

(No Model.)

3 Sheets—Sheet 1.

W. B. CANNON.  
WASHBOARD.

No. 557,966.

Patented Apr. 7, 1896.

FIG. 1.

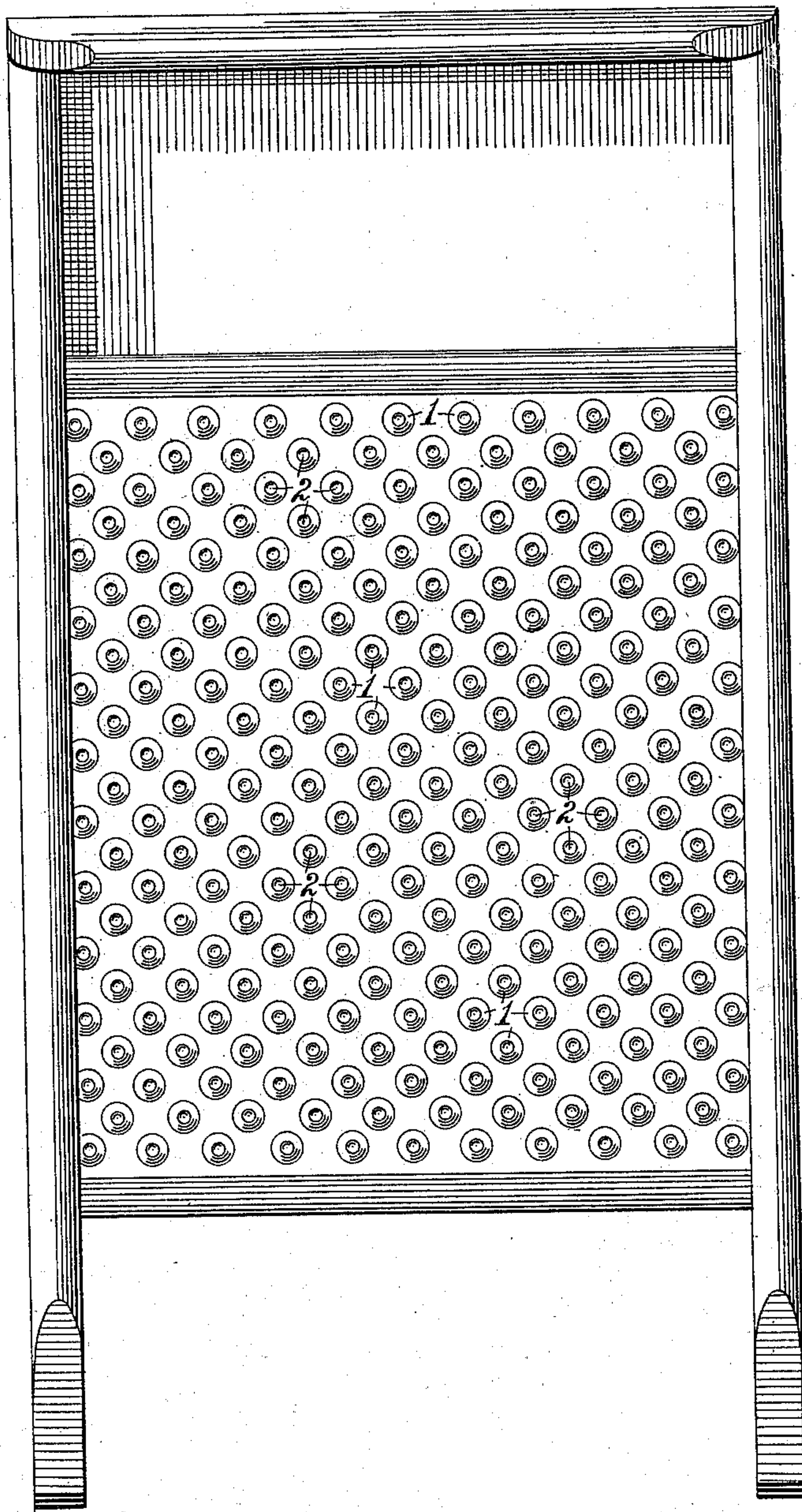
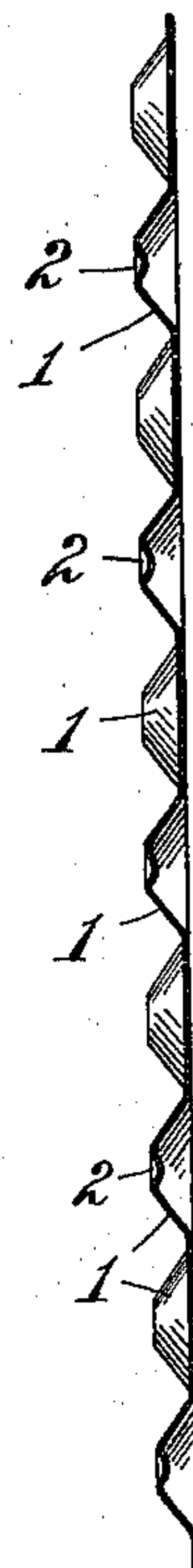


