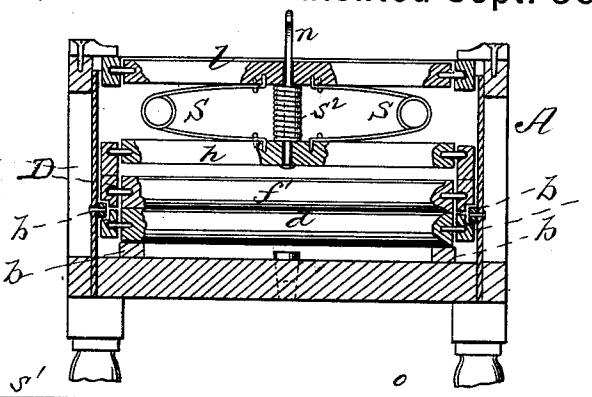
J. LOCKWOOD & G. W. BACON.

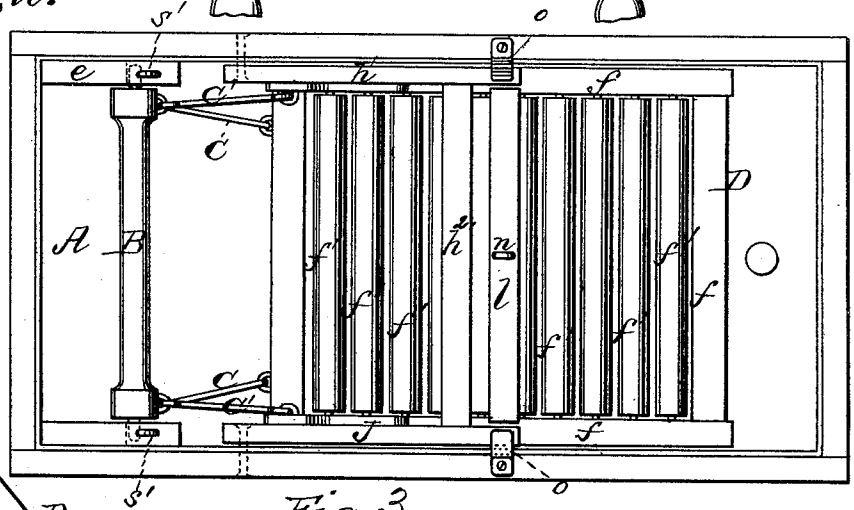
Washing-Machine.

No. 220,208. Patented Sept. 30, 1879.

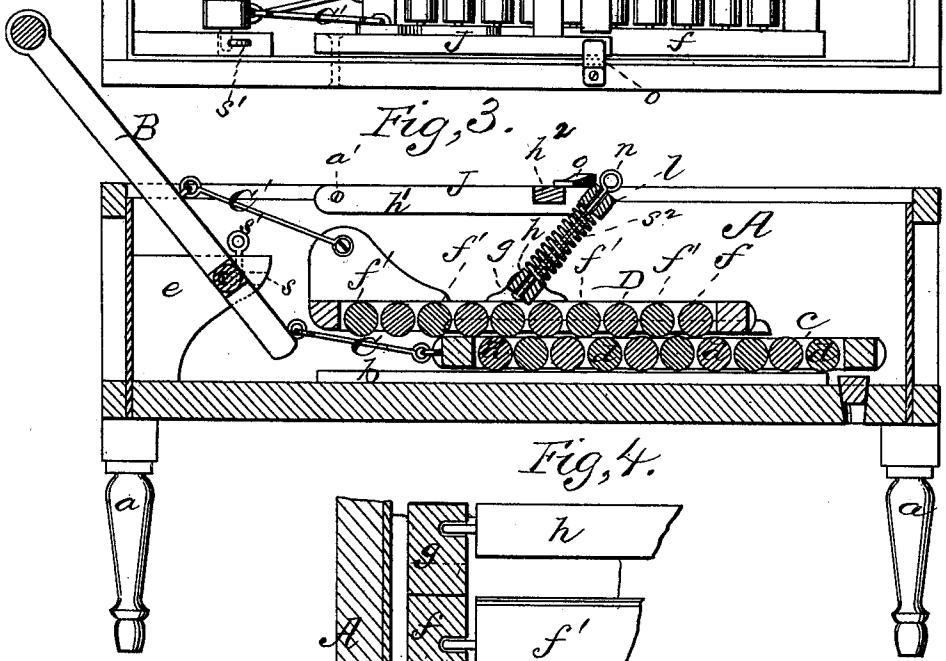
Fig, 1.



