

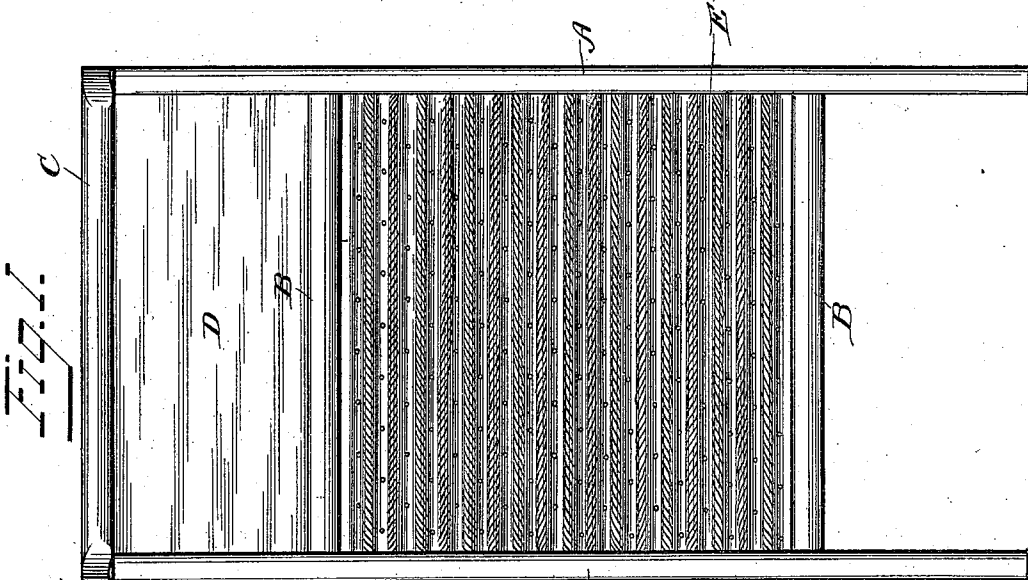
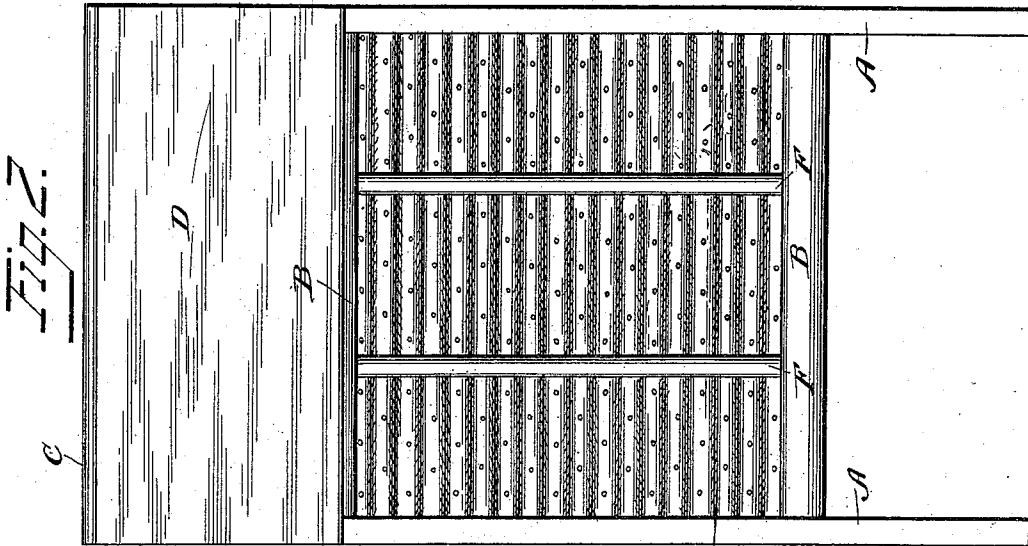
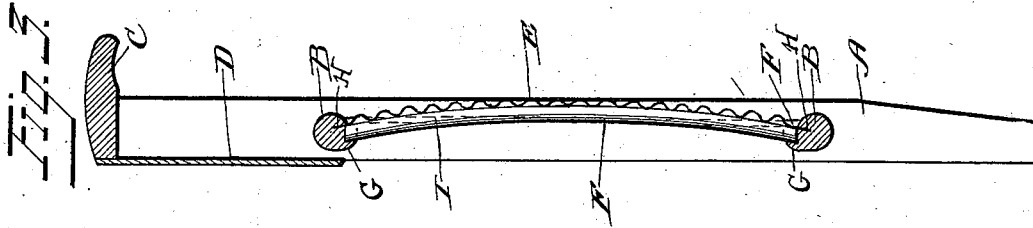
(No Model.)

