

J. W. SMITH.
Washing-Machine.

No. 221,112.

Patented Oct. 28, 1879.

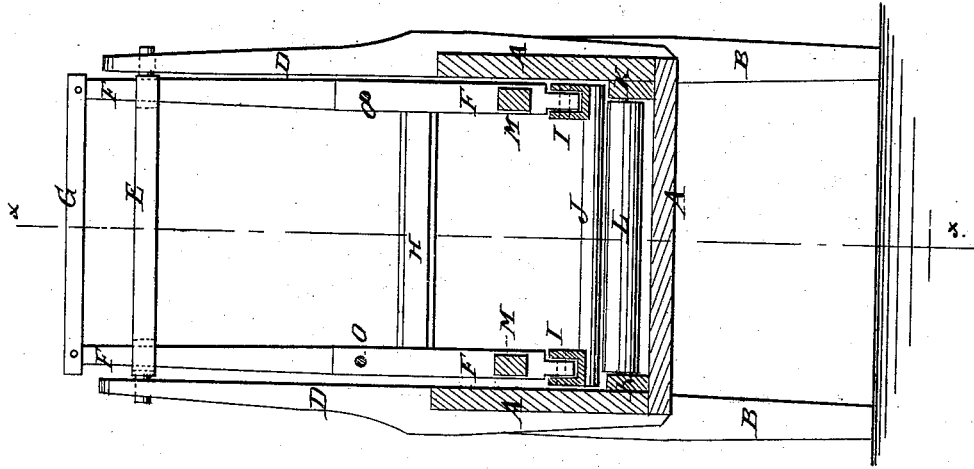


Fig. 2.

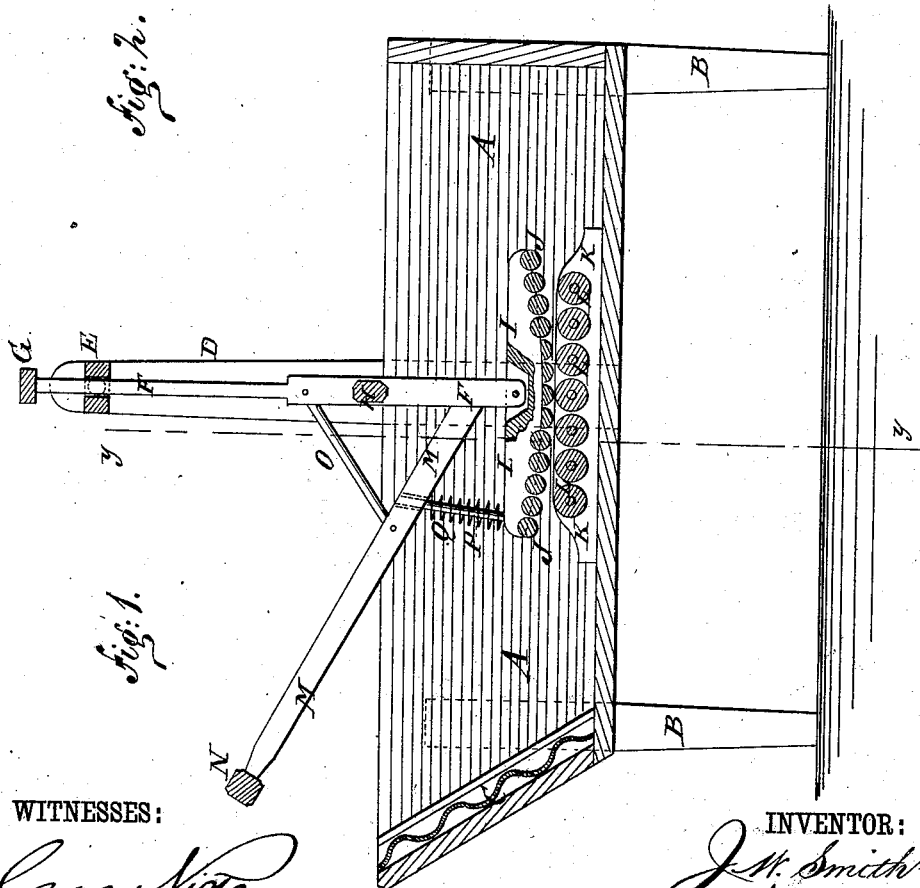


Fig. 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES W. SMITH, OF SOUTH SCHROON, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **221,112**, dated October 28, 1879; application filed March 15, 1879.

To all whom it may concern:

Be it known that I, JAMES W. SMITH, of South Schroon, in the county of Essex and State of New York, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

Figure 1 is a vertical longitudinal section of my improved machine, taken through the line *x x*, Fig. 2. Fig. 2 is a vertical cross-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 which shall be so constructed as to wash the clothes quickly and thoroughly, and to allow any desired part of the clothes to be rubbed more or less, as may be required.

The invention consists in an improved washing-machine, formed by the combination of the stationary rubber, the movable rubber, the sliding and swinging frame, the rock-bar, the handle-frame, and the spiral springs with each other, and with the suds-box and the stationary uprights, as hereinafter fully described.

A is the suds-box, which is made with vertical sides, and rear end and inclined forward end, and of any desired size. The suds-box A is supported upon legs B, of such a length as to raise the machine to a convenient height.

To the inclined forward end of the suds-box A is attached a wash-board, C, which may be used for rubbing wristbands, neck-bands, and other parts of the clothes that may be particularly soiled.

To the middle part of the side boards of the suds-box A are rigidly attached the lower parts of two uprights, D, to the upper ends of which are pivoted the ends of a cross-bar, E.

Through the cross-bar E, at the inner sides of the uprights D, are formed two mortises, through which pass, and in which slide, two upright bars, F, the upper ends of which are connected by a cross-bar, G. The lower parts of the upright bars F are also connected by a cross-bar, H.

The lower ends of the upright bars F are inserted in mortises in the upper sides of the

middle parts of the two bars I, the lower edges of which are slightly curved, and to them are attached the ends of a series of rounds, J, the bars I and the rounds J thus forming the upper or movable rubber.

To the bottom of the suds-box A, at the inner sides of the middle parts of the side boards, are rigidly attached two bars, K, to and between which are pivoted the ends of a series of rollers, L, the bars K and rollers L thus forming the lower or stationary rubber.

To the forward sides of the lower parts of the upright bars F are attached the ends of two inclined bars or levers, M, the outer ends of which are connected by a cross-bar, N, which serves as a handle in operating the machine. The connection between the levers M and the upright bars F is strengthened by inclined braces O, as shown in Fig. 1.

To the forward ends of the bars I of the upper rubber are attached the lower ends of two guide-rods, P, the upper ends of which pass up through guide-holes in the inclined levers M. Upon the guide-rods P are placed spiral springs Q, the lower ends of which rest upon the upper sides of the ends of the bars I, and their upper ends rest against the lower sides of the inclined levers M.

With this construction the upright bars F slide up and down through the rock-bar E, to allow the upper rubber, I J, to adjust itself to the thickness of the clothes to be operated upon. With this construction, also, the springs Q hold the rubber I J down upon the clothes in proper position to rub them effectively as the said rubber is moved back and forth.

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

The combination, in a washing-machine, with the rubber I J, centrally pivoted to bars F, of the springs Q on guide-rods P, the handle-lever M, the braces O, and the upright rocking bars F, as shown and described.

JAMES WARREN SMITH.

Witnesses:

ISAAC S. WOODWARD,
ORIN BURGE.