S. TURNER, Sr.

WASHING-MACHINE.

No. 176,566. Patented April 25. 1876.

Fig. 1.

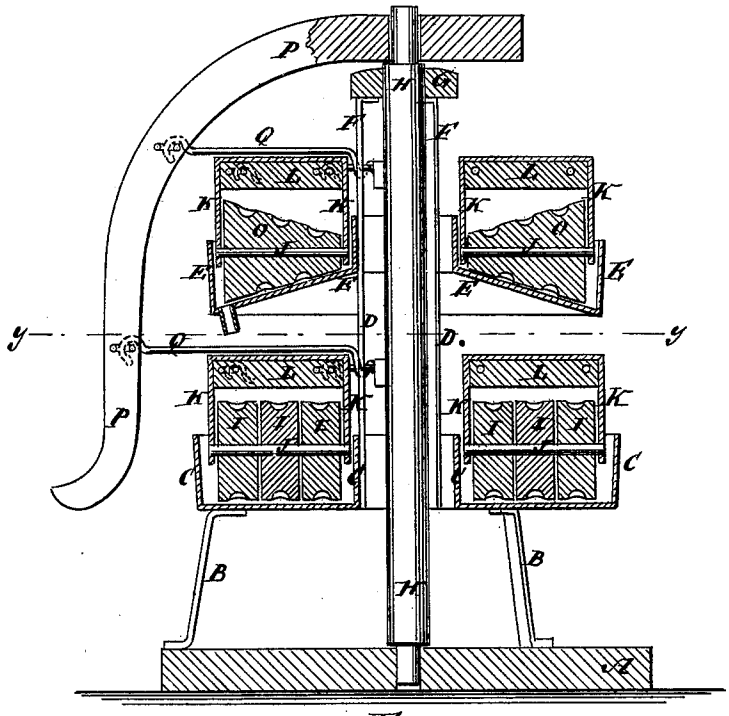
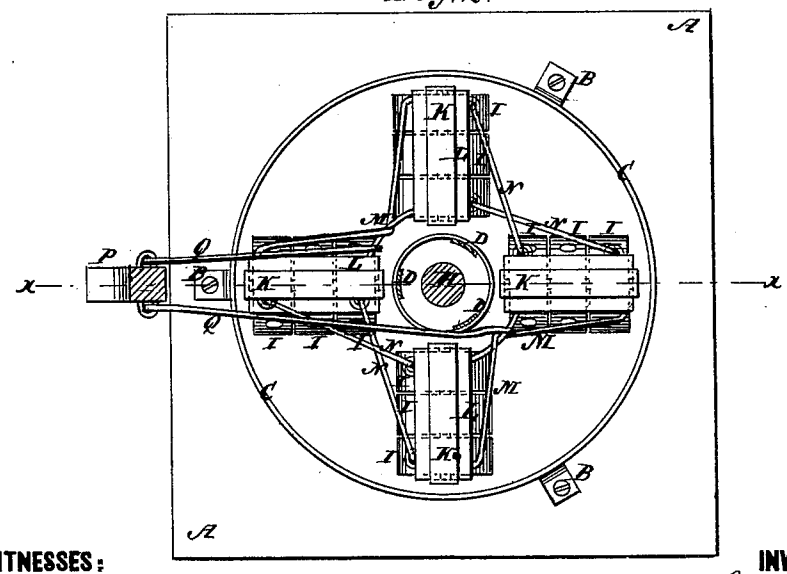


Fig. 2.



WITNESSES:

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BY

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UNITED STATES PATENT OFFICE.

SQUIRE TURNER, SR., OF COLUMBIA, MISSOURI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **176,566**, dated April 25, 1876; application filed January 15, 1876.

To all whom it may concern:

Be it known that I, SQUIRE TURNER, Sr., of Columbia, in the county of Boone and State of Missouri, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a vertical section of my improved machine, taken through the line *x x*, Fig. 2. Fig. 2 is a horizontal section of the same taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved washing-machine, simple in construction and effective in operation, which may be made of any desired size and capacity, and may be operated by hand-power, animal-power, water-power, steam, or other desired or convenient power, and which will wash the clothes quickly and thoroughly, and without injuring them.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A is the bed-plate of the machine, to which are attached the lower ends of the standards B, that support the tub C. The tub C is made ring-shaped, and to its inner sides are attached the standards D, that support the upper tub E. To the inner part of the tub E are attached the standards F that support the bearing G for the upper end of the shaft H. The shaft H passes down through the cavities in the centers of the tubs E C, and its lower end revolves in a socket in the bed-plate A. The bottom of the lower tub C is made flat, and in it are placed four rollers, I, placed at right angles with each other, and each made in three or more sections, so that each inner section which rolls through a smaller circle may turn slower than the outer sections, to avoid a sliding friction. The sections of each roller I revolve upon a rod, J, the ends of which are attached to brackets K, secured to the bars L. The bars L and the rollers I are connected together in pairs by braces M, and the pairs of bars and their rollers are connected together by detachable hook-braces N, so that all the rollers and their bars may move together. The bottom of the upper tub E is inclined, as shown in Fig. 1, and in it are placed four conical rollers, O, which roll upon rods J attached to brackets K secured to bars L and connected by braces M and hooks N, in the same manner as the rollers I. Every other one of the rollers I and O have cavities formed in them which carry down air and discharge it among the fibers of the clothes, to be pressed out, together with the water, by the following smooth rollers, removing the dirt and washing the clothes clean in a very short time.

When the machine is to be operated by animal-power, a sweep, P, is attached to the upper end of the vertical shaft H, which sweep curves downward, so that the animal can be conveniently connected with its lower end. The sets of rollers I and O are connected with the sweep P by hook-connecting rods Q, so that the said rollers may be carried around the tubs C E by the said sweep.

When the machine is to be operated by hand, water, or steam power, the sweep P and draft-hooks Q are omitted, and a horizontal shaft is connected with the upper or lower part of the vertical shaft H by bevel-gear wheels. In this case the standards or supporting-bars D F should be connected with the outer parts of the tubs C E, and the rollers should be connected with bars attached to the vertical shaft H.

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

1. In a washing-machine, the standards D F, having rollers O I extending up from tubs and made to support the bearing G, in the manner shown and described.

2. The combination, with a bar, L, and a tub having a horizontal bottom, of the roller-sections I, arranged in a washing-machine side by side on the same shaft J, as and for the purpose set forth.

SQUIRE TURNER, SR.

Witnesses:

WM. H. WHITE,

THOS. J. WHITE.