FIG. 2.



WITNESSES:

*Chas. F. Miller.*  
*F. E. Gatcher*

INVENTOR,

*Warren B. Cannon*  
*by Daniel S. Wolcott*  
Att'y.



(No Model.)

3 Sheets—Sheet 2.

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FIG. 3.

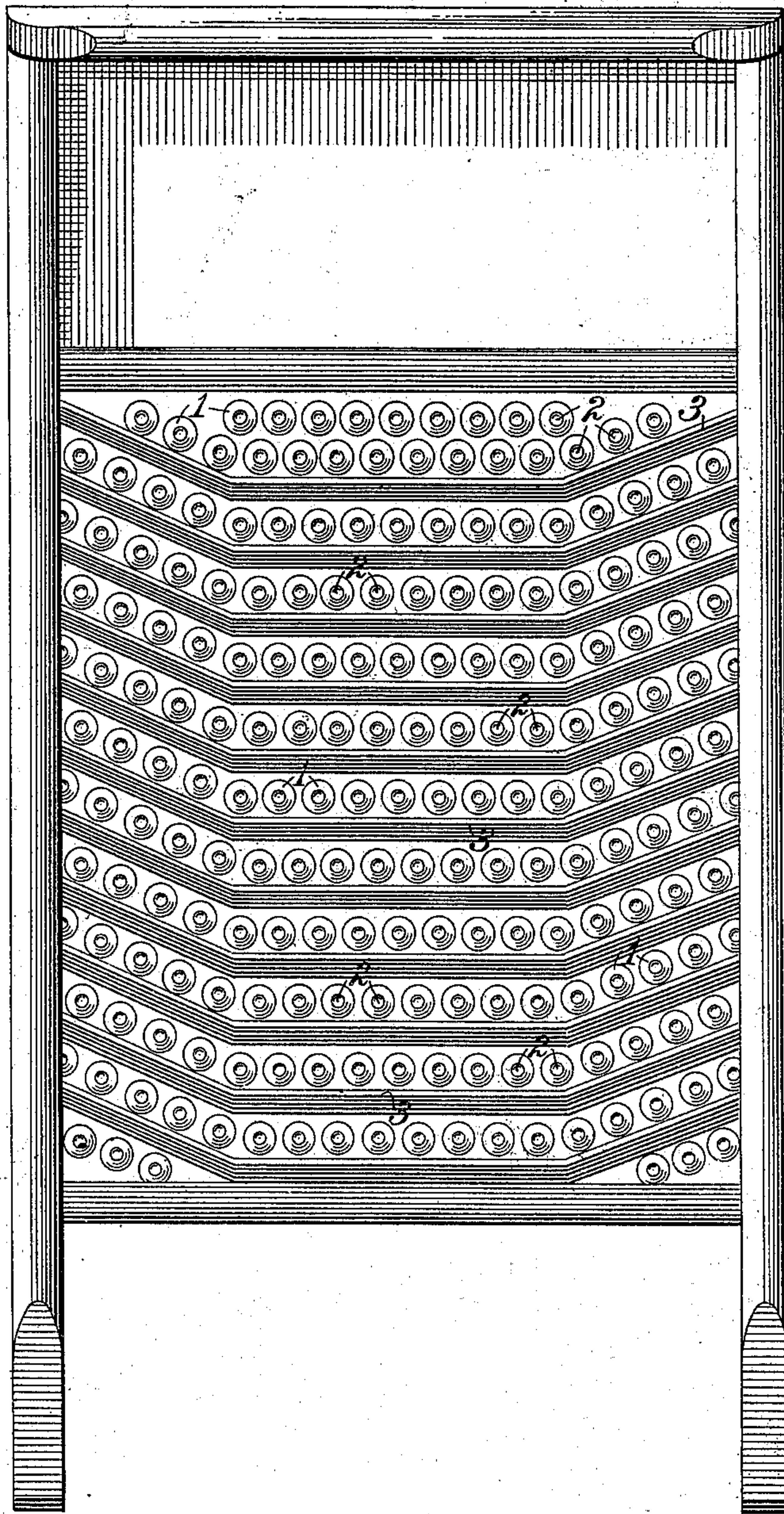


FIG. 4.



WITNESSES:

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(No Model.)

3 Sheets—Sheet 3.

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FIG. 5.