2 Sheets—Sheet 1.

H. J. GILBERT.
WASHBOARD.

No. 557,199.

Patented Mar. 31, 1896.



Witnesses
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Inventor
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his atty.

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Fig. 4.

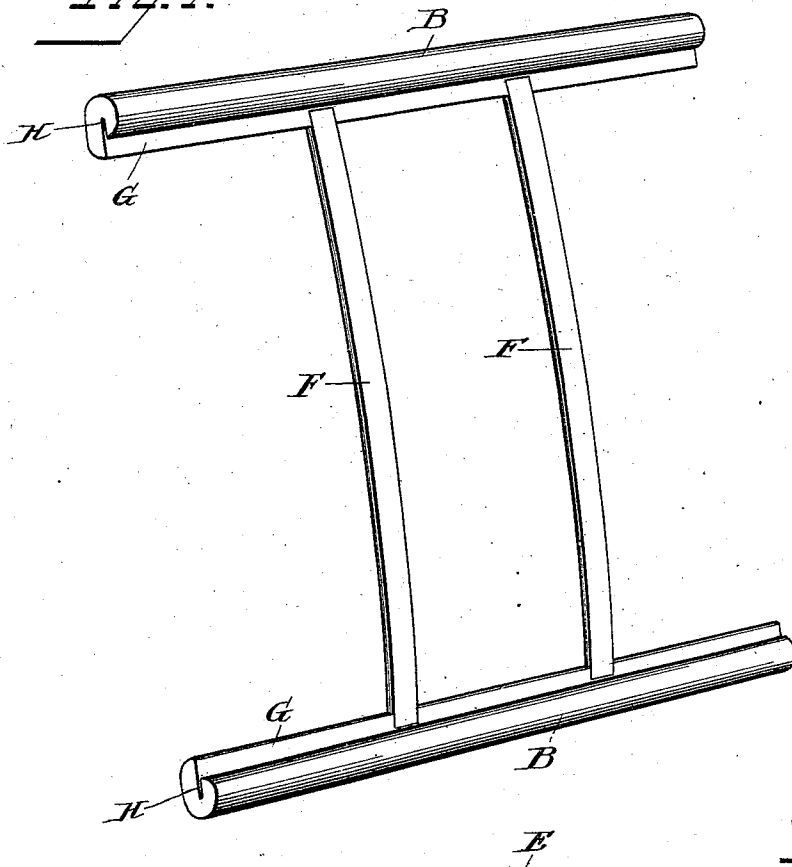


Fig. 5.

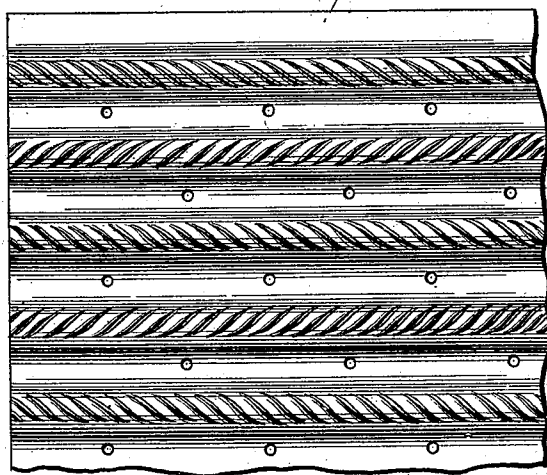


Fig. 6.



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UNITED STATES PATENT OFFICE.

HENRY J. GILBERT, OF SAGINAW, MICHIGAN.

WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 557,199, dated March 31, 1896.

