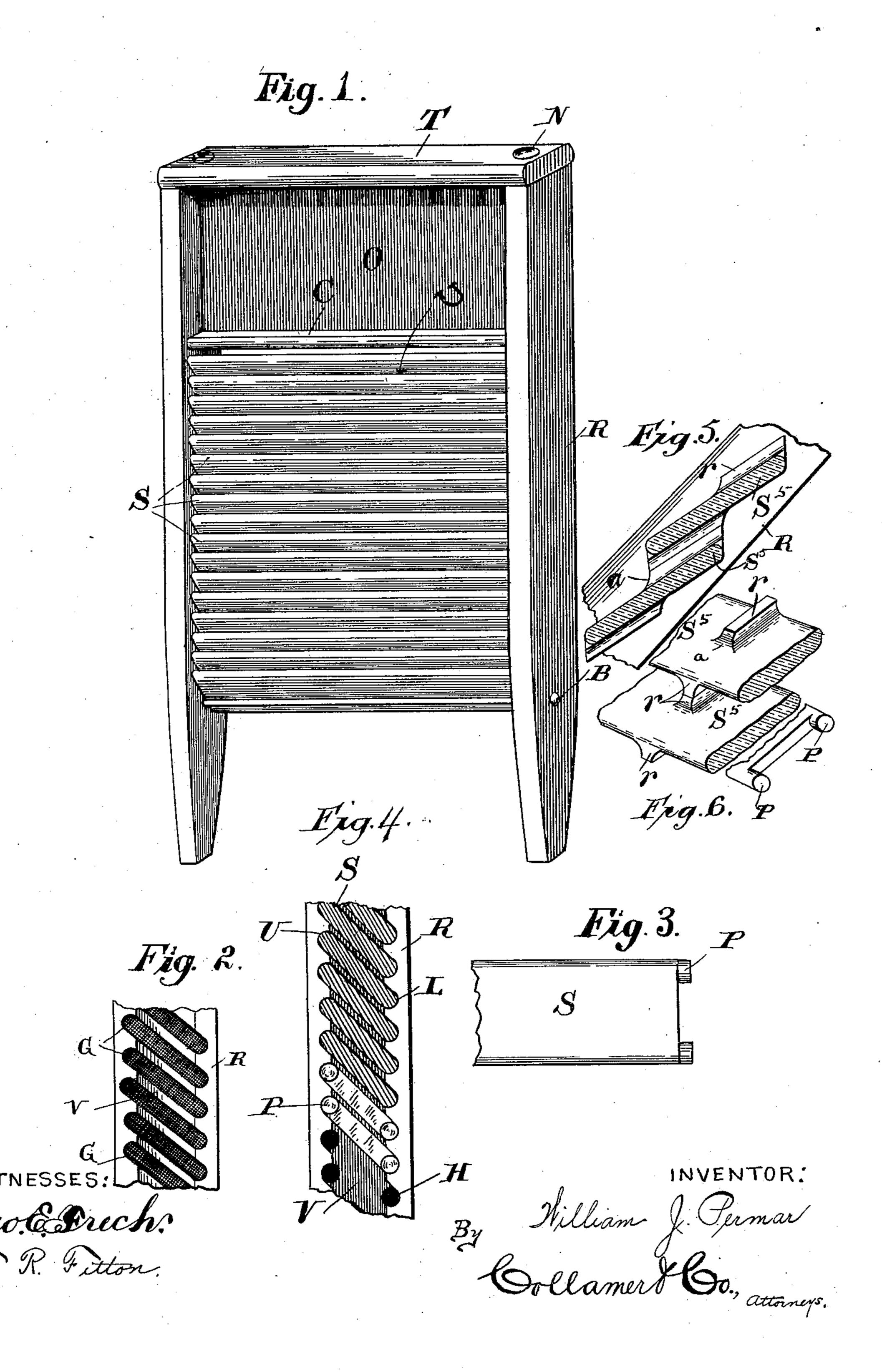
W. J. PERMAR. WASHBOARD.

(Application filed Aug. 21, 1901.)

(No Model.)



United States Patent Office.

WILLIAM J. PERMAR, OF TOLEDO, OHIO.

WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 712,957, dated November 4, 1902.

Application filed August 21, 1901. Serial No. 72,839. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. PERMAR, a citizen of the United States, and a resident of Toledo, Lucas county, State of Ohio, have in-5 vented certain new and useful Improvements in Washboards; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifyto ing the novelty.

This invention relates to washboards, such as are used in the laundry for rubbing clothes; and the object of the same is to render the slats removable and invertible and also to 15 prevent friable slats from breaking.

