T. Outwater,

Washing Machine,

No. 61,558, Patented Jan. 29, 1867.

Fig. 4

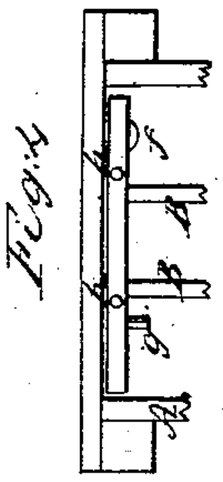


Fig. 3

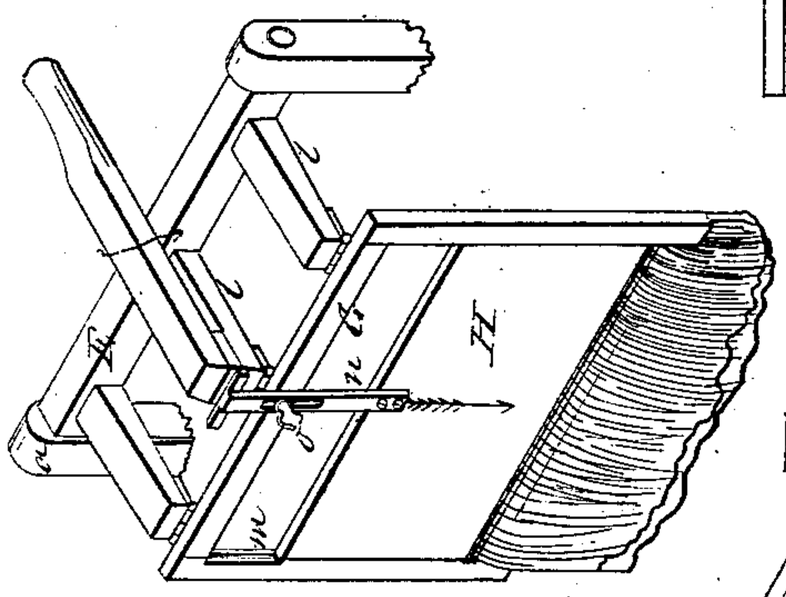


Fig. 2

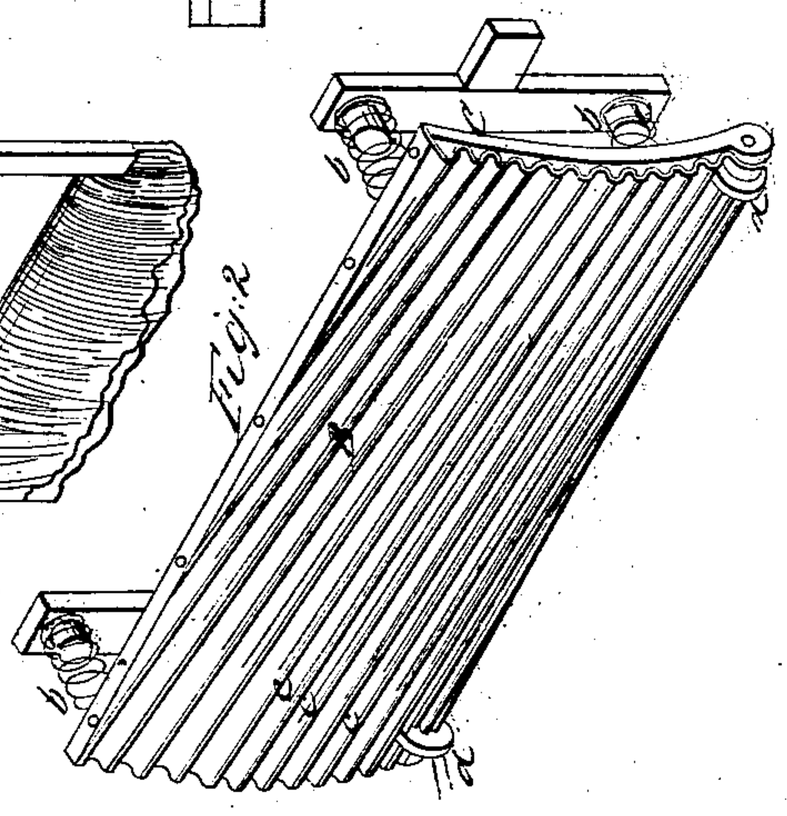
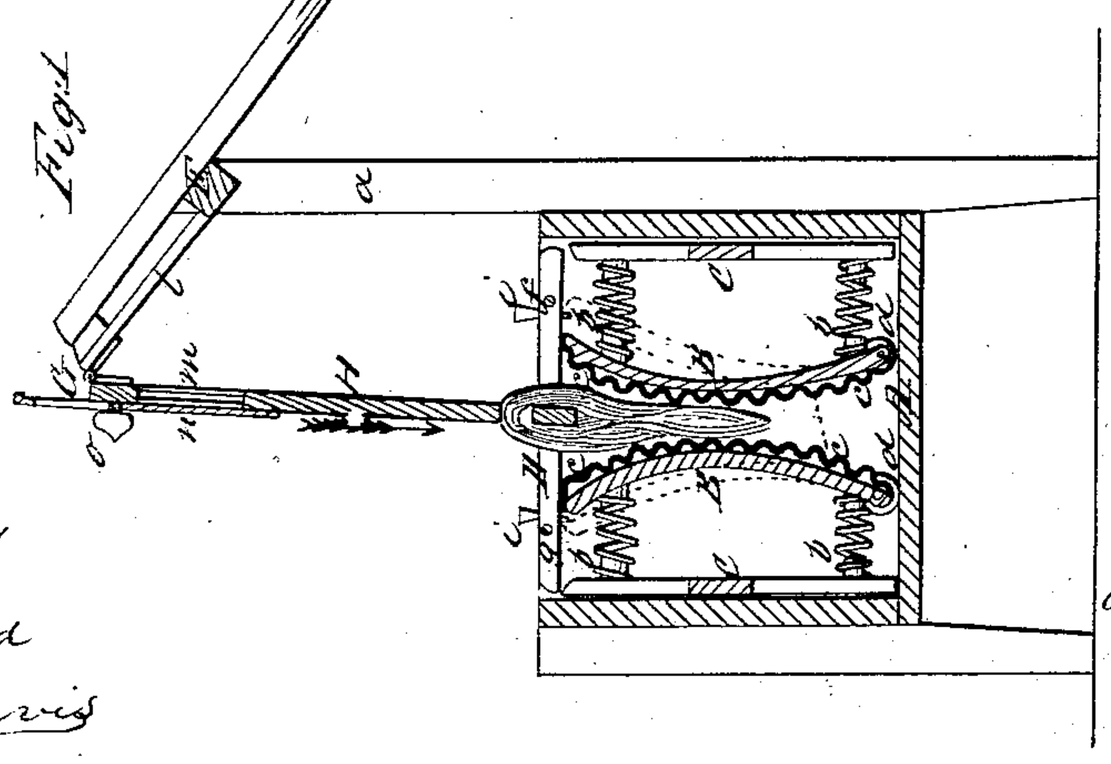


