

(Model.)

C. M. STONE.

WASH BOARD.

No. 359,644.

Patented Mar. 22, 1887.

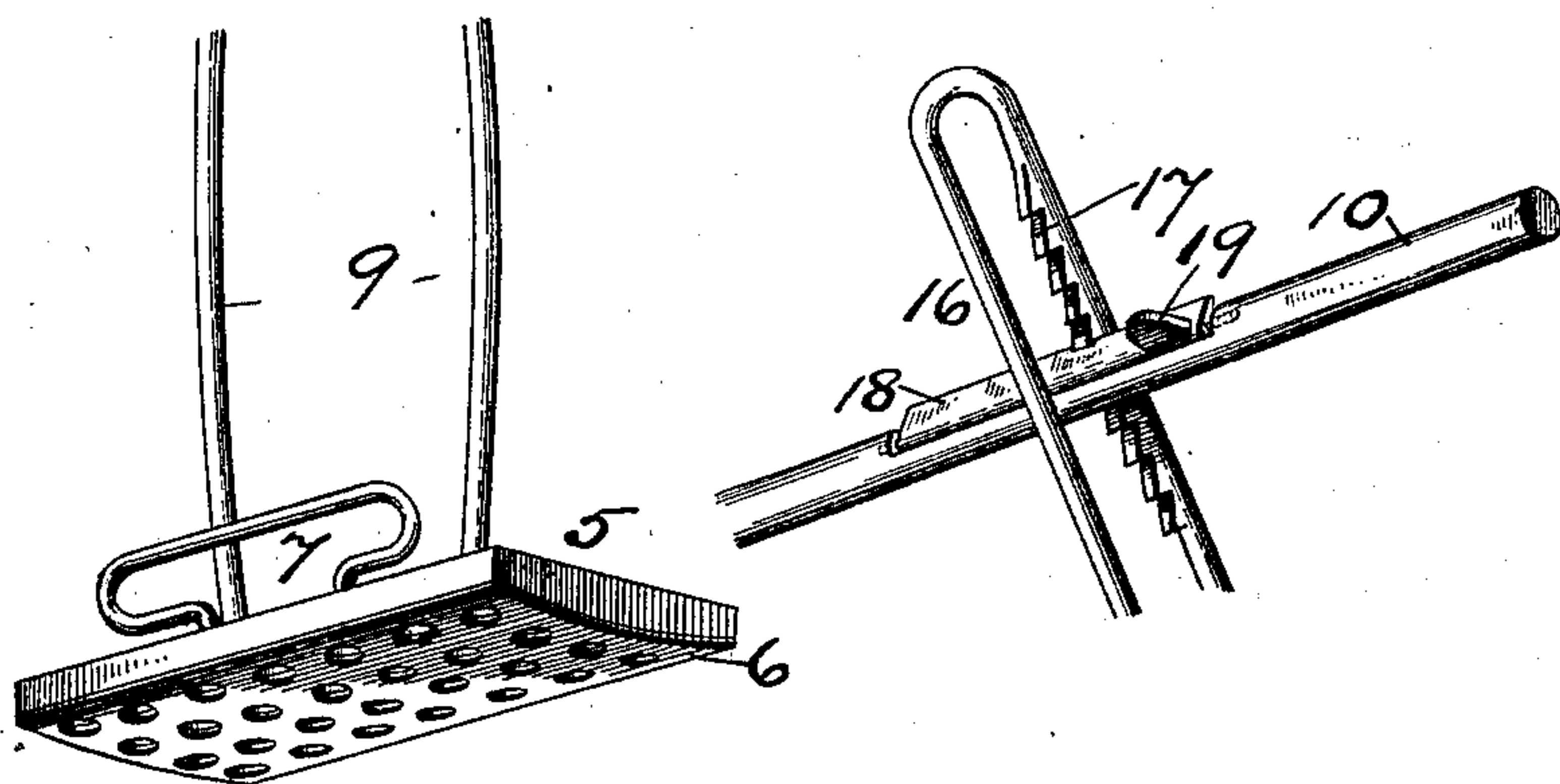
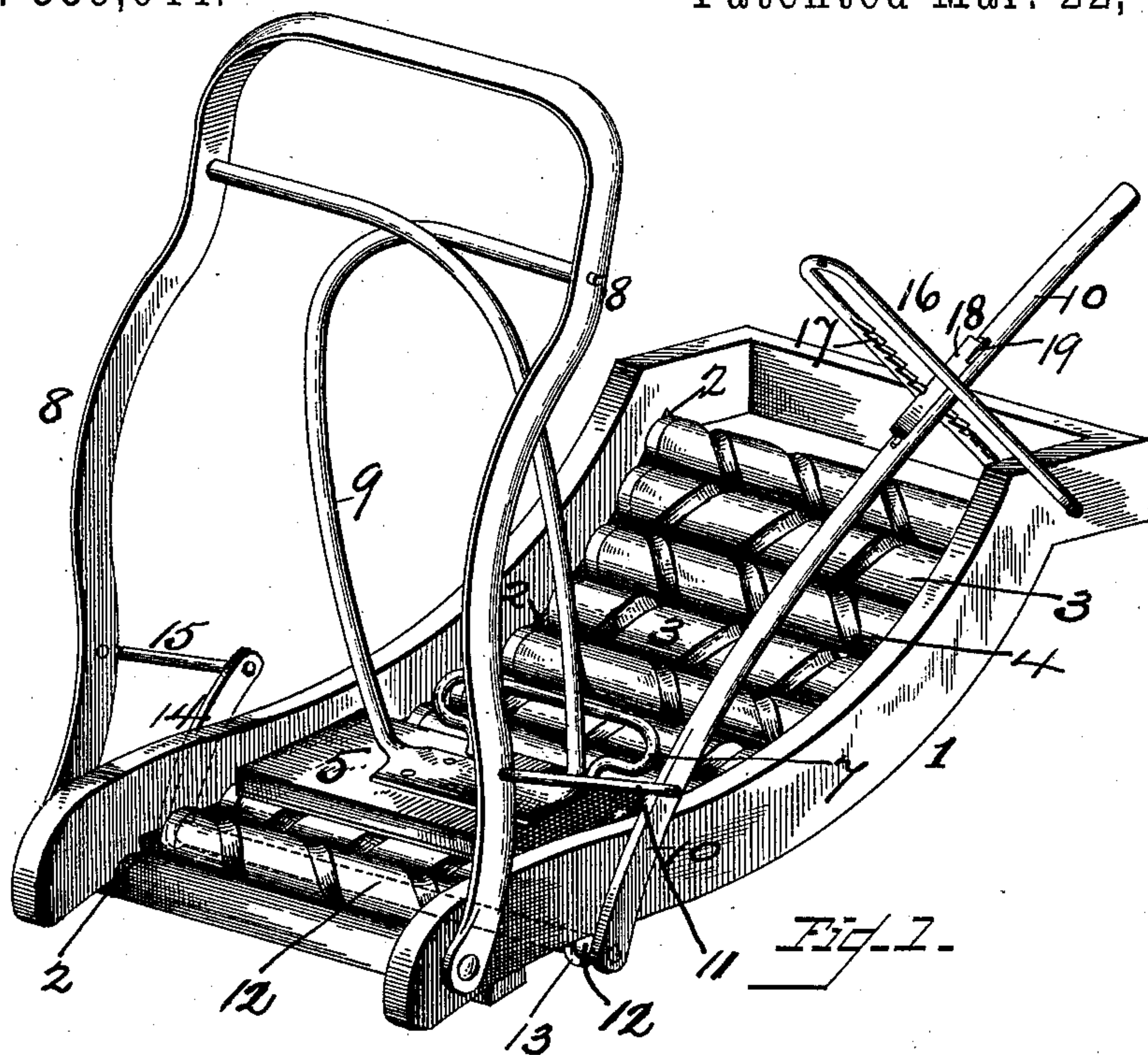


