No. 648,176. Patented Apr. 24, 1900.

W. H. OSMER.

WASHBOARD.

(Application filed Jan. 30, 1899.)

(No Model.)

Fig. 1.

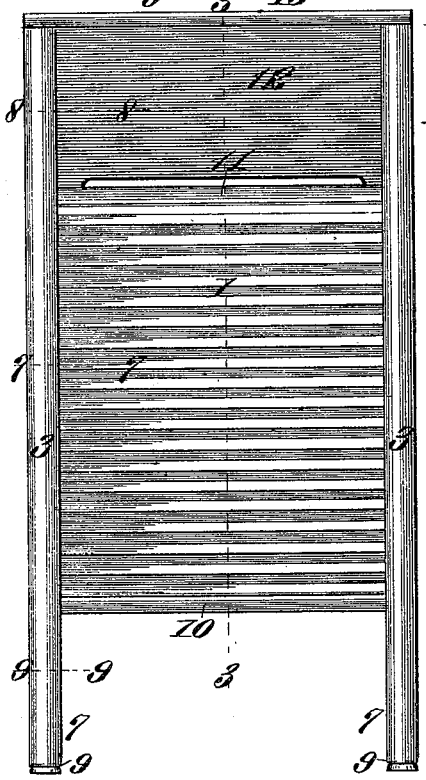


Fig. 2.

Fig. 3.

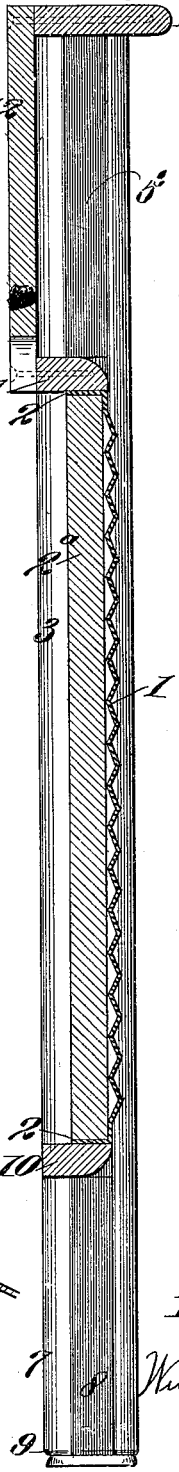


Fig. 4.

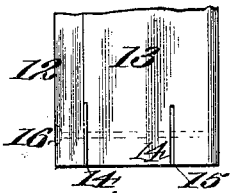


Fig. 5.

Fig. 6.

Fig. 7.

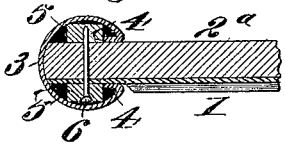


Fig. 8.

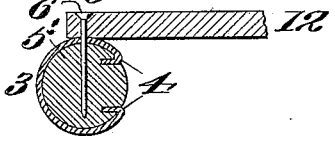


Fig. 9.

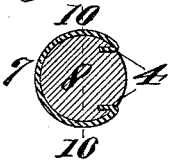


Fig. 10.

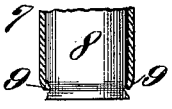
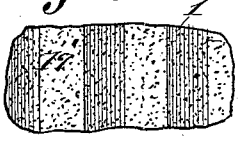


Fig. 11.

Fig. 12.



Attest,
Charles Pickles
F. W. Ludlow

Inventor,
William H. Osmer

UNITED STATES PATENT OFFICE

WILLIAM H. OSMER, OF ST. LOUIS, MISSOURI.

WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 648,176, dated April 24, 1900.

Application filed January 30, 1899. Serial No. 703,923. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. OSMER, a citizen of the United States of America, and a resident of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Washboards, of which the following is a specification.

My invention relates to washboards, especially that class having tubular metallic side rails; and its objects are, first, to construct the body portion so that the side rails may be readily applied and firmly secured thereto; second, to provide a core or filling for certain portions of the tubular space in metallic side rails of washboards, to be so constructed and applied as to preserve the proper shape of the side rail and prevent its spreading or opening along the inner edges, and, further, to arrange and secure the core at the lower end of the side rail so that its metallic end will not come in contact with or gouge the washtub, and also to hold the body or cross-connecting portion of the washboard firmly against longitudinal displacement in the side rails, and, third, to construct tubular metallic side rails of washboards with tongues or extensions at their upper ends arranged to register and fit in corresponding slots or kerfs in the outer ends of the top cross-piece, and thus form therein neat, close-fitting, and strong joints.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a front elevation of my improved washboard complete. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical longitudinal section of the washboard on line 3 3 of Fig. 1. Fig. 4 is a detail end view of one corner of the upper end of the washboard, showing construction of the joint formed by the projecting tongues of the side rail and the kerf at the end of the top cross-piece. Fig. 5 is a detail end view of the top cross-piece. Fig. 6 is a detail view of the upper end of the tubular metallic side rail, showing parallel tongue projections. Fig. 7 is a horizontal section on line 7 7 of Fig. 1, showing vertical offset or ridge along the lateral edges of the body portion. Fig. 8 is a horizontal section on line 8 8 of Fig. 1, showing one method of securing the soap-tray. Fig. 9 is a horizontal section on line 9 9 of Fig. 1, showing the tubular metallic side rail of the washboard below its body portion and one plan of applying the core or filling material. Fig. 10 is a vertical section of the side rail on line 10 10 of Fig. 9, showing the method of crimping or indenting the end of the metallic side rail into the core or filling material at the point of projection from the tubular side rail. Fig. 11 is an enlarged detail view of the rubbing portion of my improved washboard after the same has been corrugated and coated or enameled. Fig. 12 is a detail top view of the foundation-sheet of the rubbing-plate after corrugating and before coating or enameling.

