## J. K. MILLER & F. D. BASHORE.

Improvement in Wash-Boards.

No. 127,629.

Patented June 4, 1872.

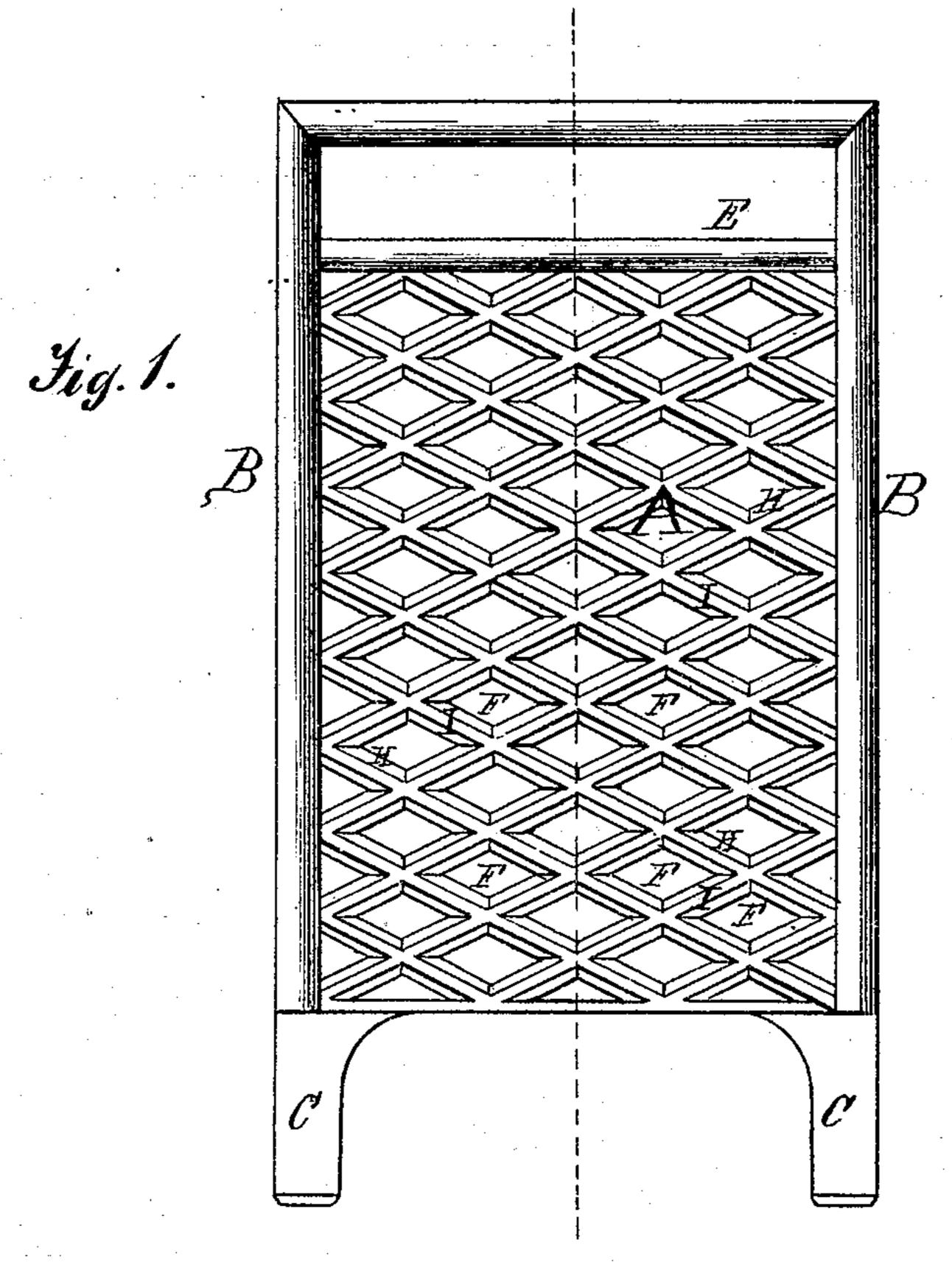
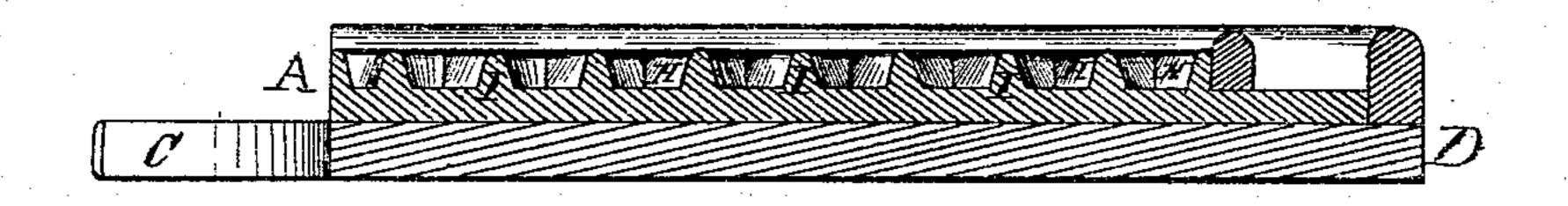


