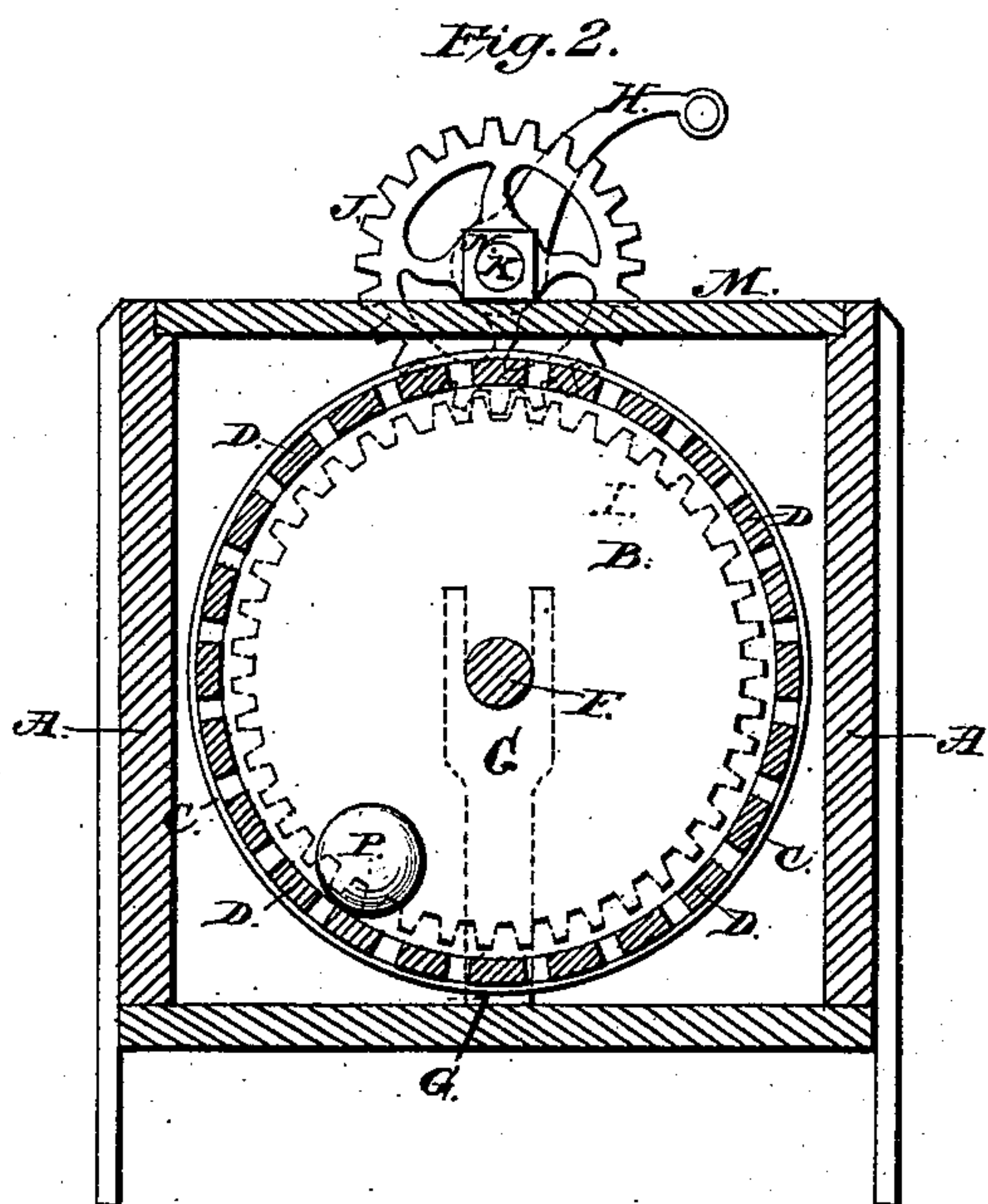
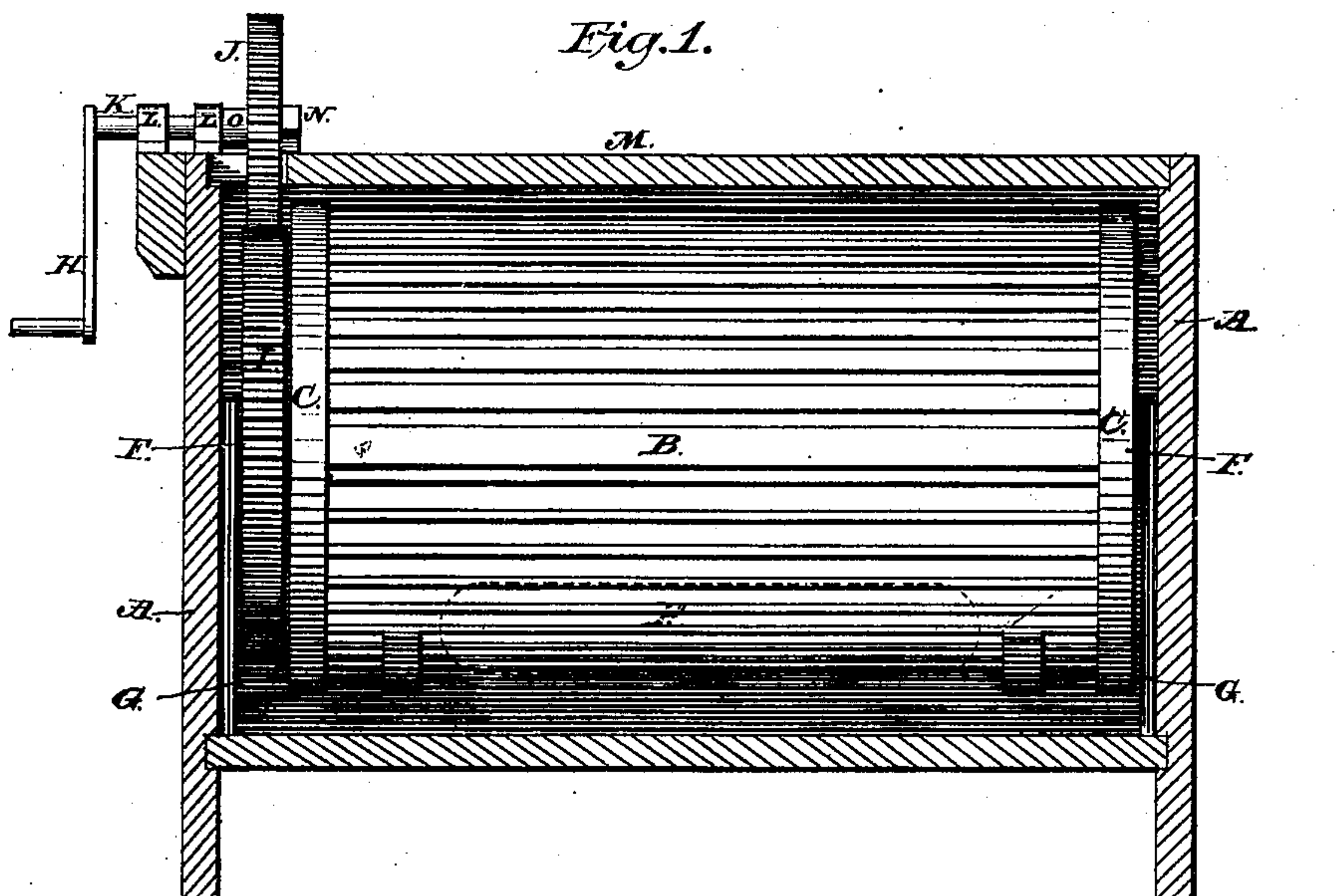


