## C. C. GRIDLEY & C. W. PRATT. Wash-Board.

No. 218,959.

Patented Aug. 26, 1879.

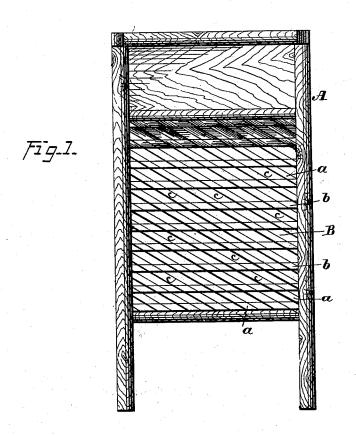


Fig.Z.

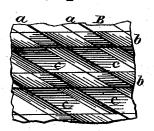
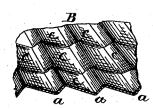


Fig.3.



WITH ER RES Jas. E. Hutchinson. Chas. C. Gridley Chas. W. Pratt, Januar Lo. Norris

INVENTORS.

## UNITED STATES PATENT OFFICE.

CHARLES C. GRIDLEY AND CHARLES W. PRATT, OF WATERLOO, N. Y.

## IMPROVEMENT IN WASH-BOARDS.

Specification forming part of Letters Patent No. 218,959, dated August 26, 1879; application filed June 22, 1878.

To all whom it may concern:

Be it known that we, CHARLES C. GRIDLEY and CHARLES W. PRATT, both of Waterloo, in the county of Seneca and State of New York, have invented a certain new and useful Improvement in Wash-Boards; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which-

Figure 1 is a face view of the wash-board. Fig. 2 is a similar view of a fragment of the board on a larger scale. Fig. 3 is a perspective view of the same.

Our improvement relates to zinc wash-boards which are corrugated by running the sheet

between crimping-rollers. In forming our improved board we pass the sheet twice through rollers-first angularly through a pair of fine rollers, which produce a diagonal channeling of the sheet from corner to corner, and next through the ordinary rollers, which corrugate or crimp the board crosswise, in the usual manner. By this means a peculiar surface is formed on the board, by which it is cut up into a series of parallelograms, following each other in order on opposite sides of the transverse crimps, said parallelograms being separated by the diagonal channels before described, the whole presenting a checkered and finely-diversified surface, thereby producing a very effective

A is the frame, and B the zinc sheet forming the wash-board. b b are the diagonal corrugations or channels. These are produced by running the sheet of zinc diagonally through a pair of fine crimping-rollers, said corrugations extending in the direction from one corner to the other, the same being narrow and comparatively shallow. a a are the ordinary transverse crimps. These are formed by running the sheet, already diagonally corrugated, through the ordinary crimping rollers, and are of comparatively large size.

rubbing surface.

By the means above described a series of parallelograms, e e e, are formed on each side of the transverse crimps, which follow each other in order, and those on one side alternat-

ing or breaking joints with those on the other side, and all of said figures being separated by the diagonal ribs or corrugations b, which present, in cross-section, such angles to the parallelograms as will form V-shaped channels between them.

By the means above described the surface is greatly diversified and cut up into a great number of diamond-shaped angles, each of which presents a rubbing-surface to the clothes which is effective in operation.

The great facility with which the board is made, by simply passing it through the two sets of rollers, renders it nearly as cheap as the common board, the only extra expense being the labor of running it through the first set of rollers. This process also renders the board stronger, as continuous sharp edges of the transverse corrugations, which soon crack, are avoided. Greater stiffness and solidity of the board are also attained.

The board may be made either single or double faced, and either plain or with a milled

center, as may be desired.

We are aware that wash-boards have been made with diagonal corrugations crossing each other and forming diamond-shaped protuberances; also wash-boards transversely corrugated and stamped with zigzag ribs; but in such cases the board has been stamped or struck up in contradistinction to rolling. Such we do not claim.

What we claim as new is—

As a new article of manufacture, a washboard having a sheet-metal rubbing-surface, constructed with diagonal ribs extending from corner to corner, and transverse crimps forming plain parallelogrammic figures between the crimps, which are separated from the diagonal ribs by V-shaped channels, all as herein shown and described.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

> CHAS. C. GRIDLEY. CHAS. W. PRATT.

Witnesses:

M. D. MERCER. WM. L. MERCER.