To this end the invention consists in attaching the slats to the side rails in a peculiar manner and in forming peculiarly-shaped ribs at about the mid-length of slats which 20 are made of friable material, all as more fully described and claimed below, and as shown in the accompanying drawings, wherein—

Figure 1 is a perspective view of the face of this washboard complete. Fig. 2 is an ele-25 vation of the inner face of one side rail constructed in its preferred form. Fig. 3 is a side elevation of one end of one slat having studs. Fig. 4 is a detail showing some of the slats in section, two in elevation and con-30 structed like that shown in Fig. 3, and a portion of one side rail in elevation as viewed from its inner side as constructed slightly different from the rail shown in Fig. 2. Fig. 5 is a sectional detail showing two glass or fri-35 able slats which might be employed and a portion of the side rail by which said slats are supported. Fig. 6 is a fragmentary perspective detail of the same, one of the slats being continued to show stude at its ends, as 40 in Fig. 3.

In its general construction this washboard does not differ essentially from those now on the market. Its two side rails R are connected to a top rail T by pins, screws, or nails 45 N, and these side rails are also connected by a cross-piece C, above which is a solid board, leaving an opening O, constituting the soapbox, as usual. By preference the side rails are also connected near their lower ends by a 50 bolt B. Between this bolt and the cross-strip C are located the slats S, which are flattened,

cent faces spaced slightly from each other, as best seen in Fig. 4, their upper and lower edges U and L being preferably rounded and 55 their bodies standing at an angle of about forty-five degrees to the length of the side rails.

The sizes, shapes, materials, and proportions of the parts are not essential, though I 60 hereinafter describe several details which are used by preference.

In use the washboard is placed in the tub at an angle of about forty-five degrees, which will cause the slats to stand in parallel verti- 65 cal planes with their edges U uppermost. The clothes are then taken in a wet condition from the water and rubbed over the board in the usual manner, when the rounded upper edges U will assist the operator's knucklesin 7c squeezing the water out of the clothes, and such soiled water will run through between the slats and fall back into the tub. It is clear that the pressure comes edgewise on the slats, so that they are not bent out of posi- 75 tion. If it be not desired to have this action, the entire washboard is turned over. The slats will then stand approximately horizontal or can be made to incline downward, if desired, by tipping the washboard a little nearer 80 the vertical, and the lower edges L then do the rubbing, but the water will not pass between the slats. Thus my improved washboard can be used in either way desired by the operator; but experience has taught me 85 that it is highly desirable to squeeze out the water from the garments as they are rubbed. This water is dirty and soapy, and usually the garment passes from the rubbing operation to another tub wherein rinsing is done. 90

A few details of construction suggest themselves at this time and I have illustrated some of them in the drawings herewith. By preference the inner faces of the side rails are grooved vertically, as at V, for the recep- 95 tion of the ends of the slats, and they are provided in the bottom of the grooves with openings consisting of deeper oblique grooves G for further receiving the ends of the slats, as seen in Fig. 2; or the slats may have 100 studs P, Fig. 3, which enter openings consisting of holes H, formed along the edges and in the bottom of the groove V in the inner lap each other partly, and have their adja- | faces of the side rails R, as seen in Fig. 4,

the grooves, holes, or different openings which are employed always conforming with the shape of the ends of the slats. The latter by preference have flattened bodies with the 5 edges rounded, so that when one edge becomes worn the slat may be reversed edge for edge. In Figs. 5 and 6 are shown sections of two glass slats S5, which could be used in place of other material; but when I use glass or any to friable material I preferably provide transverse ribs rat about the center of their lengths and projecting from their faces to a sufficient extent to contact with each other, so as to prevent the breaking of the slats. Obviously 15 these ribs must be cut away, as at α , so that the clothes and fingers will not come in contact with them.

What is claimed as new is—

1. In a washboard, the combination with
20 the two side rails having longitudinal grooves
in their inner faces and openings in the bottom of said grooves and means for detachably
connecting said rails; of a series of slats whose
extremities are removably seated in said open25 ings and whose bodies are parallel and slightly

spaced from each other.

2. In a washboard, the combination with two side rails having longitudinal grooves

in their inner faces and openings consisting of holes in the bottoms of said grooves along 30 the edges of the latter, the holes being set in pairs oblique to the length of the rails, and means for detachably connecting the latter; of a series of slats whose bodies are flattened and lap each other partly, and two studs at 35 each end of each slat entering a pair of said holes so as to hold the slat oblique.

3. In a washboard, friable slats slightly spaced from each other, and transverse ribs projecting from both faces of each slat and 40 contacting with similar ribs on the slats next

adjacent.

4. In a washboard, friable slats slightly spaced from each other and standing in planes oblique to the length of the board, and trans-45 verse ribs on opposite faces of said slats extending into contact with those of the slats next adjacent and cut away at their extremities near each edge of the slat.

In testimony whereof I have hereunto sub- 50 scribed my signature this the 19th day of

August, A. D. 1901.

WILLIAM J. PERMAR.

Witnesses:

E. F. ROWLEY,
BURTON SOUTHARD.