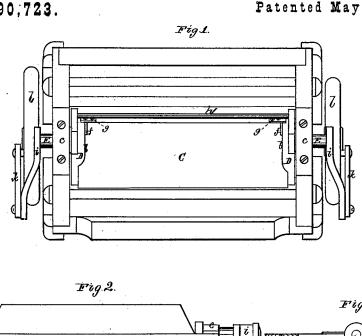
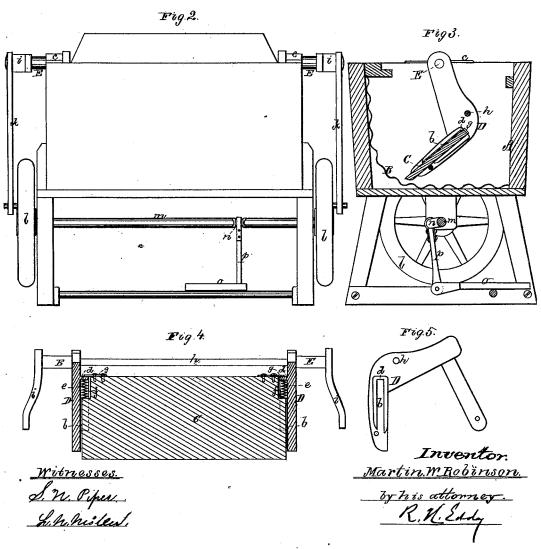
M. W. ROBINSON. WASHING-MACHINE.

No. 190,723.

Patented May 15, 1877.





## UNITED STATES PATENT OFFICE

MARTIN W. ROBINSON, OF EAST SOMERVILLE, ASSIGNOR TO HIMSELF AND OLIVER P. PRESCOTT, OF SOUTH BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN WASHING-MACHINES,

Specification forming part of Letters Patent No. 190,723, dated May 15, 1877; application filed March 27, 1877.

To all whom it may concern:

Be it known that I, MARTIN W. ROBINSON, of East Somerville, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Washing-Machines; and do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, and Fig. 3 a transverse section, of my improved washing-machine, with its cover removed from the tub. Fig. 4 is a longitudinal section of the dasher and its supportingarms and springs. Fig. 5 is an inner side

view of one of the said arms.

My invention relates to or consists in, first, the combination of a tub and its wash-board or corrugated lining, a notched dasher and its supporting-arms, springs, and stops, all arranged and applied substantially in manner and to operate as specified; second, the combination of the tub and its wash-board or corrugated lining, and its dasher, and the supporting-wires, springs, and stops thereof, with mechanism, as hereinafter explained, for producing reciprocating movements of the dasher and its arms.

In this machine the tub or clothes and suds reservoir A has within it a fluted wash-board or corrugated lining, B, arranged and formed as shown, it being to operate with a reciprocative dasher, C, which is a board disposed edgewise toward the lining B, and inclined

thereto, in manner as represented.

This dasher at its ends enters straight grooves or sockets b b of two bent arms, D D, provided with journals E E, that extend through boxes or bearings c c, fixed on the upper surfaces of the ends of the tub A. Each of the sockets b b is open at its lower end and closed at its upper end, the closure d serving as a bearing for the upper end of a helical spring, e, arranged in the socket and in a notch, f, made in the dasher.

The said dasher is supported by the springs

The said dasher is supported by the springs and the sockets, and can move forward and backward within the latter, or, in other words, either away from or toward the corrugated

lining. Two short arms or stops, g g, projecting from the dasher in manner as shown, serve, when against the closures d d, to maintain the dasher in place within its carrying-arms, which are connected by a rod, h, extending from one to the other, a short distance above the dasher.

Each journal of the dasher has a crank, i, projecting from it, which, by means of one of two rods, k k, is connected with one of two fly-wheels, l l, by a crank-pin, m, projecting

from the wheel.

These fly-wheels, arranged as represented, are fixed to a shaft, m, extending along underneath and pivoted to the tub, and provided with a bell-crank, n, connected to a pedal, o, by a pitman or link, p, all being arranged as shown.

By actuating the pedal, the dasher may be put in rapid reciprocating movement within the tub. By it and the corrugated lining, clothes may be washed when the tub is supplied with water or a saponaceous solution.

Owing to the springs the dasher will not be clogged by the clothes, as it will give back in case of their becoming wedged or caught be-

tween it and the lining.

With the machine as described clothes may be washed to advantage with great expedition, and little if any danger of being torn or injured while being so cleansed.

I claim—

1. In combination with the tub A and its wash-board or corrugated lining B, the notched dasher C and its recessed supporting-arms D D, springs e e, and stops g g, arranged and applied essentially as set forth.

2. In combination with the tub A and its wash-board or corrugated lining B, and with the dasher C and its recessed supporting-arms D D, springs e e, and stops g g, arranged as set forth, the cranks i i, connecting-rods k k fly-wheels l l, cranked shaft m, and the pedal o, arranged as specified.

MARTIN W. ROBINSON.

Witnesses:

R. H. EDDY, J. R. SNOW.