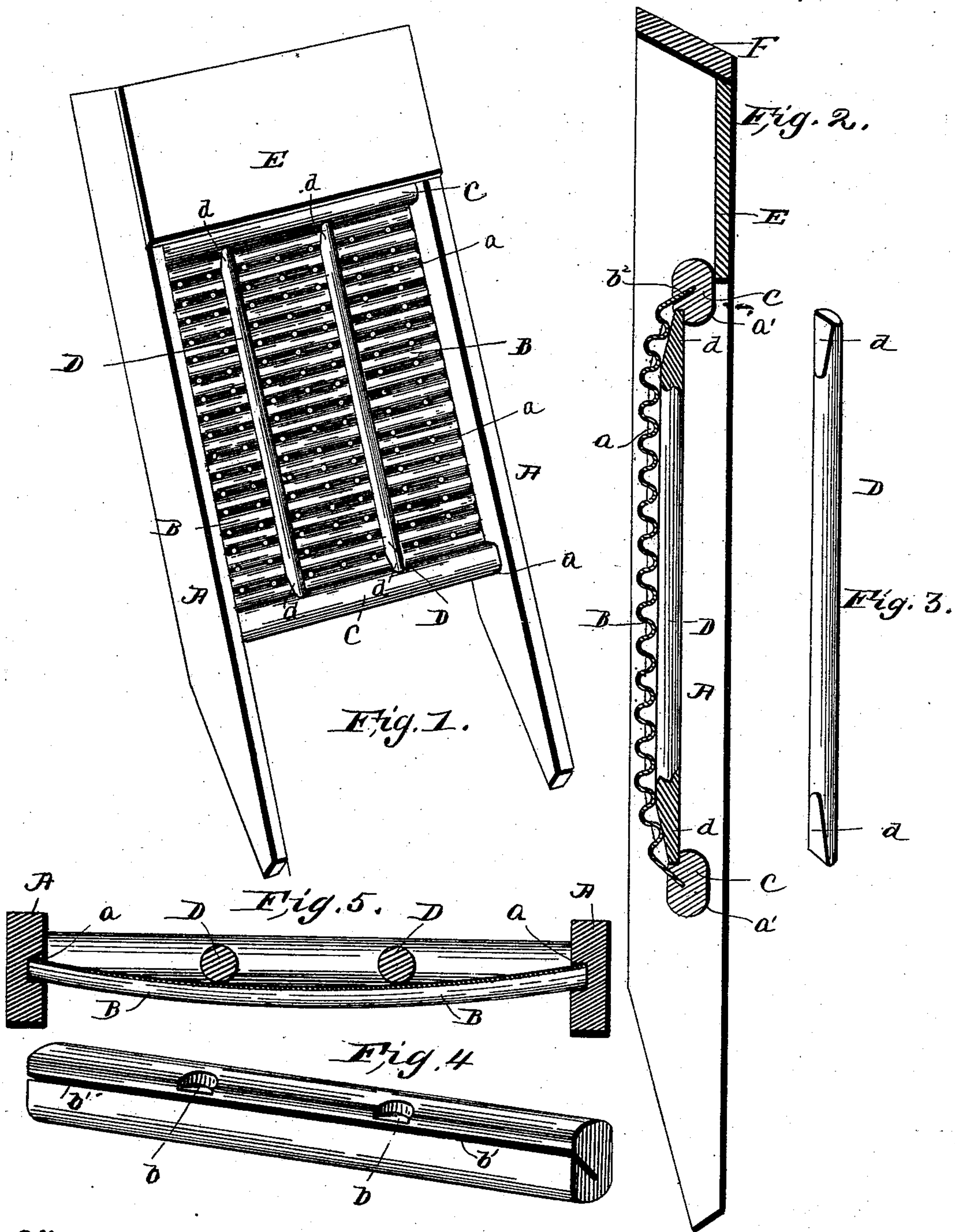


(No Model.)

G. P. FULLER.
WASH BOARD.

No. 414,805.

Patented Nov. 12, 1889.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE PLINY FULLER, OF MINNEAPOLIS, MINNESOTA.

WASH-BOARD.

SPECIFICATION forming part of Letters Patent No. 414,805, dated November 12, 1889.

Application filed June 28, 1888. Serial No. 278,451. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PLINY FULLER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Wash-Boards, of which the following is a specification.

The invention relates to wash-boards, and is designed as an improvement upon Patent No. 336,910, granted me March 2, 1886.

The object of the present invention is to provide a wash-board of simple and cheap construction that will possess great durability, lightness, and strength, and, furthermore, to produce a wash-board in which the zinc plate will not crack at the edges nor sag or get out of shape from use.

The invention consists in the novel combination and arrangement of the parts herein-after fully described, illustrated in the drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a rear perspective view of a wash-board constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view taken through one of the vertical supporting-rods, showing the construction and the manner of adjusting the parts. Fig. 3 is a detail view of one of the supporting-rods, showing the beveled ends. Fig. 4 is a detail perspective view of one of the transverse pieces, showing the half-round holes or notches that receive the beveled ends of the supporting-rods and the inclined kerf-slot in which is inserted the end of the zinc plate. Fig. 5 is a transverse section through the wash-board.

