

UNITED STATES PATENT OFFICE.

RUSSELL S. MORSE, OF WILTON, MAINE.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 103,357, dated May 24, 1870.

To all persons to whom these presents may come:

Be it known that I, RUSSELL S. MORSE, of Wilton, of the county of Franklin, of the State of Maine, have invented a new and useful Improvement in Machines for Washing Clothes; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a transverse section of a washing-machine provided with my invention. Fig. 2 is a top view of the tub, showing the spindle and the appliances fixed to the bottom of such tub. Fig. 3 is a top view, and Fig. 4 a bottom view, of the reciprocating or rotary dasher.

The washing-machine hereinafter described is similar in its general character to that explained in the United States Patent No. 49,920, granted September 12, 1865, to L. E. Ransom.

The dasher A has a series of tangential rubbers, *a*, applied to the lower face of its perforated disk *b*, and turns on an upright spindle, B. The said spindle, instead of being fixed to a perforated disk having rubbers or arms on its upper face, is simply fastened at its lower end to four radial arms, C, which extend from it at right angles to it and each other, and rest on the bottom *d* of the tub D, and are to be fixed thereto by means of screws *e e* going down through each of such arms and into the bottom. Between the said arms and fixed to the bottom is a series of cleats or rubbers, *ffff*, each of which is formed with a long passage, *g*, leading through it and over the bottom of the tub, in manner as shown in Fig. 5. Furthermore, each of the arms C has two or more of such passages made through it, as shown at *h* in Fig. 1. The purpose of these passages through the cleats and arms is not only to facilitate the flowage of the water, but to prevent dirt or extraneous matters from settling in the spaces between the arms while the process of washing may be in the act of being carried on.

My improvement in the washing-machine

consists in dispensing with the lower perforated disk used in Ransom's washing-machine and supporting the spindle by the radial arms or rubbers C, and arranging in each of them the passages, as described; also, in combining and arranging with the tub and the spindle and its series of supporting-arms the intermediate series of perforated cleats, as described.

My invention not only materially simplifies and cheapens the machine, but causes it to operate to better advantage, and prevents it from becoming clogged with dirt or deposits made between the lower rubbers.

The mechanism, as described, as fixed to the tub and used with the dasher, may be applied to any tub of sufficient size.

In operating with it after the tub may have been charged with clothes and a washing-liquid, we have only to lay hold of and impart to the dasher a reciprocating rotary movement.

I make no claim to the subject of the patent hereinbefore mentioned, or to the machine described in such patent.

I do not employ in my machine, as in Ransom's machine, a second perforated disk to rest on the bottom of the tub and give support to a series of rubbers or arms disposed on such disk. By dispensing with such, and fastening the rubbers directly to the spindle, I gain an important advantage, as I not only greatly simplify the construction of the machine, but am enabled more readily to cleanse the dirt from the bottom of the tub.

I therefore claim—

The combination of the radial arms C, the cleats *f*, and the passages *g h*, all arranged as described, with the spindle B and with the dasher A, having perforations through its disk, and rubbers *a* applied to such disk, as set forth.

RUSSELL S. MORSE.

Witnesses:

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