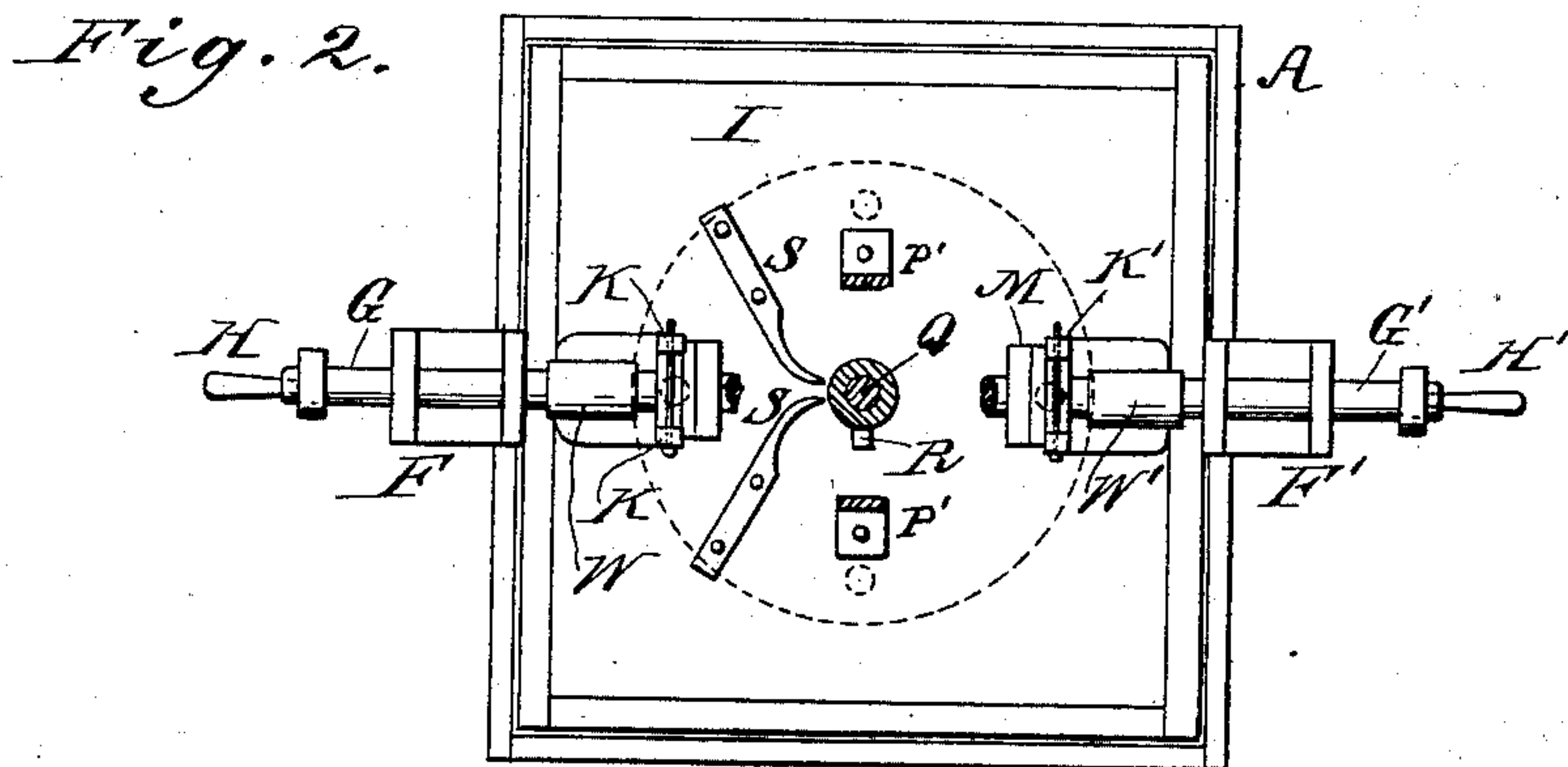
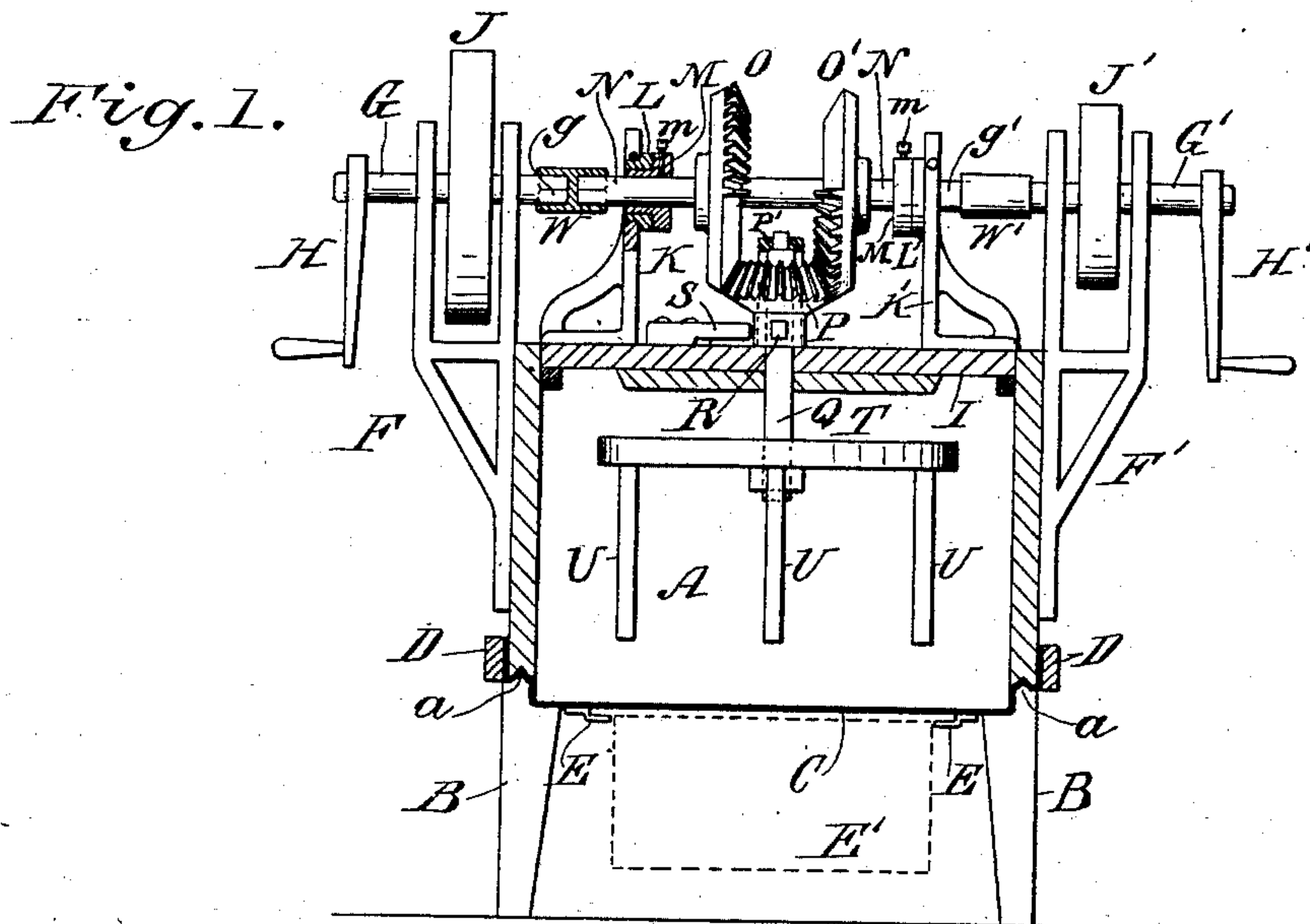


