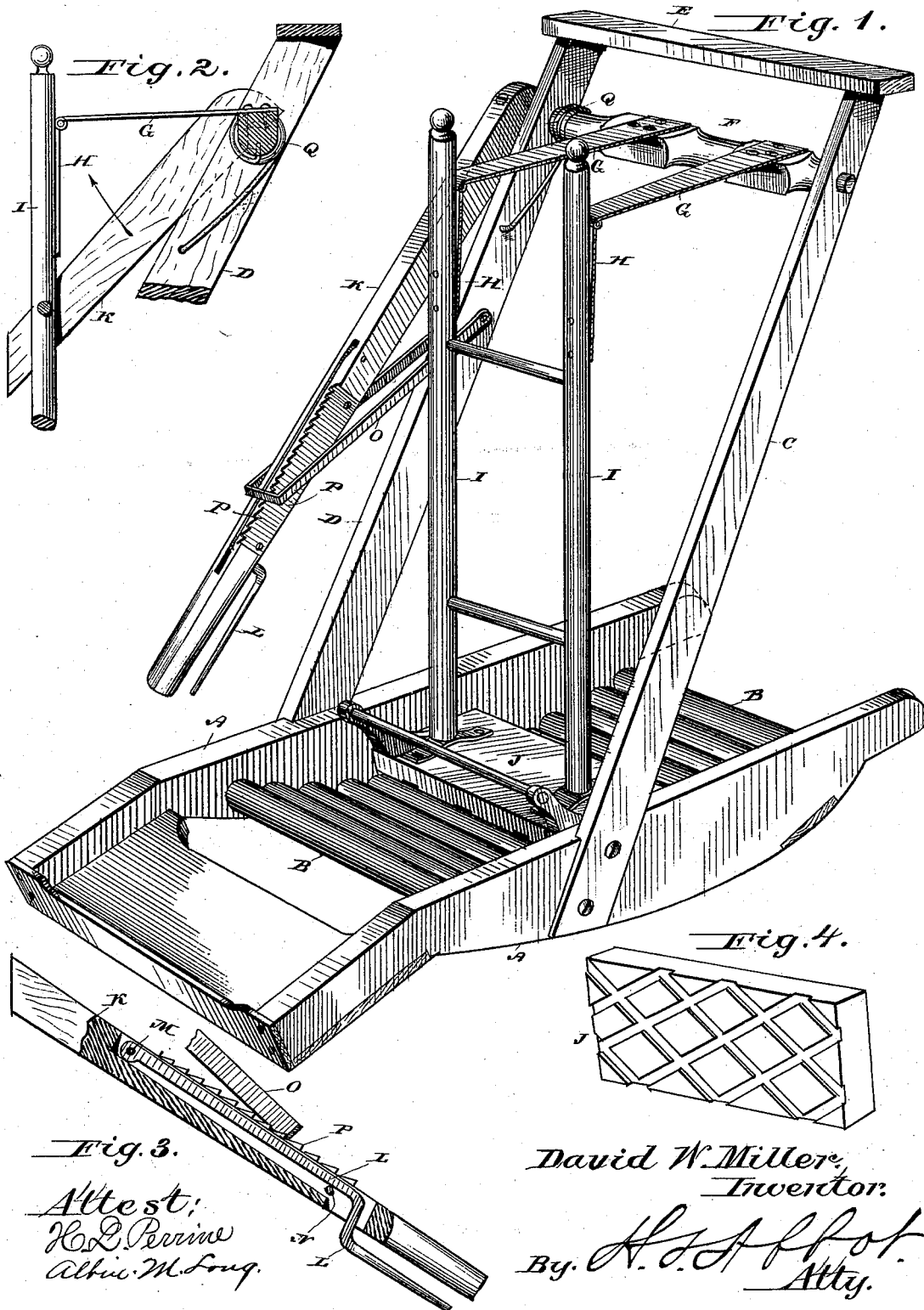


D. W. MILLER.  
Washing-Machine.

No. 209,499.

Patented Oct. 29, 1878.



Attest:  
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# UNITED STATES PATENT OFFICE.

DAVID W. MILLER, OF WHITNEY'S POINT, NEW YORK.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **209,499**, dated October 29, 1878; application filed September 16, 1878.

*To all whom it may concern:*

Be it known that I, DAVID W. MILLER, of Whitney's Point, in the county of Broome and State of New York, 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 thereof.

This invention relates to certain improvements in washing-machines; and the invention consists in the construction and arrangement of parts, which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a section through the horizontal and torsional pieces of the frame-uprights. Fig. 3 is a view with the lever in section, showing the finger-piece; and Fig. 4 is a bottom view of the rubber.

In the drawing, A denotes the frame, which is constructed in any suitable manner, and provided with a series of rollers, B, arranged in a concave manner, as shown in Fig. 1 of drawing.

The frame A is provided with upright pieces C and D, held together at the upper end by a horizontal piece, E, as shown. Between the upright pieces C D, near their upper ends, is arranged a torsional piece, F, to which is secured one end of two flat springs, G. The other ends of these springs are hinged to a bar, H, secured to the standards I of the rubber J.

To the end of the torsional piece F projecting through the upright D is secured in any suitable manner one end of a lever, K. This lever is recessed to receive a finger-piece, L,

as shown in Fig. 3 of drawing. This finger-piece is held in place by a pin, M, passing through an eye at its upper end, as shown. The pin N serves as a rest or support for the lower end of the finger-piece L.

The catch or stay O, secured to the upright D, engages with a rack-bar, P, secured to the lever K, as shown in Fig. 1 of drawing. The torsional piece F is provided with a coil-spring, Q, one end of which is secured to the upright D, as shown in Figs. 1 and 2 of drawing.

The bottom of the rubber J is formed with cross-cuts, as shown in Fig. 4 of drawing.

The operation is as follows: The spring Q serves to keep or draw the rubber J up from the clothes. The flat springs G, when the lever is shoved down, maintains an even pressure of the rubber upon the clothes. The degree of pressure upon the clothes is regulated by the lever K. When it is desired to ease off or raise the rubber from the clothes, the stay O is, by the finger-piece L, disengaged from the rack P, allowing the lever to be carried upwardly by the spring Q and the rubber to be raised above the clothes.

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

1. A washing-machine constructed substantially as described, having a lever, K, coil-spring Q, cross-piece F, flat springs G G, standards I, and rubber J, as set forth.

2. The combination of the cross-piece F, coil-spring Q, lever K, stay O, rack-bar P, and finger-piece L, as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

DAVID W. MILLER.

Witnesses:

J. N. STONE,  
H. C. HOEFLE.