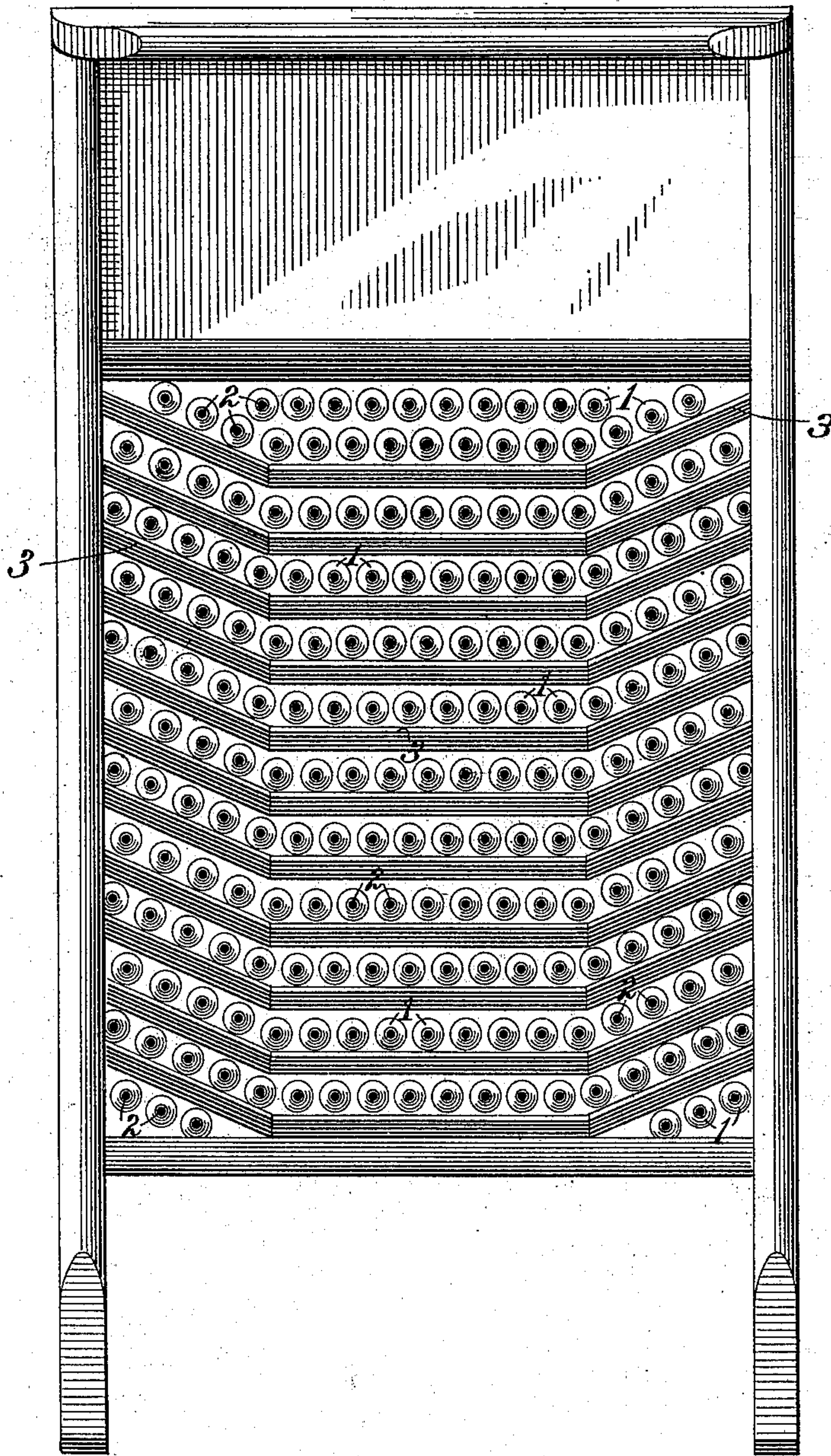


FIG. 6.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WARREN B. CANNON, OF CLEVELAND, OHIO, ASSIGNOR TO THE AMERICAN WASHBOARD COMPANY, OF SAME PLACE.

## WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 557,966, dated April 7, 1896.

Application filed October 28, 1895. Serial No. 567,111. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN B. CANNON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented or discovered a certain new and useful Improvement in Washboards, of which improvement the following is a specification.

The invention described herein relates to certain improvements in rubbing-faces for washboards; and it consists, generally stated, in a metal sheet having a series of bulb-like projections or swells having depressions in their ends; and the invention further consists in the arrangement of the projections in rows and separating such rows by V-shaped ribs.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of a washboard having my improved rubbing-face. Fig. 2 is a sectional view of the rubbing-face. Figs. 3 and 4 are views similar to Figs. 1 and 2, showing a modified structure of the rubbing-face, having V-shaped ribs arranged between the rows of projections. Figs. 5 and 6 are views similar to Figs. 3 and 4, showing a further modification of the rubbing-face, in which the bottoms of the depressions or recesses in the projections are perforated.

In the practice of my invention the frame of the washboard is constructed in the usual or any suitable manner. The rubbing-face is made of sheet-zinc or other suitable material, and in it are formed, by stamping between suitable dies or by rolling between suitably-constructed rolls, a series of bulb-like projections or swells 1, thickly dispersed over the sheet, so as to form an effective rubbing-surface. The rubbing-surface presented by these projections is further increased by forcing inwardly the apices of the projections, thereby forming depressions or pockets 2, whose walls increase the effective area of the rubbing-face. These bulb-like projections may be arranged in any suitable manner on

the sheet—as, for example, in transverse rows, the projections in one row alternating with the projections in adjacent rows, so that such portions of clothes being washed that pass between projections in one row will strike against projections in the next succeeding row, as shown in Fig. 1.

