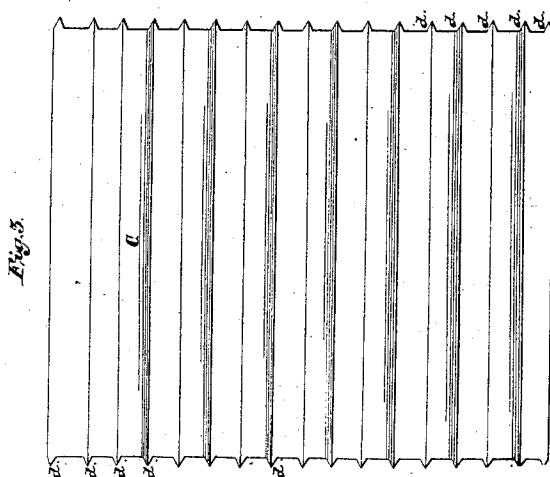
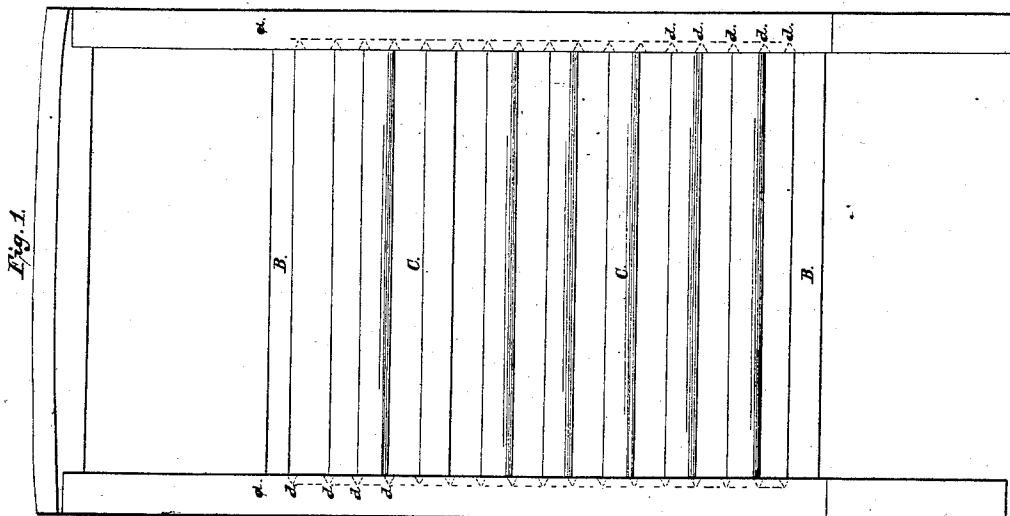
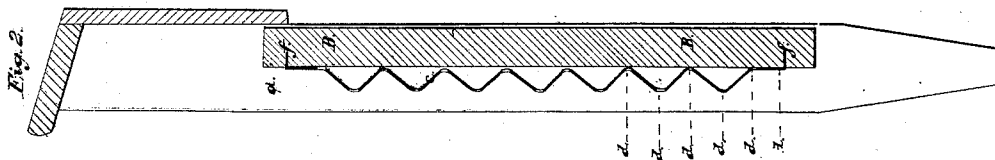


Barrett, Waters, & Lee,

Wash-Board,

N^o 20,473.

Patented June 8, 1858.



UNITED STATES PATENT OFFICE.

S. M. BARRETT, J. M. WATERS, AND R. S. LEE, OF CINCINNATI, OHIO.

WASHBOARD.

Specification of Letters Patent No. 20,473, dated June 8, 1858.

To all whom it may concern:

Be it known that we, SILAS M. BARRETT, JABEZ M. WATERS, and RUFUS S. LEE, of the city of Cincinnati, county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Washboards; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and made to form part of this specification.

Similar letters refer to like parts of the improvement.

