

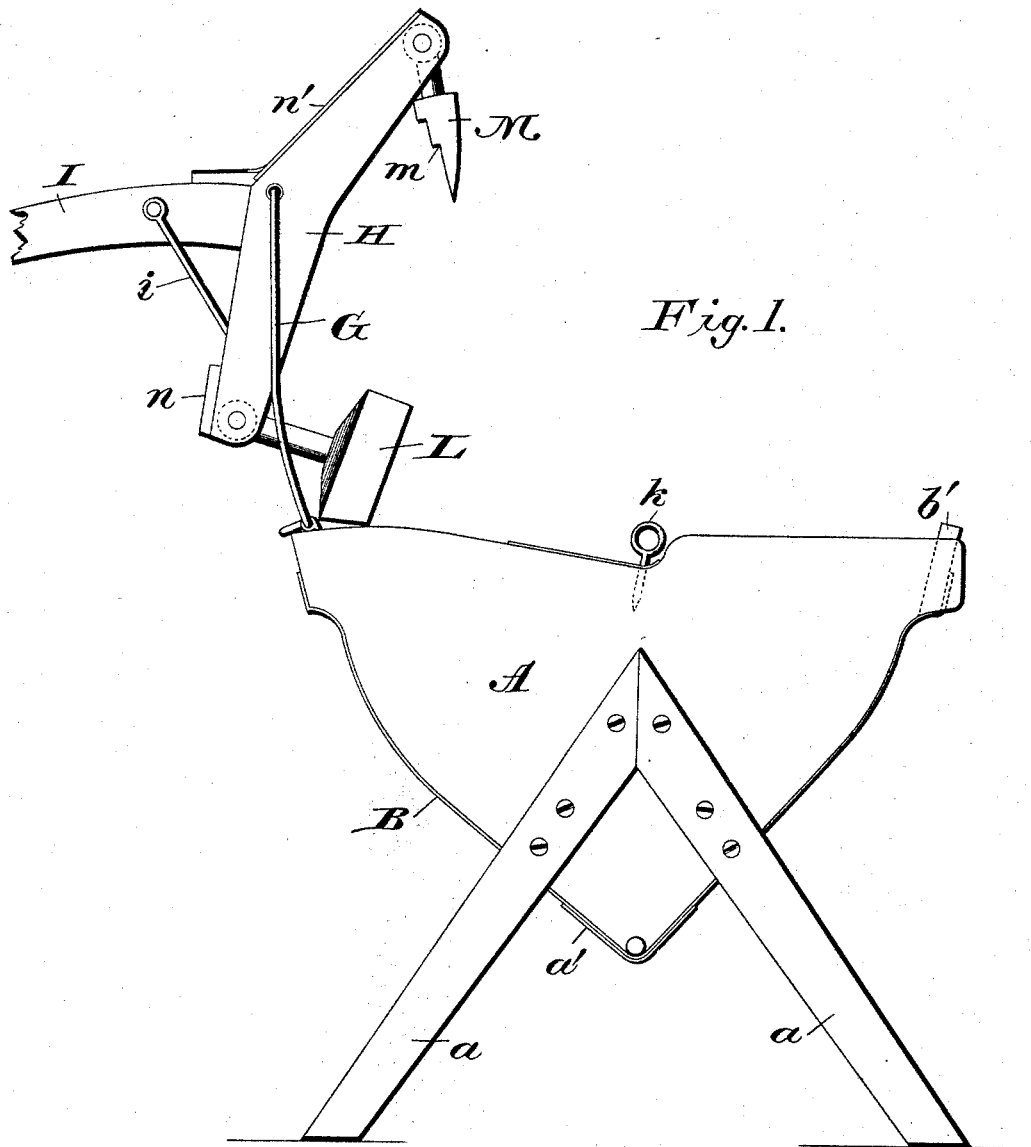
(No Model.)

3 Sheets—Sheet 1.

G. W. SMITH.
WASHING MACHINE.

No. 456,445.

Patented July 21, 1891.



George W. Smith.