In order to further increase the rubbing-surface, V-shaped ribs 3 may be arranged between adjacent rows of conical projections. The rows of projections and the alternating ribs are preferably arranged as shown in Figs. 3 and 5, wherein the projections or swells in the middle portion of the sheet are arranged in horizontal rows, while the rows of projections at the sides of the sheet are arranged at an angle to the middle rows. The V-shaped ribs or crimps are formed between the rows of swells or projections and parallel therewith.

As shown in Figs. 5 and 6, the bottoms of the depressions in the swells or projections may be perforated. This construction of the swell or projection affords the same effective rubbing area as the swell or projection having the imperforate depression, and in addition thereto provides an effective drainage.

The angular arrangement of the projections and ribs or crimps has a tendency to force the hands of the operator to move toward and from each other as they move down and up along the rubbing-face, thereby causing an angular and more effective cleaning movement.

I claim herein as my invention—

1. A rubbing-face for washboards provided with a series of bulb-like projections or swells having their apices depressed, substantially as set forth.

2. A rubbing-face for washboards provided with a series of bulb-like projections or swells having their apices depressed and perforated, substantially as set forth.

3. A rubbing-face for washboards having a series of bulb-like projections or swells and V-shaped ribs or crimps, the swells or projections having depressed apices and arranged in horizontal rows in the middle portion of the sheet and at the sides of the sheet in rows at

an angle to the middle rows, V-shaped ribs or crimps being arranged between the rows of swells or projections, substantially as set forth.

- 5 4. A rubbing-face for washboards having a series of bulb-like projections or swells arranged in rows, and a series of alternating ribs or crimps, the swells or projections hav-

ing their apices depressed, substantially as set forth. 10

In testimony whereof I have hereunto set my hand.

WARREN B. CANNON.

Witnesses:

JAMES T. SARGENT,  
A. B. CALHOUN.