Fig. 2.

Witnesses

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By his Attorney

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# UNITED STATES PATENT OFFICE.

CHARLES M. STONE, OF BELTON, TEXAS, ASSIGNOR OF ONE-HALF TO  
BEANE BLEVINS, OF SAME PLACE.

## WASH-BOARD.

SPECIFICATION forming part of Letters Patent No. 359,644, dated March 22, 1887.

Application filed July 2, 1886. Serial No. 206,969. (Model.)

*To all whom it may concern:*

Be it known that I, CHARLES M. STONE, a citizen of the United States, residing at Belton, in the county of Bell and State of Texas, have invented certain new and useful Improvements in Wash-Boards; 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.

This improved wash-board comprises a base-frame having metallic strips secured to the bottom portions of its inner faces, a series of rollers journaled in said metal strips and having screw-shaped circumferential grooves around their circumferences, a rubber having curved and perforated under face, a frame of metal or other suitable material pivoted to the base-frame and straddling the same and curved to extend over the base-frame, a spring arm or arms connecting at its lower end with the rubber and pivoted at its upper part within the pivoted frame, a hand-grasp attached to the rubber, whereby the same may be reciprocated, a lever and connections whereby said pivoted frame and the rubber connected thereto may be raised and lowered to suit clothing of different thicknesses, a rack or toothed bar attached to and extending upwardly from the base-frame, and a dog or pawl carried by the lever, so as to engage with said rack for the purpose of holding the rubber-supporting frame rigidly in the desired position, all substantially as herein described.

In the accompanying drawings, Figure 1 represents a perspective view of the improved wash-board. Fig. 2 represents a detail view of the several parts minus the base-board and rollers.

1 represents the base-board, which may be of curved form, as shown, or of straight form, as may be desired.

2 represents metallic strips, which may be either let into suitable recesses formed in the inner faces of the base-framing at the bottom portions thereof, or attached directly to said sides by nails, screws, or other suitable means; but I prefer that they shall be inserted within grooves formed in said side pieces, as thereby they will be flush with said sides, and will not present any obstruction to the clothing.

3 represents the rollers, which are journaled within said metallic strips. These rollers are provided with spirally-extending grooves around their circumferences, the series of rollers being so arranged in the base-board that said grooves shall extend in alternately right and left handed directions, by which means the clothing, when operated upon by the rubber, will have imparted to it not only a to-and-fro motion, but also transverse motions from side to side of the base-frame, whereby the washing of the clothes can be much more readily and quickly accomplished than when the rollers do not have grooves extending in alternately right and left handed directions. The rollers are journaled within the framing, so as to present a curved or concave surface, upon which the clothing shall rest and be rubbed. This form is found more desirable than having the rollers journaled in a straight plane, as increased friction on the clothing is thereby assured.

5 represents the rubber, or, as I term it, the "suction-pad." This is formed with a curved under face, to which is attached a perforated metallic plate, 6, so that as the rubber is reciprocated a suction will be created which will materially expedite the cleansing of the clothes.

7 represents a hand-grasp attached to the upper face of the rubber for the purpose of enabling the operator to readily grasp and reciprocate the rubber.

8 represents a forked metallic frame, which straddles and is pivoted at its lower end to the outer faces of the side bars of the base frame or board 1. This forked frame is curved, as shown, so as to secure the projection of the upper portion thereof above or nearly above the center of the board 1.

9 represents a bow or other suitably shaped spring for supporting the rubber. This spring is at its lower portion connected to the top face of the rubber, its upper portion being pivoted within the curved frame 8, whereby, upon the operator grasping the hand-grasp 7, said rubber can be readily reciprocated up and down the board 1 and over the rollers 3, journaled therein. By forming the rubber suspension device 9 of spring metal the rubber will in use give to any inequalities there may be in the clothing under treatment, and



will readily pass over buttons without injuring or breaking them off, as upon the rubber coming in contact with any extra thickness or protuberance in the clothing the spring 9 will permit the rubber to rise sufficiently to avoid either the smashing of the buttons or the blocking of the further reciprocation of the rubber.

