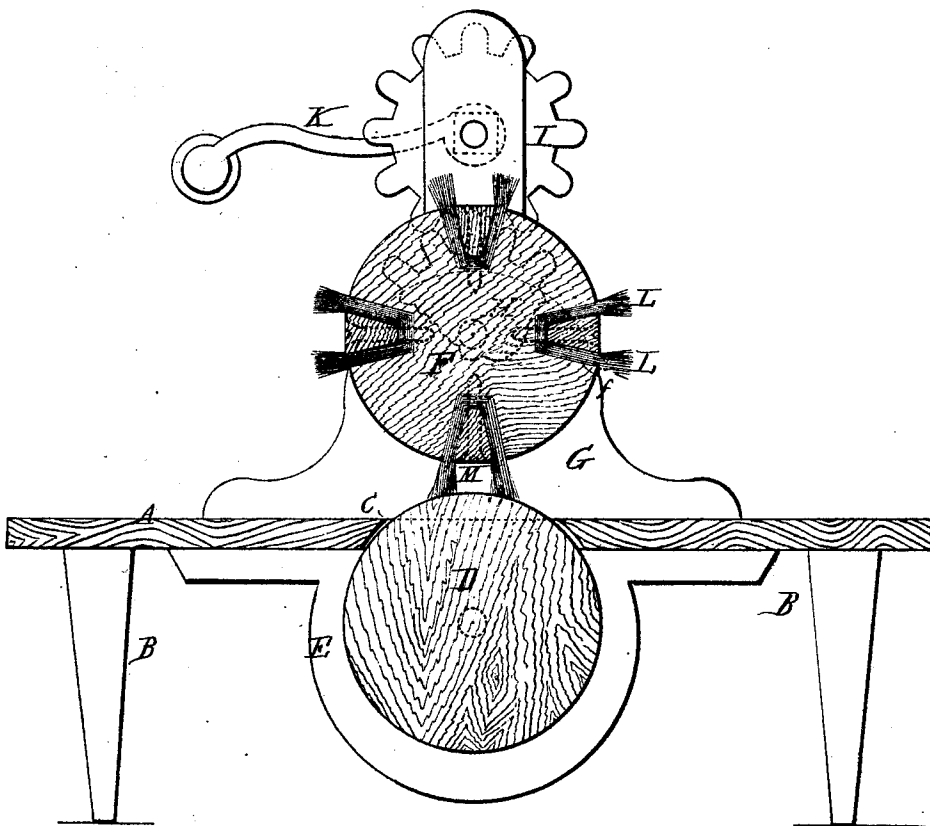


G. H. MILLER.

Improvement in Washing Machines.

No. 121,883.

Patented Dec. 12, 1871.



Witnesses
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R. H. Vasi

Inventor.
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UNITED STATES PATENT OFFICE.

GIDEON H. MILLER, OF BELVIDERE, NEW JERSEY.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 121,883, dated December 12, 1871.

To all whom it may concern:

Be it known that I, GIDEON H. MILLER, of Belvidere, in the county of Warren and State of New Jersey, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a vertical central sectional view of my invention.

This invention has relation to a washing-machine in which a rotary cylinder furnished with bristle brushes is employed for the purpose of rubbing and cleaning the clothes. The novelty consists in the arrangement of and method of securing said brushes, as hereinafter described.

Referring to the drawing, A represents a frame or platform having supports B, and constructed with a transverse opening, C, midway between its ends. D designates a smooth cylinder journaled horizontally across the frame A and underneath it. A portion of the circumference of this cylinder passes through the opening C, as shown. The ends of the shaft of said cylinder have their bearings in brackets E depending from opposite sides of the frame A. F designates a cylinder journaled to standards G and heated directly above the smooth cylinder D. The cylinder F is designed for rotary motion. On its shaft is a toothed wheel, H, gearing with a similar or larger wheel, I, operated through the medium of a crank-arm, K. In the periphery of the cylinder F are cut the longitudinal recesses *f*, of a beveled form, as shown, and terminating near the ends of the cylinder. Their

purpose is to hold the bristles forming the brushes L.

To form these brushes a number of bristles all of the same length are arranged in a row, their ends coinciding, and are then bent to a V-shape and inserted in the recesses *f*, so that both their ends shall protrude in a radial direction, as shown. A beveled or V-shaped slat, M, is then placed in each recess and secured in place by means of screws or their equivalents. The ends of the slats and of the cylinder are correspondingly notched, so that when the former are inserted their surfaces shall coincide with the periphery of the cylinder.

By the arrangement described each set of bristles serves to constitute two distinct brushes, one on each side of the slat. The bristles are retained in place very securely, and when worn and useless may be readily replaced by removing the slat and inserting new bristles.

The clothes are washed by being passed between the two cylinders, water being, of course, employed; as, for instance, by setting the machine in an ordinary wash-tub or in a tank especially provided for its reception.

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

In a brush-holding cylinder of a washing-machine, the double continuous brushes L, bent and arranged in a radial manner within the recesses *f* of the cylinder F, and secured in place by means of the slats M, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: GIDEON H. MILLER.

HENRY S. HARRIS,
JNO. B. BROOKFIELD.

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