The object of our improvement is to cause the zinc plate at its edges that form the washing portion of the board, to incise itself at each side, an equal depth in each leg or side of the board. When the legs are composed of wood of different densities or hardness, without bending or crimping the edges of the zinc, when being incised into the legs of the board, and the nature of our improvement consists in providing the edges of the sheet of metal with teeth similar in shape to those of a cross cut saw or substantially the same, and so arranged to the edges of the sheet, that the width of the teeth will be parallel with the grain of the wood composing the legs of the board, in which they are incised, and be made at the top and bottom of the corrugations of the plate in the manner represented in the accompanying drawings. The teeth thus made on the edges of the sheet will occupy about one fifth of the edge more or less while the remaining edge of the sheet at the bottom of the teeth is made straight or in a right line, so if the teeth would be incised in two legs, and one of which was much harder than the other—of course the teeth on the sheet would incise themselves in the soft leg first, but after the whole length of the teeth was incised and the whole edge of the sheet comes against the surface of the leg, it would give sufficient resistance to force the teeth into the hard leg on the other side of the board until the whole edge of the sheet would press itself against the hard leg of the board also and thus the teeth will incise themselves in each leg when one of them is much harder than the other without bending the edges of the plate and at the same time hold the sheet to its place firm enough for all practical purposes, and make a more durable and much better job in every

respect, than when the whole corrugated edge of the sheet of zinc is incised in the leg.

When the whole edge of the sheet, in a corrugated state is incised in the legs as that of O. Rice's, zinc-washboard it is impossible to incise each edge the same depth, for if one leg is the least harder than the other, which is most always the case the sheet will incise the deepest in the soft leg and often not incise itself in the hard leg at all, and zinc (the metal commonly used in the wash board business) will not always hold sufficient edge after being sharpened to cut across the grain of the wood, which it will have to do when the whole corrugated edge of the sheet is incised and then the edges of the plate will bend and when they do bend, the fibers of the wood in place of being cut are only forced or indented below the surface and not cut as was intended they should always be and thus leave the sheet and legs straining against each other, and when the board is thus constructed, and made wet the first time the legs swell and force themselves off from the body board and the sheet of zinc comes out and renders the board useless. But our improved plan of arranging teeth to the edges of the sheet for incising and holding it to the legs of the board, prevent all the above mentioned difficulties and defects.

To enable others skilled in the art to make and use our improvement, we will proceed to describe its construction and operation by referring direct to the accompanying drawings of which—

Figure 1, is a face view of the improved wash-board. Fig. 2, is a longitudinal sectional view of the board through its center and Fig. 3, is a face view of the sheet of metal drawn to itself, and furnished with teeth on its side edges, as before described.

(*a, a,*) are the sides or legs of the board. (*B, B,*) is what is denominated the body board, and fastened to the legs as usual with nails.

(*C, C,*) is the corrugated sheet of zinc, and bent at the upper and lower ends and let into the body board as represented at (*f, f,*)

(*d, d, d, d,*) are the teeth on the side edges of the sheet of metal, and made on the upper and lower corrugations as represented in Fig. 2, and the width of them is made parallel with the length of the legs (*a a*) which is parallel with the grain of the wood, so

that it will not be necessary for them to cut across the grain of the wood when being incised in the legs, and thereby avoid all the difficulties and defects before stated, arising
5 from the bending of the edges of the zinc, from the want of it retaining an edge strong and sharp enough for to cut across the grain of the wood.

In making our improved board the zinc
10 sheets are properly provided with teeth, and arranged with the body board (B, B,) and placed in a suitable machine together with the legs (a, a,) for incising the teeth in the legs and nailing them to the body board
15 (B, B.)

What we claim as our improvement, and desire to secure by Letters Patent, is—

The teeth (*d, d, d, d,*) made and arranged as represented to the edges of corrugated sheets of metal for wash board, for incising, 20 and holding, the edges of the sheet of metal in and to the sides of the legs of the board, as represented and for purposes mentioned and described in the foregoing specification.

SILAS M. BARRETT.

JABEZ M. WATERS.

RUFUS S. LEE.

Witnesses:

M. BENSON,

CHARLES H. FOX.