Fig. Z.



Mitnesses. Alekset Inventor. James K. Miller Gereinand D. Bashore by their attorneys Lord God

# UNITED STATES PATENT OFFICE.

JAMES K. MILLER AND FERDINAND D. BASHORE, OF SHAMOKIN, PA.

#### IMPROVEMENT IN WASH-BOARDS.

Specification forming part of Letters Patent No. 127,629, dated June 4, 1872.

To all whom it may concern:

Be it known that we, James K. MILLER and FERDINAND D. BASHORE, of Shamokin, in the county of Northumberland in the State of Pennsylvania, have invented certain new and useful Improvements in Wash-Boards, of which the following is a description, reference being had to the accompanying drawing.

Nature and Objects of the Invention.

The invention relates to providing the surface of a wash-board of India rubber with angular cavities having sides nearly vertical to the face of the wash-board; the object of the invention being to provide a wash-board with cavities, which, while the operation of washing is being performed, shall so retain the water that, as the material is rubbed upon the surface of the board, it comes constantly in contact with the water in such cavities.

Description of the Accompanyiny Drawing.

Figure 1 is a plan view of a device embodying the elements of the invention. Fig. 2 is a section of same, showing the cavities.

### General Description.

A, in the accompanying drawing, is the washing-face, of India rubber, having the cleats B secured at each side, and provided with the feet C, which may be an extension of the face A; or, as in the present instance, an extension of the back-board D, upon which the face A is mounted. The upper part of the board is provided with the shelf E. The face A is provided with angular cavities, F, which extend in longitudinal series from the top to the bottom of the board A, in which arrangement their obtuse angles are in line; this arrangement also extends laterally across the board. In the latter arrangement, however, the acute angles of the cavities are in line; by this arrangement the angles in which the water is retained are the obtuse. The walls or sides H of the cavities F are nearly vertical, the bottom of the cavities being flat, and in a horizontal plane parallel to the surface plane of the board. The cavities F are separated to secure by Letters Patent, is...

by the transverse ridges I, which extend in parallel lines and equidistant from each other diagonally across the face A.

It is obvious that all of the materials usually employed in the manufacture of wash-boards can be used in the present invention, which is of peculiar excellence when the face A is made of India rubber, for when thus constructed there is, in addition to the reciprocating action of the elasticity of the rubber, the strength which is given to the washing-surface by the peculiar structure of the cavities. Thus, when pressure is brought upon the upper side of the lower obtuse angle of one of the cavities, the action of the rubber is not only upward, but it also presses from each side against the material pressed into the said angles.

The rubber face is provided with a tongue or flange on each side of proper width and equal in length to the face, which tongues are secured to the back-board D by means of the cleats B.

#### Operation.

The device is placed in a tub or vessel containing a proper amount of water, having a proper inclination from top to bottom, the rear of the back-board resting against the edge of the inside of the tub and the feet C upon the upper surface of the bottom thereof. The material to be washed is now immersed in the water and placed upon the face A; the water immediately fills the lower obtuse angles of the cavities F; the operation is then continued by rubbing the material upon the face A.

It is obvious that as the lower parts of the cavities F are full of water that the material must be kept wet for some time; and, also, that owing to the peculiar structure of the same but little if any water can splash up from the board; it is also obvious that the necessity of frequent immersions of the material being washed is avoided by the cavities F retaining the water, as aforesaid.

#### Claim.

What we claim as our invention, and desire

The India-rubber face A, provided with the ridges I and cavities F, secured between the cleats B and supported by the back-board D, forming a wash-board substantially as shown and described.

In testimony that we claim the foregoing invention of improvements in wash-boards, as

above described, we have hereunto set our hands and seals.

JAMES K. MILLER. [L. s. FERDINAND D. BASHORE. [L. s. Witnesses:

GEORGE W. BASHORE, SAMUEL S. REED.