(No Model.)

W. T. VENABLE.
WASHING MACHINE.

No. 328,262.

Patented Oct. 13, 1885.



WITNESSES:

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WILLIAM T. VENABLE, OF CHRISTIANSBURG PRECINCT, KENTUCKY.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 328,262, dated October 13, 1885.

Application filed June 3, 1884. Serial No. 133,694 (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. VENABLE, of Christiansburg precinct, in the county of Shelby and State of Kentucky, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

My invention relates to improvements in washing-machines; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a cross-sectional elevation of my improved washing-machine. Fig. 2 is a plan view of the same, parts being shown in section.

The tub or box A is provided with suitable legs, B, and has a V-shaped groove, *a*, in the bottom edge of each side. The tub or box A is also provided with a galvanized-iron bottom, C, the edges of which are bent into the grooves *a* and lapped on the sides of the tub or box. Strips D are then secured to the sides of the box over the lapped part of the bottom.

The bottom C is provided on its under side with clips E for holding a furnace, E', (shown in dotted lines under the bottom C,) so that the tub or box can also be used as a boiler.

On two opposite sides of the tub or box two upwardly-projecting forks, F F', are secured, in which horizontal shafts G G' are journaled, the said shafts being provided with square inner ends, *g g'*, and having crank-handles H H' on their outer ends.

On the shaft G' a belt-pulley, J', is rigidly mounted between the prongs of the fork F', and a fly-wheel, J, is rigidly mounted on the shaft G between the prongs of the fork F.

In standards K K' on the cover I of the box A journal-boxes L are held in which sleeves M are journaled, which are held adjustably by set-screws *m* on the ends of the shaft N.

On the shaft N two bevel half-cog-wheels, O and O', are rigidly mounted, which are so arranged that they both can be engaged with a bevel-pinion, P, mounted rigidly on an upright shaft, Q, extending through the cover I, the said bevel half-cog-wheels being so ar-

ranged that their cogged halves are diametrically opposite each other—that is, when one half wheel engages with the pinion P the other is disengaged from the same—whereby by a revolution of the shaft N the pinion P and the shaft Q are alternately revolved in opposite directions.

The pinion P is provided with a neck, from the outer surface of which a stud, R, projects. One or two springs, S, are secured on the upper surface of the cover I in such a manner that their free ends will be adjacent to each other.

On the lower end of the shaft Q a disk or plate, T, is rigidly mounted, from which wooden or metal pins U project downward. The adjoining squared ends of the shafts G G' and N are held in sleeves W W'. The shafts G, G', and N are revolved either by hand or by power.

The pins U whirl the clothes about in the tub and agitate the water. As the pinion P is revolved in opposite directions its stud R alternately strikes against the ends of the springs S, which assist in throwing the pinion around and revolving the plate T, held on the shaft Q of the pinion, in the opposite direction.

If desired, but one spring can be used. The shaft Q is preferably journaled in the cover I and in a yoke, P', on the same.

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

1. In a washing-machine, the combination, with the circularly-reciprocating disk T, of the shaft Q, the bevel-pinion P on the same, the stud R on the neck of the pinion, the springs S S, and two bevel half-cogged wheels engaging with the bevel-pinion P, substantially as herein shown and described.

2. In a washing-machine, the combination, with the tub A, of the forks F F', the shafts G G', journaled in the same, the pulley J', and the fly-wheel J, the shaft N, journaled in standards K K', the coupling-sleeves W W', the bevel half-cogged wheels O O' on the same, the disk T, mounted on the shaft Q, and the bevel-pinion P, substantially as herein shown and described.

WILLIAM T. VENABLE.

Witnesses:

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