

J. DELA MAR.

Improvement in Washing-Machines.

No. 128,866.

Patented July 9, 1872.

Fig. 1.

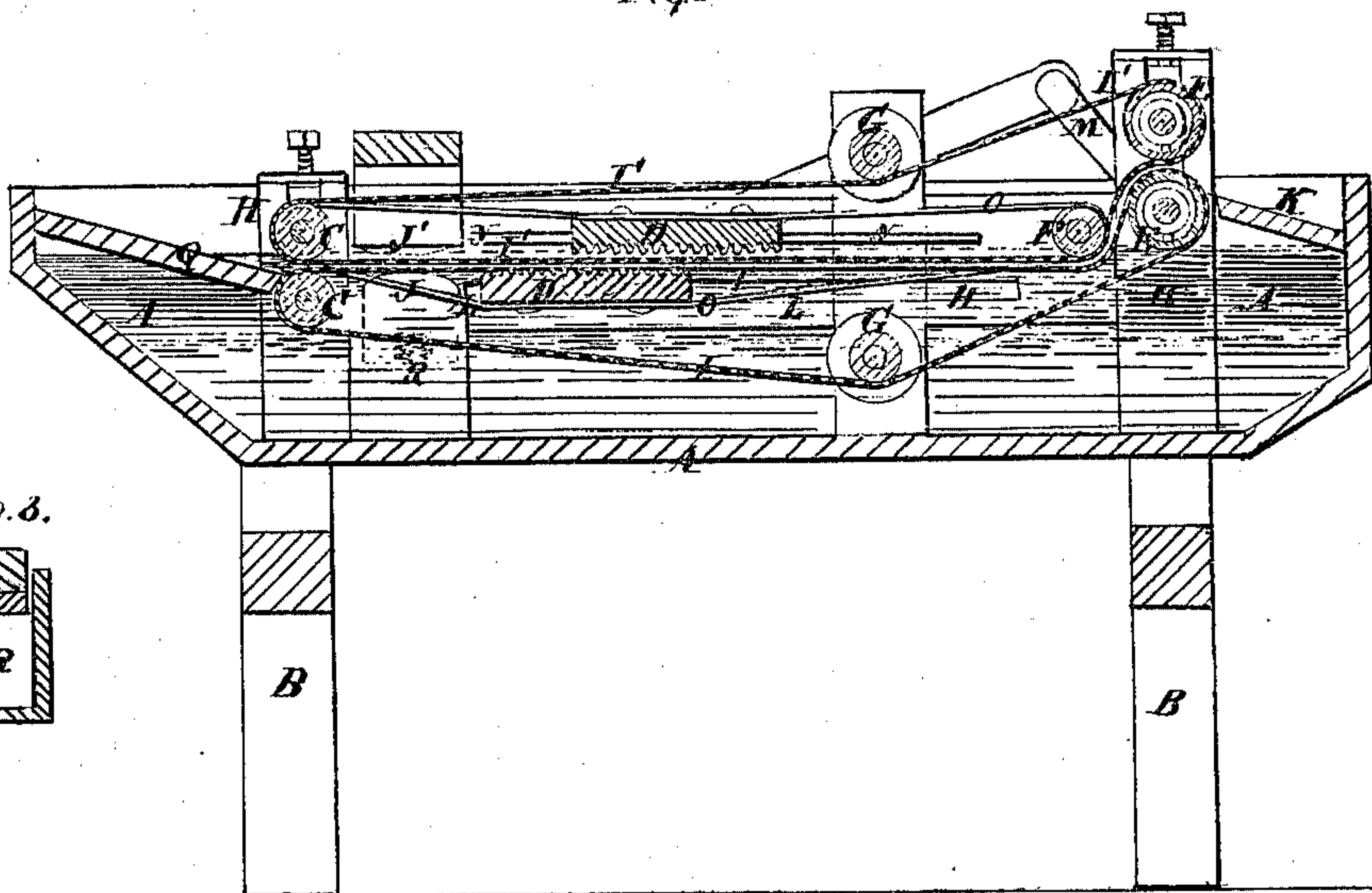
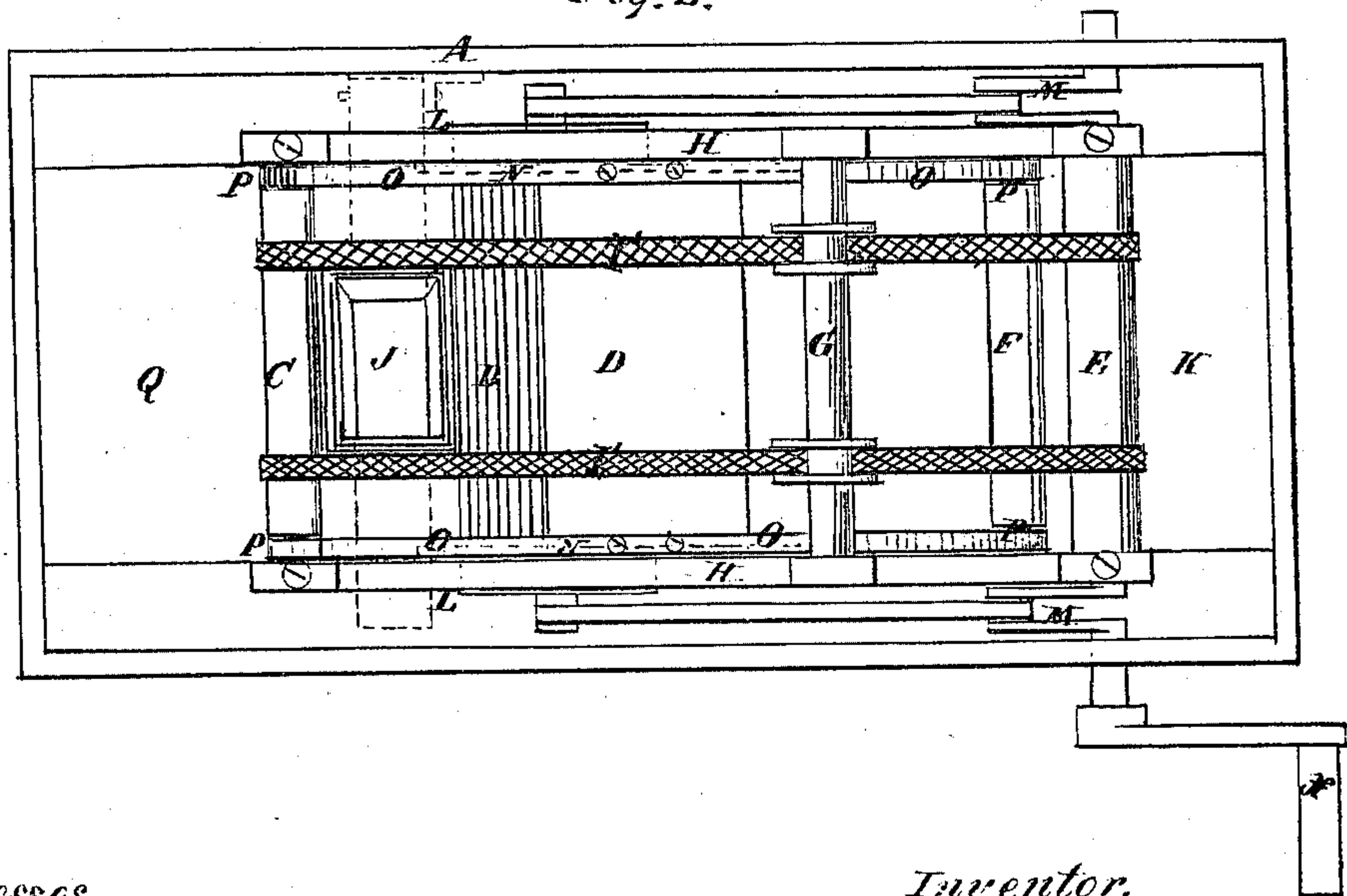