10 represents a lever, which is connected by a short connecting-bar, 11, to one of the side arms of the curved rubber-supporting frame 8. The lower end of this lever connects with a transverse rod, 12, which passes through eyes 13 on the under face of the side bars, with capability of free rocking motion within said bars when the lever is operated. A short arm, 14, connected to the end of the transverse rod 12 opposite to the end thereof to which the lever 10 is connected and a connecting-bar, 15, connecting said arm 14 and the other side arm of the curved frame, serve to secure the connection of the lever with the rubber-supporting frame at the side opposite to that at which the lever is located, and thus insure the regular movement of said frame at each reciprocatory movement of the lever.

16 represents a forked lever-guide piece attached to the top part of the base-board 1. On one inner face of said lever-guide are formed or attached a series of notches or teeth, 17, with which a dog or pawl, 18, pivoted to the lever engages for the purpose of holding said lever, and consequently the rubber supporting-frame, at any desired inclination or position. By constructing this toothed guide-bar in forked form the lever is permitted to freely slide up and down therein when the dog or pawl 18 is out of engagement with the rack, the side pieces of said bar preventing the side-wise movement of said lever and insuring the reciprocation of the lever in a straight line.

19 represents a thumb-piece on the pawl 18, to permit of the operator readily releasing the pawl.

In operation the operator places the board in the wash-tub in the ordinary manner. He or she, as the case may be, then presses down upon the thumb-piece 19, which act raises the dog or pawl 18 from engagement with the toothed rack 17. The lever 10 is then raised to a sufficient distance. The pressure upon the thumb-piece is then released and the pawl permitted to drop into engagement with the rack. As the lever is thus raised it carries with it the curved frame 8, to which the spring rubber-suspending device 9 and rubber 5 are attached, and consequently also raises said rubber and its spring-support above the board 1. The clothing to be washed is then soaped and placed upon the rollers 3. The lever is then lowered a sufficient distance to bring the inwardly-curved portion of the frame 8 and the spring 9 and rubber 5 above the center of the board 1, with the rubber resting upon the clothing with a firm pressure. The pawl 18 is then permitted to engage with the rack-bar, whereby the lever and the forked frame con-

nected thereto are held rigidly in position. The operator then grasps the hand-grasp 7 and reciprocates the rubber over the clothing beneath it until the portion beneath the rubber and resting upon the whole series of the rollers is cleansed, whereupon the lever and parts connected therewith are again raised and another portion of the garment soaped and brought upon the rollers, and the lever and parts connected therewith again brought down, as before stated, and so on until the whole of the garment is cleansed. By this arrangement the rubber can be very readily adjusted to operate upon garments of different thicknesses. It will be held in position to operate uniformly upon each portion of the garment under treatment. It will, by reason of its spring-support, readily conform to any inequalities there may be in the garment, and will safely ride over buttons, &c., without injuring them, and by reason of the perforated under face of said rubber will create a suction upon the garment.

Having thus described my invention, what I claim is—

1. A wash-board having a suitable base-frame, a series of alternately right and left handed spirally-grooved rollers journaled therein, an inclined forked frame straddling and pivoted to the base-frame, a lever for securing the adjustment of said forked frame on its axis, a rubber, and rocking spring-arms journaled in said forked frame and connecting the same and the rubber, substantially as and for the purpose set forth.

2. A wash-board having a base-frame, a series of alternately right and left handed spirally-grooved rollers journaled therein in a curved or concaved plane, a rubber having a curved and perforated under face, a forked frame pivoted to and straddling the base-frame, spring-arms pivoted to said forked frame and connecting the same and the rubber, a lever connected to said forked frame for the purpose of adjusting the same on its axis, a toothed bar or rack connected to the base-frame, and a dog or pawl connected to the lever and adapted to engage said rack-bar, for the purpose of securing said lever and forked frame rigidly in their adjusted positions, substantially as set forth.

3. The combination, with a wash-board having a series of rollers journaled therein, of a forked frame pivoted to said board, a lever and devices connecting the same and the forked frame, for the purpose of securing the oscillatory adjustment of said forked frame, a rubber having pivotal spring-connection with said forked frame, and suitable devices for retaining said lever and frame in locked position, substantially as set forth.

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

CHARLES M. STONE.

Witnesses:

JOHN G. LEE,  
S. M. RAY.