Fig. 1



Witnesses

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United States Patent Office.

THERON OUTWATER, OF OLCOTT, NEW YORK.

Letters Patent No. 61,558, *dated January* 29, 1867.

IMPROVED WASHING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THERON OUTWATER, of Olcott, in the county of Niagara, and State of New York, have invented a certain new and useful improvement in Washing Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a vertical cross-section of my improved washing machine.

Figure 2, a perspective view of one of the wash-boards and frames detached.

Figure 3, a perspective view of the clothes frame detached.

Figure 4, a diagram representing a plan of one end of the machine.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists of two convex corrugated spring wash-boards attached to frames held down by swinging bars at each end, adapted to open to allow the said boards to be inserted or removed at pleasure, and also provided with a set of adjusting holes and pins to hold the boards open when the said parts are combined with a clothes frame connected by brace arms with a rock-shaft, and provided with an adjustable gate for clamping the clothes in place, the whole arranged as hereinafter described.

As represented in the drawings, A is a square or rectangular box with the posts on one side extending up, as shown at *a a*, figs. 1 and 3. In this box rest two wash-boards B B, connected with removable frames C C by means of coiled springs *b b*, which give the desired elasticity to the boards. The contiguous faces of the wash-boards are made convex, and are provided with corrugations *c c* preferably inclining slightly downward, as shown in fig. 2, those of the one board inclining in the opposite direction from those of the other. The bottoms of the boards are provided with friction-rollers *d d*. In the ends of the machine are swinging bars D turning upon pivots *f*. They are held down over the wash-boards to retain them in place by horizontal pins *g* or equivalent. They have also a set of vertical holes *h*, through any of which are inserted pins *i* to hold the boards open or separated, as indicated by black lines, fig. 1. Between the posts *a a* is located a rock-shaft, E. To this is attached a handle, *k*, and from it also extend several arms, *l l l*, to the ends of which is hinged a square or rectangular frame, G. In the vertical sides of this frame are grooves, *m m*, in which slides a gate, H, retained in any desired position by a strap, *n*, and a screw, *o*. The clothes are clamped and held in place by fitting between the gate and the lower side of the frame. By the employment of the convex boards B instead of plane ones, as in other devices of this class, I am enabled, at the extreme of each down-stroke, to remove the clothes in a great degree from pressure, by their falling into the open space at the bottom, where they become filled with water, which, when they are drawn back again through the narrow, central portion, is expressed, and thus an alternate action of absorbing and expressing the water is produced, which is very effective in washing. By rubbing for a length of time in the central portion, and dipping occasionally into the space below, the action may be made very similar to that accompliished by hand. This convex form, also, while it is as effective as the plane form, relieves the great labor consequent upon a constant and unvarying binding of the clothes in place, by allowing a certain degree of freedom each side of the centre. The expansion of the boards at the top enables the clothes to be drawn up and adjusted, and inserted in place again without difficulty. The attaching of the boards to removable frames, C, enables them to be inserted and detached at pleasure; and the employment of the swing bars D, or equivalent, not only serves to hold them in place, but the holes *h* therein and the pins *i* enable the tops of the boards to be set at any desired distance apart, so that the clothes may be inserted or removed, or may be rinsed up or down in the water between, with freedom. The arms *l l l*, extending from the rock-shaft and holding the clothes frame, serve as braces to keep the latter always in a true position to run easily between the boards. If the simple, central connection were alone used, there would be danger of displacement and irregularity.

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

The arrangement of the convex spring wash-boards B attached to removable frames C, and of the swinging bars D or equivalent for retaining and holding open the boards, where the said parts are combined with the clothes frame G and gate H, constructed as described and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THERON OUTWATER.

Witnesses:

S. W. LOCKWOOD,

WM. H. OUTWATER.