Fig. 2.



Fig. 2.



Witnesses
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JOSEPH DELA MAR, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF AND
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IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 128,866, dated July 9, 1872; antedated June 27, 1872.

Be it known that I, JOSEPH DELA MAR, of the city of Brooklyn, in the county of Kings and State of New York, have made certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawing and letters of reference marked thereon.

This invention relates, first, to the combination of two or more endless bands, between which the articles to be washed are carried, and two wash-boards, which have reciprocating motion in contrary direction and rub the wash on each side sufficiently while passing between to become cleaned ready for being wringed; and it relates, secondly, to the combination of the above-mentioned bands and boards with soap-boxes or holders applied on each side of the wash; and it relates, thirdly, to the combination of the above-mentioned devices for washing with a pair of elastic rollers acting jointly with said bands to wring the wash automatically, ready for drying.

In the annexed drawing, Figure 1 represents a vertical longitudinal section of the washing-machine with my improvements. Fig. 2 is a top view of the same; Fig. 3, a detached vertical section of the soap-holder or box.

Similar letters of reference indicate corresponding parts in the several figures.

General Description.

A represents the basin of the machine, which contains the water for washing and the working parts of the machine. Said basin A is of rectangular form. It is supported upon legs B B at a proper height convenient for the operator to work on it. It may be constructed of wood or other suitable material to manufacture it for a limited expense. C C represent a pair of feed-rollers; E E, a pair of rubber or other elastic rollers for wringing the wash. D D are two wash-boards. F and G G are guide-rollers, which all work and have their bearings in and between two stationary side frames, H H, located within a short distance along the sides of the basin A. I I and I' I' are both endless bands, which carry the wash first between the soap and soap-holders J and J', from thence between the wash-boards

D D, under the guide-roller F, and from it passes through the wringing-rollers E E, and is delivered upon the stationary receiving-board K; for which purpose the bands I I are stretched over the lower feed-roller C and lower wringing-roller E, and their upper part passes over the lower wash-board D, under the guide-roller F, toward and over the lower wringing-roller E, and their lower part passes and returns under the lower guide-roller G to the said feed-roller C, while the bands I' I' are stretched over the upper feed-roller C and upper wringing-roller E, and their lower part passes under the upper wash-board D under the roller F over the roller E, while their upper part returns under the upper guide-roller G to the upper feed-roller C. The rubbing-faces of the wash-boards are made corrugated, in the usual manner. The lower board passes through the side frames H H, which have horizontal slots L L through them for the purpose, and said board receives reciprocating motion by means of a pair of cranks, M, attached or formed on the shaft of the lower wringing-roller E, on which the hand-crank X is secured, and by means of two pitmen which are pivoted to said board and pass over the pins of said cranks M M. The upper board D slides on guide-strips N N, which project from the side frames H H inwardly, and it is caused to slide in contrary direction to the lower board and receives motion by means of a chain or belt, O, of which one is applied on each of its ends, which passes around guide-rollers P P, which are fitted loosely upon the shafts of the rollers C and F, while said belt is permanently secured to the boards, clearly shown in Figs. 1 and 2. In front of the feed-rollers C C are employed, on inclined feed-board Q, for placing and laying out the wash, so as to feed it in a spread condition to the rollers C C. The journals of said rollers have springs to allow the rollers to yield and move apart in accordance with the varying thickness of the wash passing through said rollers. A similar provision is employed on the rollers E E, for wringing and on the guide-rollers G G for the yielding of the varying thickness of the wash, and for keeping the band I and I' in stretched condition. The lower wash-board slides solidly upon the edges of the

slots L L. The upper board can raise and does bear with its weight upon the wash. To provide the soap in the holders to rub the wash equally regardless of the wear and the variation of the thickness of the wash, I furnish the lower holder with a spring or springs, R, which press the loose bottom, upon which the soap is rested, upward, and furnish the holder of the upper soap with a pivot, as shown, by means of which said holder is attached to the basin A and can raise and lower, and that the soap held therein will follow and rub the wash in passing under it.

Claims.

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

1. The combination of the bands I and I' and boards D D, operating substantially as

and for the purpose herein shown and described.

2. The combination of the boards D D, bands I and I', and soap-holders J and J', when acting jointly and automatically, substantially as herein set forth.

3. The combination of the rollers E E with the bands I and I' and boards D D, substantially as and for the purpose herein stated.

4. The combination of all the parts above, when operating jointly and for the purpose to wash and wring automatically, substantially as herein mentioned.

New York, November 28, 1871.

J. DELA MAR.

Witnesses:

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JACOB FUCHS.