Inventor

by *[Signature]*
Attorney

Witnesses
L. S. Elliott.
E. M. Johnson

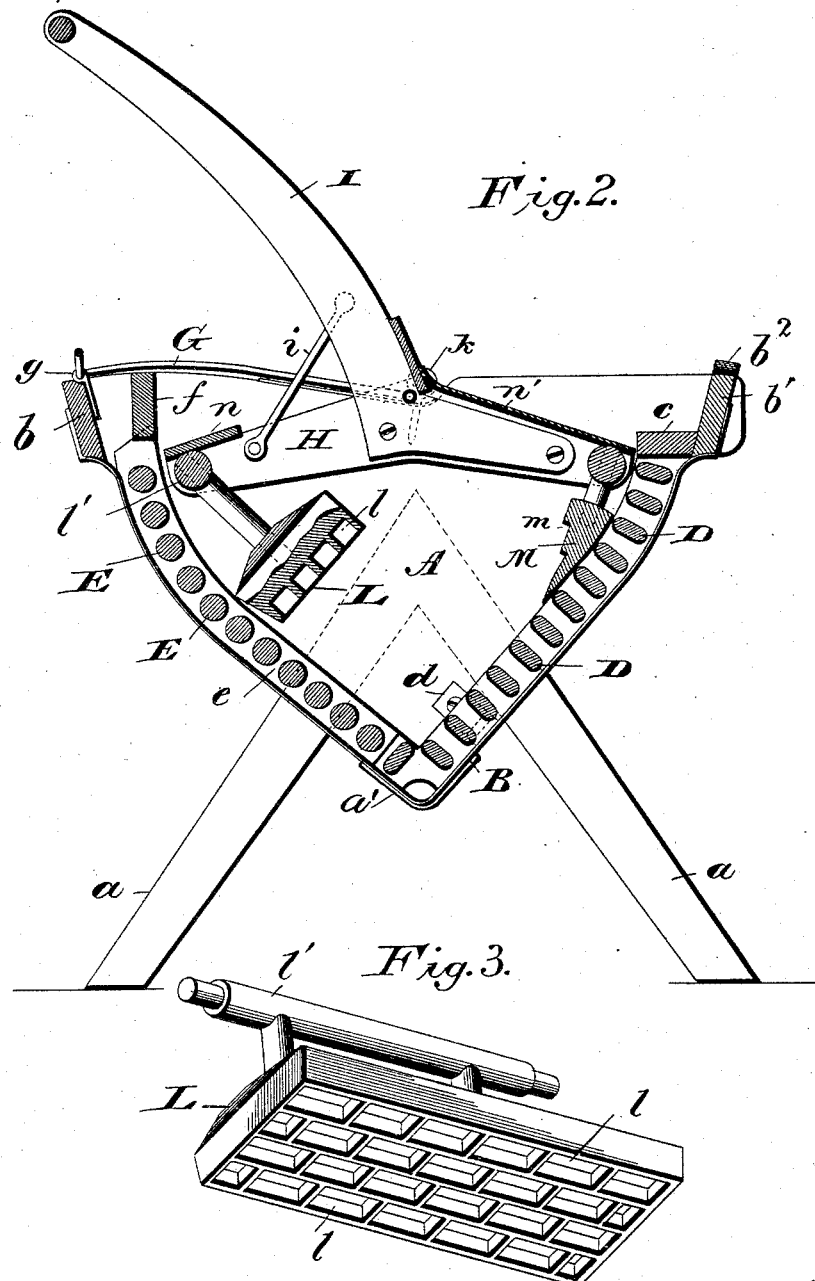
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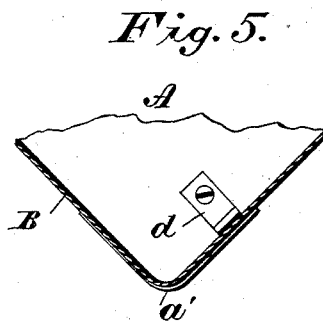
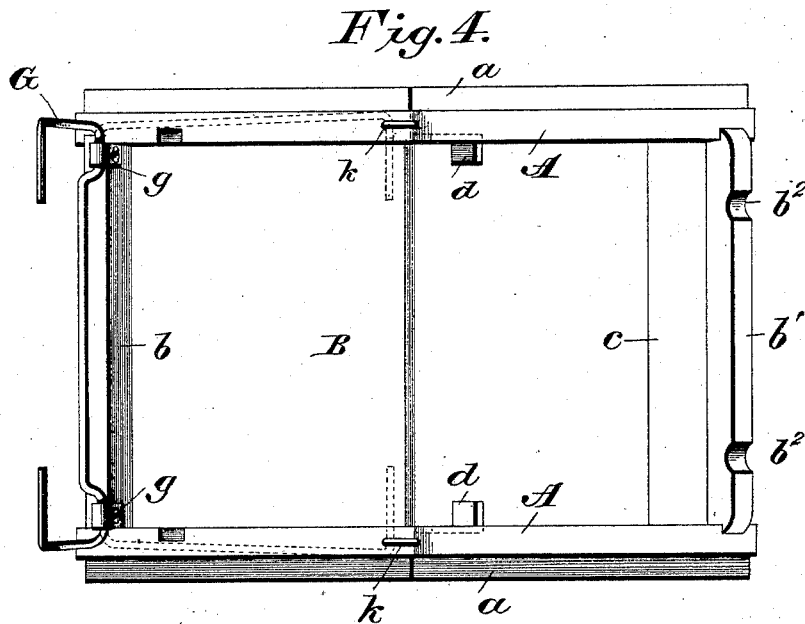
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UNITED STATES PATENT OFFICE.

GEORGE W. SMITH, OF MONTPELIER, INDIANA, ASSIGNOR OF ONE-HALF TO
JAMES I. MCGREW, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 456,445, dated July 21, 1891.