E. J. ROBINSON.
WASHING-MACHINE.

No. 178,879.

Patented June 20, 1876.



Attest:
C. C. Moore
E. W. Stark

Inventor:

E. J. Robinson
by
H. N. Taft
Attorney

UNITED STATES PATENT OFFICE.

EDWARD J. ROBINSON, OF SCHENECTADY, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **178,879**, dated June 20, 1876; application filed August 30, 1875.

To all whom it may concern:

Be it known that I, EDWARD J. ROBINSON, of Schenectady, and State of New York, have invented a new and useful Improvement in Washing Machines, of which the following is a specification:

The object of this invention is to furnish an improved machine for washing clothes; and consists in the construction, arrangement, and combination of parts hereinafter described.

Figure 1 represents a vertical longitudinal section of the machine. Fig. 2 is a sectional end view.

Similar letters indicate corresponding parts in the specification and drawing.

A is a water-tight box, of suitable form and size, which contains the revolving cylinder B. This cylinder is composed of two ends or heads, C C, and the staves D, having open spaces E between. Three (more or less) of the staves are connected together and form a door, which slides beneath the bands on the heads of the cylinder, and is removed for giving access to the interior, for introducing the clothes to be washed. The cylinder is supported on short journals F by the crotch box-pieces G G, which pieces are attached to the ends of the box A. The cylinder is revolved by means of the crank H and the gear-wheel I and pinion J, the gear-wheel I being attached to one of the heads of the cylinder, and having on it one of the short journals F, the other short journal being on a plate which is screwed to the other head. The pinion J is on the end of the shaft K, which is supported on the top of the box A in the bearing-boxes L L, in which boxes the shaft slides. M is the top or cover of the box A,

which is removable, and is slotted or notched around the pinion J. The cylinder is removed from the box A by taking off the nut N and the washer O from the shaft K, and removing the pinion and slipping back the shaft. Inside the cylinder is a roller, P, which revolves freely as the cylinder is revolved, and presses upon the clothes. This roller may be of any suitable length and diameter.

The operation is as follows: The cover M is first removed and a sufficient quantity of water or suds is placed in the box. The clothes are then put in the cylinder and the cover is replaced. The cylinder is now revolved by turning the crank, and the clothes are washed without rubbing and wearing them, as in ordinary machine or by hand washing.

This machine is similar in many respects to the machine described in my patent dated June 1, 1875. In that machine the construction of the journals and boxes requires nice workmanship and skilled labor, which enhanced the cost and rendered the machines unremunerative. With the present machine this objection is obviated.

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

The nut N, washer O, and sliding shaft K, in combination with the gear-wheel or pinion J in a washing-machine, as and for the purpose described.

E. J. ROBINSON.

Witnesses:

EDWARD ROSA,
JOHN A. DE REMER.