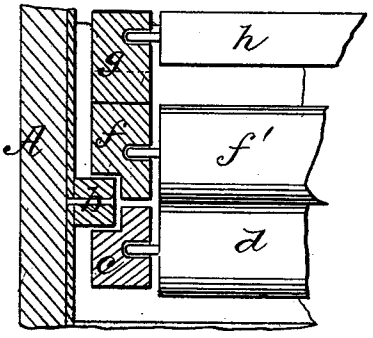
Fig, 2.



Fig, 3.



Fig, 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

JEREMIAH LOCKWOOD AND GEORGE W. BACON, OF SULLIVAN, INDIANA; SAID LOCKWOOD ASSIGNOR TO SAID BACON, AND SAID BACON ASSIGNOR OF ONE-HALF HIS RIGHT TO AZARIAH E. CURTIS, OF SAME PLACE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **220,208**, dated September 30, 1879; application filed April 12, 1879.

To all whom it may concern:

Be it known that we, JEREMIAH LOCKWOOD and GEORGE W. BACON, of Sullivan, in the county of Sullivan and State of Indiana, have invented a new and valuable Improvement in Washing-Machines; and we 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a cross-sectional view of my improved washing-machine. Fig. 2 is a top view of the same. Fig. 3 is a longitudinal vertical section, and Fig. 4 is a detail view.

This invention has relation to improvements in washing-machines; and the nature of the invention consists in combining with a suds-box, metal-lined and provided at its bottom with horizontal guideways, a rectangular frame seated in said ways and affording bearings to rollers, a second roller-carrying frame above the first, a lever-handle, connecting-rods uniting the handle end of the lever and the lower frame and the upper frame and lever above its fulcrum, and a spring holding the upper frame down upon the lower one, as will be hereinafter fully shown and described.

In the annexed drawings, the letter A designates a rectangular metal or metal-lined suds-box, usually raised upon the legs *a*. Inside of this box, near its bottom, are slideways *b*, in which is arranged a rectangular frame, *c*, in which are journaled side by side the rubbing-rollers *d*. These are usually close together, though not touching each other, and extend transversely across the length of the box. At one end of the box are strong raised offsets *e*, rigidly secured to its sides, and affording bearings to the journals of a rectangular lever-frame, B. These bearings are made usually by means of the open-ended slots *s*, and the journals are confined thereto by means of pins *s'*. C indicates connecting-rod, pivoted at one end to the frame *c*, and at the other to the handle ends of the lever-frame below its bearing or fulcrum; and C', similar rods, connecting the said lever above its fulcrum *s* to an upper carriage-frame or scrubber, D. This is composed of a rectangular frame, *f*, in which are journaled a number of rollers, *f'*.

It is evident that actuating the lever-handle will impart endwise reciprocating movements in opposite directions.

The frame *f* affords bearings at or near the middle of its length, at *g*, to a transverse rock-shaft, *h*, the object of which will hereinafter appear.

J indicates a vertically-vibrating frame, formed of side bars, h^1, and a brace or braces, h^2, and secured to the sides of the box, near the bearings of the lever, by means of pivot-pins *a'*. In its free end the frame J affords bearings to a rock-shaft, *l*, which is connected to the rock-shaft *h* by means of a metallic rod, *n*, rigidly secured to said shaft *h*, but extending up loosely through shaft *l*, and by means of elliptic springs S secured at their ends to the said shafts. I may also interpose between the latter the spiral spring s^2, usually arranged on the rod *n*, and secured at its ends to the shafts aforesaid.

The operation is as follows: The box being filled with water to a suitable depth, the garments to be washed are soaped, and, the upper roller-frame being thrown up, laid upon the lower roller-frame. The upper frame is then swung down upon the garments, and the buttons *o* on the edge of the box caused to engage the side bars of frame J. The operator, seizing hold of the lever-handle, draws it back and forth, and imparts opposite reciprocation to the roller-frame, subjecting the garments to a vigorous rubbing.

The yielding of the springs between the rock-shafts, while subjecting the garments to an effective pressure, prevents the breaking

of buttons, and allows folds of the garments to pass between the rollers without undue pressure.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, with a box, A, having ways *b*, of a roller-carrying frame moving endwise on said ways, the upper roller-carrying frame, D, the lever-handle B, the connecting-rods C C′, the frame J, its rock-shaft *l*, the rock-shaft *h* on frame D, and the springs connecting said shafts, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JEREMIAH LOCKWOOD.
GEORGE WASHINGTON BACON.

Witnesses:
MOSES WILKEY,
DANIEL his × mark. VAIL.