Application filed March 19, 1891. Serial No. 385,683. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SMITH, a citizen of the United States of America, residing at Montpelier, in the county of Blackford and State of Indiana, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in washing-machines; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claim, whereby I provide a washing-machine with a reciprocating presser and with a device for turning the clothes on each reciprocation of the operating-lever.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a washing-machine constructed in accordance with my improvement, the parts being shown in a position for placing the clothes in the tub. Fig. 2 is a transverse sectional view, and Fig. 3 a detail perspective view of the presser detached. Fig. 4 is a plan view, and Fig. 5 is a detail sectional view.

A A refer to the side pieces of the tub or suds-box, which are shaped as shown, and to which the supporting-legs *a a* are attached. To these side pieces are rigidly attached a zinc bottom plate B and end pieces *b* and *b'*, the piece *b'* having semicircular recesses *b²* for the better attachment of a wringer. A cross-piece *c* is also provided, which forms a stop for one of the bottom boards and prevents upward movement thereof. At the lower end of one of the side pieces A, where the metallic bottom presents a sharp bend, I employ a re-enforcing plate or strip *a'*, adjacent to which is an aperture closed by a suitable plug.

The side pieces A A, near their lower ends and within the tub, are provided with angle-plates *d*, which form a bottom rest for the pressing-board D. This board D is made up

of side strips and cross-bars, as shown, the end cross-bar being placed substantially at right angles with the adjacent cross-bar, as will appear by reference to Fig. 2 of the drawings. This pressing-board or removable section D is preferably made up of slats having rounded upper edges, while the opposite board E is made up of round bars or rollers, which are journaled in the side strips *e e*. When the board E is placed in position, it is retained therein by a transverse strip *f*, which enters the grooves or recesses in the side pieces A.

The upper edges of the side pieces are shaped as shown, and to one end, by means of a bail G, the bar H and lever I are secured. The bail G passes through suitable eyes or links *g*, and is bent between said eyes to provide a projecting portion, which will rest upon the upper edge of the transverse end board *b* when the parts are positioned, as shown in Fig. 1, to maintain the lever, bar H, presser, and clothes-turner in an elevated position. The ends of the bail G are bent inwardly and engage with the bars II, to which they are pivotally secured in any suitable manner, preferably extending inward beyond said bars and riveted upon a washer which bears against the inner side of the lever I, which lever is secured to the bar H by screws, as shown, and is also provided with an additional brace-rod *i*.

When the parts are lowered into the tub to be in an operative position, they are held against upward movement by the screw-eyes *k*, which are turned to lie over the inwardly-bent portions of the bail G. The bars H carry at one end a presser L and at the other what I term a "clothes-turner" M. The presser L is provided with a series of cells *l*, and is pivotally connected to the bars H by the cross-bar *l'*. The clothes-turner is similarly attached to the opposite ends of the bars H and has a smooth surface adjacent to the section D, while the opposite face is stepped, as shown at *m*. Covering-plates *n* and *n'* extend transversely across and are carried by the bars H H. It will be observed that the covering-plate *n'* completely covers the bar H on one side of the lever I, while the opposite covering-plate *n* is of narrow width, which leaves a space through which the op-

erator can observe the condition of the clothes and withdraw them from the tub or suds-box at any time without tilting the movable parts to the position shown in Fig. 1, which position they are supposed to occupy while the tub is being filled with clothes.

It will be noted that the pivotal point of the bar H is not the exact center of the structure, but is to one side of the same.

10 In operation the clothes are placed in the tub, and by rocking the lever I the bars H will be caused to oscillate, causing the presser L to contact with the clothes and squeeze them between the bottom of said presser and the frame D. On the upward movement of the lever the clothes-turner M descends, passes under the clothes, and when it reaches the bottom of its stroke partially turns the clothes over to present a new surface to the action of the presser, as when this turner reaches the bottom of the section D it engages with the angular portion at the base thereof and is thrown while in engagement therewith to nearly a vertical position.

25 A washing-machine thus constructed is comparatively simple and is effective in operation, and by pivotally securing the bail to one side of the frame carrying the presser

and clothes-turner the device is rendered more effective in operation, and it will be observed to accommodate this form of construction that the sides of the tub extend considerably farther on one side of the center of the tub than on the other.

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

The combination, in a washing-machine constructed substantially as shown, of a bail G, pivoted to eyes *g* and provided between said eyes with an outwardly-bent portion, said bail having inwardly-bent ends, to which rock-bars and an operating-lever are pivoted, screw-eyes *k*, adapted to engage with the inwardly-bent ends of the bails for holding the lever and rock-bars in an operative position, and a presser L, pivotally secured to one end of the rock-bars and a clothes-turner M to the opposite end, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. SMITH.

Witnesses:

CHARLES F. BUCKLAND,
JOHN A. HARTLEY.