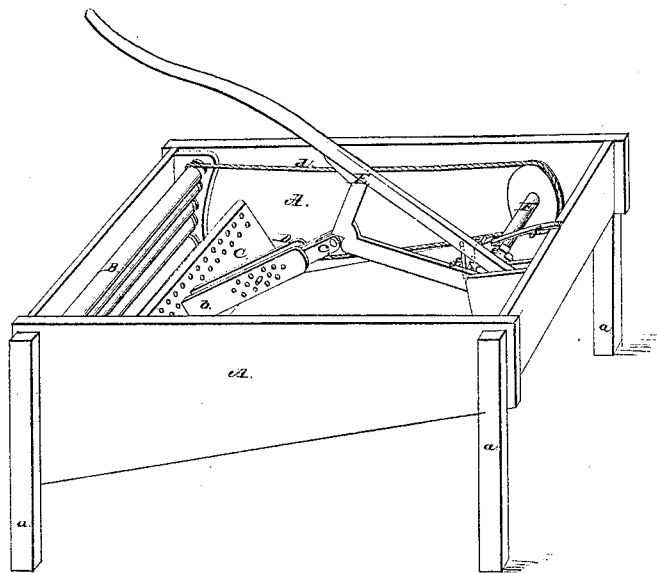


R. Marean,
Washing Machine,
N^o 6,989. Patented Jan, 1. 1850



UNITED STATES PATENT OFFICE.

RANSOM MAREAN, OF LAURENCEVILLE, PENNSYLVANIA.

WASHING-MACHINE.

Specification of Letters Patent No. 6,989, dated January 1, 1850.

To all whom it may concern:

Be it known that I, RANSOM MAREAN, of Laurenceville, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the characteristics which distinguish my invention from all others heretofore known, reference being made to the accompanying drawing, forming part of this specification, which represents a perspective view of my washing-machine.

My invention consists of a moving bed of rolls arranged in such manner that they are turned with different velocities; the clothes being rubbed and turned by the rolls, and squeezed between them and a compressor much in the same manner as in ordinary hand washing.

In the accompanying drawing A is the tub in which the water and clothes are placed, and which is supported at a convenient distance above the ground on legs *a, a*. At one end of the tub a series of horizontal rolls B are arranged one above the other. These are of unequal diameter and are so placed that their journals lie in the arc of a circle. They form the bed against which the clothes are pressed. The compressor, C, is a block fluted on its face (that is, the side facing the rolls), pierced with holes, and supported on friction wheels. A stem D projects from its back, and is hinged to a bent lever E which projects over the end of the tub, and forms a handle to which the hand of the operator is applied; the hinging of the stem to the lever forms a toggle joint, and the power applied to the handle will exert a great pressure upon the clothes placed between the compressor and the bed. As the quantity of clothes acted upon at one operation will vary considerably, the stem of the compressor is constructed in such manner that it can be lengthened or shortened, this is done by making it in two pieces *b, c*, one of which slides over the other, and which are pierced with holes through which a pin is passed to connect the two together when the two pieces are adjusted to the required length.

In order to give a rotary motion to the

rolls, a band *d*, is passed over pulleys turned on one of their extremities, and around a pulley secured to a horizontal shaft F, at the opposite end of the tub; to this shaft is secured a ratchet wheel *e* which is acted upon by a spring ratchet *f*, secured to the lever handle. As the lever handle is raised this ratchet slips over the inclined face of the ratchet teeth while the wheel is prevented from moving by a pawl *g*. As the lever handle is depressed the ratchet acting on the radial faces of the teeth of the wheel *e* turns the shaft and puts the band *d*, in motion, which acting upon the rolls, turns them also on their journals. As the rolls are of unequal size they will turn with different velocities, and will thus rub the clothes lying against them with an energy proportioned to the velocity with which one roller tends to draw the clothes forward faster than that which precedes it, and at the same time will turn the mass into a new position to be acted upon by the fluted compressor, thus greatly quickening the cleansing and reducing the amount of labor required.

I have hitherto described the rollers composing the bed as being of different sizes while the pulleys are of equal size but it is obvious that the rolls may all be of equal size and the pulleys may differ from each other so as to cause the surfaces of the rolls to move with differing velocities. The machine may also be used for wringing the clothes after they have been washed and rinsed, as the water may be expressed from them by compression between the compressor and the roller bed.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of a bed of rollers moving at different velocities with a compressor for the purpose of washing, rinsing, and wringing clothes, substantially as herein set forth.

In testimony whereof I have hereunto subscribed my name this 13th day of September A. D. 1849.

RANSOM MAREAN.

Witnesses:

T. H. WATSON,

WM. D. WASHINGTON.