Referring to the drawings, A designates the side strips or rails of a wash-board of the usual form. The side pieces A are provided along their inner side faces with longitudinal grooves *a*, adapted to receive the sides of corrugated zinc plate B, and the ends of these longitudinal grooves *a* terminate in enlarged portions or recesses *a'*, which have inserted in them the ends of transverse pieces C, which connect the side rails or strips A intermediate of the ends. In the inner edges of the upper faces of the transverse pieces that connect the side strips or rails A are provided half-round holes or notches *b*, in which are

fitted beveled ends *d* of round vertical supporting-rods. Two supporting-strips are preferably provided with their corresponding half-round holes or notches *b*; but the number may be varied, if desired, and I wish it understood that I do not limit myself to the precise details of construction herein shown and described, as I may, without departing from the spirit of the invention, make any minor changes therein.

By constructing the vertical supporting-rods D with the beveled ends *d* the ends of the corrugated zinc plate can be sloped and a continuous uniform convex surface be produced from the top to the bottom of the board, and by making the holes or notches *b* in the transverse pieces C half-round one-half of the round vertical supporting-rods D intermediate of their ends are above the plane of the transverse pieces C and a continuous uniform convex surface or arch from one side strip or rail A to the other is made in the corrugated zinc plate B.

If round holes were used in the cross-bars to receive the ends of supporting-rods to avoid beveling the same, the continuous arched surface could not be formed without correspondingly lowering the grooves *a* in the side strips or rails A. This would place the sides of the zinc plate B so low down from the upper edges of the side strips or rails A that the latter would be in the way and interfere with the operation of washing, besides making the board more clumsy and more difficult to construct. Such an arrangement of rods would not admit of beveling them off at their extremities, as I now use them placed in half-round holes, over which the nicely-finished slope of the zinc-plate is secured at either end of the rubbing-surface. This continuous curved rubbing-surface from the center of the corrugated zinc plate B to the sides, and having the curves at the ends, is a great desideratum and a large factor in the production of fine work at the expense of little labor on the part of the operator.

The transverse pieces C have longitudinal kerf-slots *b'* to receive the downward-bent edges *b²* of the corrugated zinc plate B. These longitudinal kerf-slots *b'* are inclined downward and diverge from the corrugated zinc

plate B, and the ends b^2 of the said corrugated zinc plate B have only a slight bend.

It will be observed that the longitudinal kerf-slot in the transverse pieces to receive the ends of the corrugated zinc plate B is not vertical to the plane of the rubbing-surface, but at an angle downward in the lower and upward in the upper transverse pieces, and is thus designedly constructed for the twofold purpose of, first, preventing the cracking of the zinc so readily at the point where the angle is formed after the board is put into use as though it were turned directly downward at right angles with the surface of the board, and, secondly, in order to brace more firmly the zinc plate in the frame of the board, so that it cannot slip or move downward, upward, or outward during the rubbing process. I wish it understood, however, that I do not claim this construction, broadly, but limit myself to its combination with the rods having the beveled ends fitting in the holes or notches of the transverse pieces. By this construction the proper inclination or curving of the upper and lower ends of the rubbing-surface is secured. Furthermore, I have found it to be impractical to secure the very desirable continuous arched rubbing-surface of the zinc plate without constructing the cross-bars in the manner shown.

A soap-receptacle is formed at the upper part of the wash-board by a board E, which extends across and connects the side strips or rails A, and an end rail F, that also connects the side strips or rails.

The operation of washing is similar to that set forth and described in my former patent.

The real advantages secured in the construction of a wash-board substantially in the manner described are these: It combines lightness, strength, durability, and finish.

Constructed in this manner the board weighs only two and one-half pounds, making the very lightest of all boards for women to handle, yet one that will sustain three hundred pounds upon its rubbing-surface, which cannot sag or get out of order from use, but is always durable and convenient.

Having described my invention, I claim—

1. In a wash-board, the combination of the side rails A, the transverse pieces provided with half-round holes or notches b , the vertical longitudinal supporting-rods D, having beveled ends d and adapted to fit into the half-round holes or notches b , and the plate B, substantially as described.

2. In a wash-board, the combination of the side rails A, the transverse pieces C, provided with half-round holes or notches b and the diverging inclined slots b' , the supporting-rods having beveled ends fitting in the holes or notches b , and the rubbing-plate B, fitting at its ends in the slots b' , substantially as described.

3. In a wash-board, the combination, with the corrugated rubbing-plate B, having the continuous arched surface, of the similar straight wooden rods D, bearing against and supporting the rear side thereof on opposite sides of the center of the rubbing-plate and having their ends tapered or beveled, whereby the upper and lower ends of the rubbing-plate can be rounded off or curved or inclined, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE PLINY FULLER.

Witnesses:

H. H. MCINTIRE,
C. L. WALDE.