Application filed April 5, 1894. Serial No. 506,457. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. GILBERT, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented a certain new and useful Improvement in Washboards, of which the following is a description, reference being had to the accompanying drawings, making part of this specification.

My invention consists in novel means for supporting the zinc washing-surface and in the novel construction of such surface, as will be hereinafter explained, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a front elevation of my improved board; Fig. 2, a rear elevation thereof; Fig. 3, a vertical cross-section of the same; Fig. 4, a perspective view of the longitudinal bars and curved supporting-bars for the zinc washing-surface; Fig. 5, an enlarged detail of a piece of the zinc washing-surface, and Fig. 6 a sectional detail of the same.

The same letters of reference indicate identical parts in all the figures.

The frame of the board consists of the side bars or legs A A, the cross-bars B B, the top rail C and the soap-board D. The zinc washing-surface E, corrugated as hereinafter described, is of slightly convex form, being swelled outward at its middle, and it is firmly supported in this convex form by two or more outwardly-bowed rods F F supported at their upper and lower ends in the cross-bars B B. The shape of the cross-bars B B and the curved rods F F and the manner of their connection are shown in Fig. 4, where it will be seen that the rear half of each cross-bar is wider than the front half, forming a projecting shoulder or ledge G. The supporting-rods F are preferably round, having their forward sides cut away or flattened to present flat surfaces to the zinc E. They are steamed and bent to the desired shape and maintained therein until dry, so that they will retain such shape. They are fitted at their upper and lower ends in mortises in the portions G G of the cross-bars B B, with their flat outer surfaces approximately flush with the surfaces of the portions G G. The cross-bars B B are provided with retaining-slits H for the zinc E flush with the surfaces G, so that the upper

and lower edges of the zinc E may be readily inserted and confined in said slits while the body of the zinc rests upon the flat surfaces of the supporting-rods F F and portions G G of the cross-bars. The side edges of the zinc E are confined in straight grooves I in the side bars A A, which grooves are approximately in line with the slits H H in the cross-bars, so that at its center the zinc slopes from its middle vertical line toward each side of the board as well as conforming to the curve of the supporting-bars F F.

I am aware that convex washing-surfaces have heretofore been employed and that they have been supported in convex form by vertical rods secured at their upper and lower ends in the cross-bars of the board; but in such instances with which I am familiar straight rods having the outer sides of their opposite ends beveled off to accommodate the curve of the zinc were employed, the cross-bars were of a different construction from mine, and the ends of the supporting-rods were secured in them in a different manner.

In my improved board the bowed shape of the supporting-rods firmly holds the zinc in its outer convex position against any pressure that may be applied to it, and does so with increasing strength and resistance as the rods become wet and swell and tend to bow further outward. At the same time the bowed rods support the zinc in a regular curve from top to bottom.

The zinc washing-surface E is corrugated, as shown, forming the alternate ridges and depressions or grooves running from side to side of the board. The depressions are provided with a series of perforations to permit escape of the water through the zinc, while the ridges are spirally grooved, as shown, the grooves in the adjacent ridges running in opposite directions. The provision of these spiral grooves increases the washing action of the zinc, since as the fabric passes over one ridge the grooves in the latter will tend to force it in one direction, and as it clears said ridge and strikes the next one the grooves in the latter will tend to force it in the opposite direction, and thus the successive grooved ridges will tend to give it a zigzag motion as it is rubbed back and forth over the zinc, and thereby facilitate the washing of it.

Having thus fully described my invention,
I claim—

In a washboard, the combination of the side
bars A A, the cross-bars B B secured therein
5 and provided with the projecting shoulder
portions G and zinc-retaining slits H forming
continuations of the surfaces of such shoul-
der portions, the supporting-rods F F out-
wardly bowed or curved throughout their
10 lengths and secured at their upper and lower
ends in the portions G G of the cross-bars

B B, said rods having their outer surfaces
flattened and approximately flush with the
surfaces of the portions G G, and the zinc
washing-surfaces E supported upon the said 15
curved rods F F and having their upper and
lower edges confined in the slits H H of the
cross-bars B, B, substantially as described.

HENRY J. GILBERT.

Witnesses:

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