Similar figures of reference indicate similar parts throughout the several views.

1 represents the rubbing-plate, having the flanges 2 at its upper and lower ends. This rubbing-plate is corrugated and formed in the usual well-known manner, except when an enameled rubbing-plate is desired. Then the bare surface, as shown by 17′ in Fig. 12, after being corrugated and suitably formed is coated by depositing thereon or fusing therein a zinc or other suitable enamel, as shown at 17, Fig. 11.

2^a is the cross connecting or body portion of the washboard constructed with a vertical offset or ridge along its lateral edges, as shown at 5, Fig. 7.

3 represents the tubular metallic side rail, having the tongue projections 14 at front and back sides of its upper end and the filling-core 5′ between the top cross-piece 13 and the body portion, and the leg 7 (being the part extending below the body portion) having the filling-core 8, extending from the end of the body portion to and beyond the end of the metallic side rail, the end of the metallic side rail being crimped or indented into the core or filling 8, as shown at 9 in Figs. 1, 2, 3, and 10.

10 and 11 represent, respectively, the lower

and upper fenders of the rubbing-plate, as shown in Figs. 1 and 3.

12 represents the bottom of the soap-tray, and 13 the top cross-piece of the washboard, having in its ends the kerf 15 for the reception of the side-rail projection 14, which, with the nail 16, completes the joint.

4 represents the inturned terminal lips of the tubular metallic side rail 3, and is shown in Figs. 7, 8, and 9.

In constructing my improved washboard the side rails slide over and clasp upon the vertical offset or ridge 5, formed along the lateral edges of the body or cross connecting portion of the washboard, while the parts are assembled, adjusted, and secured together without a tendency to pinch or bind, which has heretofore made the construction of this class of washboards tedious and expensive, all of which is obviated by the vertical offset or ridge herein shown, which constitutes a strong, firm, and positive holding-base which the inturned terminal lips or edges of the tubular side rails bear against with sufficient pressure to entirely prevent twisting or turning or the loosening of the side rails from the body portion when the same have been properly applied. The right-angle offset may be formed by securing vertically-faced cleats along the upper and lower lateral edges of the backboard, or any other suitable method of applying or forming a right-angle offset or ridge upon the lateral edges of the body portion having a vertically-faced inner edge may be adopted without departing from the essential element of my invention.

The longitudinal core inserted in the tubular space of the side rails above and below the body portion serves to hold it in position, and, being provided with parallel grooves which register and retain the parallel inturned terminal edges 4 of the side rail, prevents it from spreading or opening. It will be noticed that by constructing the core with the upper and lower longitudinal grooves for the reception of both terminal edges of the side rail and inserting these cores above and below the cross connecting portion of the washboard the slot in the side rail is prevented from spreading or opening and the side rail is materially strengthened and the more expensive metallic plates or clasps commonly used for this purpose are abolished and the tendency thereby to tear or destroy clothes in the washing is obviated. The lower end of the leg 7 of the tubular metallic side rail is crimped or indented into the core or filling 8, which projects beyond the metal portion of the leg, as shown at 9, Figs. 1, 2, 3, and 10, and serves the double purpose of holding the core and the body or cross connecting portion of the washboard in place and preventing the end of the metallic side rail from coming in contact with and gouging or abrading the washtub. By thus indenting the end of the metallic side rail into the core the rough edges (which would otherwise be a hindrance through tendency to tear the clothes in washing) are properly disposed of and utilized to hold the core, as above stated.

The tongues 14 extend from the front and back sides of the metallic side rail at its top end. The front tongue being inserted in the corresponding saw-kerf 15 at the end of the top cross-piece 13, while the back tongue is inserted between the back edge of the top cross-piece and the brand-board, the nail 16 being then driven in completes the neat, serviceable, and very durable joint shown in Fig. 4, and also prevents the opening or expansion of the inside of the side rail at its upper end.

The advantage derived by my improved method of constructing a washboard with tubular metallic side rails and an enameled rubbing-plate is that of increased strength and durability.

It will be observed that one of the essential features of this invention is the provision of front and back offsets or ridges having vertical inner faces and extending along the lateral edges of the cross connecting portion of the washboard, which faces press against the edges of the inturned terminal lips of the side rail, and then holding the terminal lips 4 securely in place by registering them in the parallel longitudinal grooves of the cores 5 and 8 to be inserted in the side rail above and below the cross connecting portion of the washboard.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a washboard tubular metallic side rails with front and back inturned terminal edges, cores having parallel longitudinal grooves to register with said edges inserted in the rails extending from the lower end of the body portion of the washboard to and beyond the lower ends of the metallic side rails, substantially as shown and described.

2. In a washboard tubular metallic side rails the filling-cores inserted therein extending from the lower end of the body portion to and beyond the lower end of the side rails, the ends of said side rails being crimped or indented into the cores at the line of projection, substantially as shown.

3. A washboard having tubular metallic side rails provided at their upper ends with tongues extending from the front and back sides thereof, a body portion, a brand-board, and a top cross-piece provided at each end with linear kerfs arranged to register and retain the tongue projections of the tubular side rails, substantially as set forth.

4. In a washboard tubular metallic side rails provided with front and back inturned terminal edges, cores having parallel longitudinal grooves to register with said edges, inserted in the rails above and below the body

portion, a body portion provided upon its front and back lateral edges with ridges having vertical inner faces, which faces press against the inturned terminal edges of the metallic side rails contiguous to the body portion, a brand-board and a top cross-piece, substantially as shown and described.

Signed by me at St. Louis, Missouri, this 28th day of January, 1899.

WILLIAM H. OSMER.

Witnesses:
ARTHUR STITH,
JOSEPH H. COYNE.