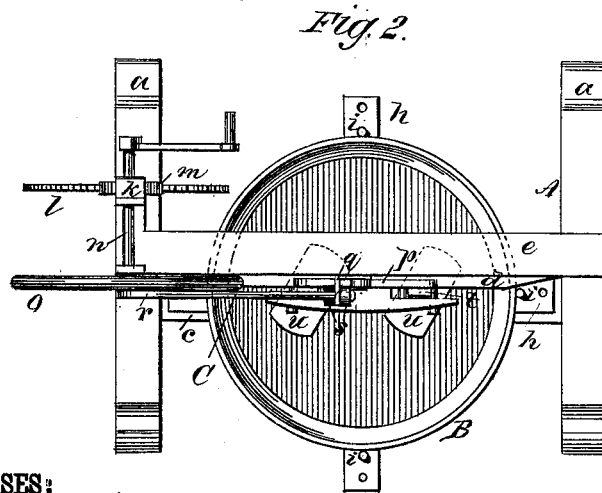
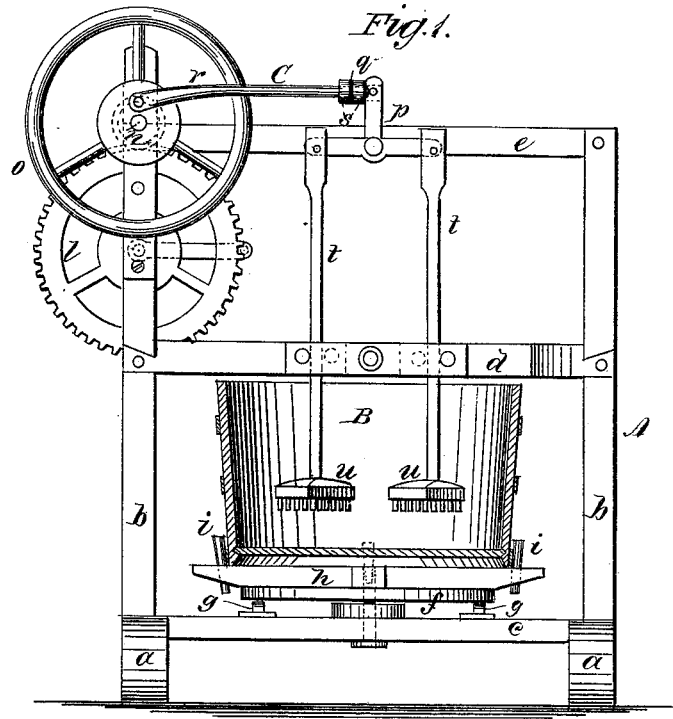


O. JURDEN.
WASHING-MACHINES.

No. 195,512.

Patented Sept. 25, 1877.



WITNESSES:
Francis McCardle,
J. W. Scarborough.

INVENTOR:
O. Jurden.
BY *Mumford & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

OSCAR JURDEN, OF ACKLEY, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **195,512**, dated September 25, 1877; application filed June 25, 1877.

To all whom it may concern:

Be it known that I, OSCAR JURDEN, of Ackley, in the county of Hardin and State of Iowa, have invented a new and Improved Washing-Machine, of which the following is a specification:

Figure 1 is a side elevation showing the tub in section. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

My invention consists in the arrangement, in a suitable frame, of two vertically-reciprocating pounders and gearing for operating the same, as will be hereinafter more fully described.

In the drawing, A is a frame, consisting of the feet *a*, standards *b*, and cross-pieces *c d e*.

To the lower cross-piece *c* a turn-table, *f*, is pivoted, and rollers *g* are provided for supporting the edges of the table. Upon the table *f* cross-pieces *h* are placed, which are bored to receive pins *i*, that hold the tub B in place.

Upon one of the standards *b* a frame, *k*, is fixed, in which the shaft of the spur-wheel *l* is journaled. This spur-wheel drives a pinion, *m*, on the shaft *n*, to the opposite end of which shaft a fly-wheel, *o*, is attached. A three-armed lever, *p*, is pivoted to the upper cross-piece *e*.

To the vertical arm of the lever *p* one end of a connecting-rod, C, is jointed, the other end being connected with a crank-pin projecting from the face of the fly-wheel *o*. The connecting-rod consists of the rod *r* and the L-shaped piece *q*, which is jointed to the lever

p, and through which the rod *r* passes. Upon the rod *r*, on each side of the piece *q*, rubber springs *s* are placed, which are held in place on the rod by nuts and washers.

To the ends of the horizontal arms of the lever *p* rods *t* are jointed, which extend downward through guides on the bar *d*, and are provided with heads *u*, which are placed diagonally in relation to the frame A, and are provided with a number of pins, which project downward from their under surface.

The upper ends of the rods *t* are provided with several holes, by means of which they may be adjusted.

The clothes to be washed are placed in the tub B, and the pounders are rapidly moved by turning the wheel *l* by means of a crank attached to its shaft. The tub containing the clothes is turned, as occasion may require, either by hand or foot. If there should be a greater quantity of clothes in one side of the tub than in the other, the rubber springs *s* yield, and prevent straining any part of the machine or injuring the clothes.

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

The combination, in a washing-machine, of the fly-wheel *o*, connecting-rod C, having springs *s*, the three-arm lever *p*, and the pounders, consisting of rods *t* and heads *u*, substantially as shown and described.

OSCAR JURDEN.

Witnesses:

S. BLOCK,
ANDREW RATH.