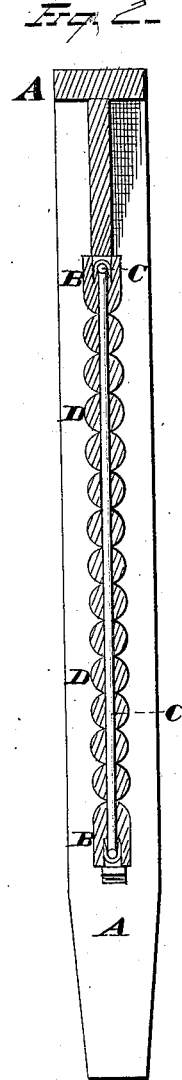
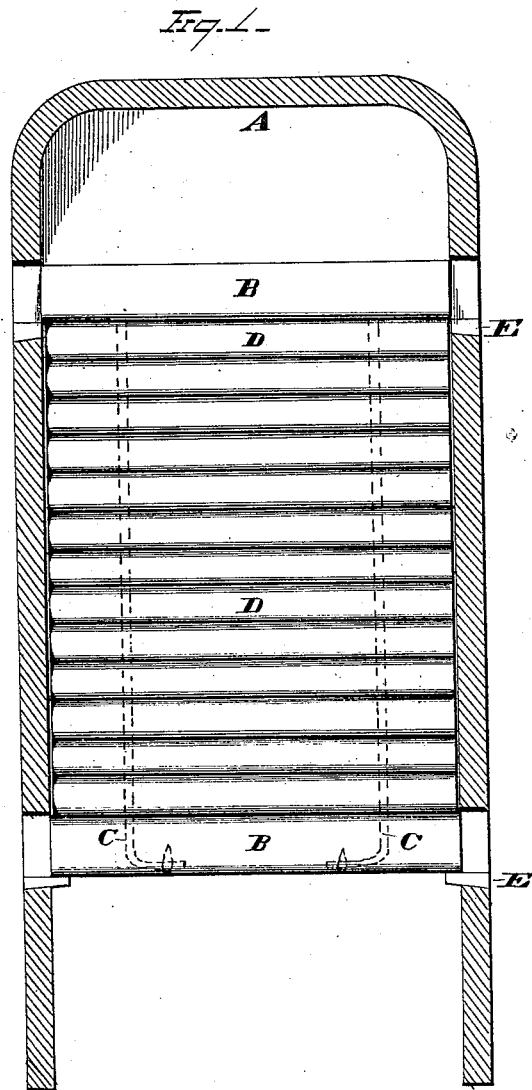


D. E. HALL.  
WASH-BOARDS.

No. 195,214.

Patented Sept. 18, 1877.



WITNESSES

*Edw. S. Nottingham,*  
*A. M. Bright,*

INVENTOR

*David E. Hall,*  
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ATTORNEYS

# UNITED STATES PATENT OFFICE.

DAVID E. HALL, OF CLEVELAND, OHIO, ASSIGNOR TO HIMSELF AND JOHN C. COMPTON, OF SAME PLACE.

## IMPROVEMENT IN WASH-BOARDS.

Specification forming part of Letters Patent No. 195,214, dated September 18, 1877; application filed July 7, 1877.

*To all whom it may concern :*

Be it known that I, DAVID E. HALL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Wash-Boards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in wash-boards.

In the drawing, Figure 1 is a longitudinal section of a wash-board, taken on a plane with its operating surface. Fig. 2 is a longitudinal section, taken at right angles thereto.

My invention consists in the following parts and combinations, as hereinafter specified and claimed, wherein A is the frame, constructed of a continuous bent piece, which, though preferably single, may be, if found desirable, constructed of several component pieces and bent so as to form a continuous piece. B B are cross pieces, which are preferably jointed or tenoned or dovetailed into the frame A, instead of being nailed therein.

Between the cross-pieces B B are stretched two or more wires or strands, C, of any suitable material, upon which are strung rubbing-slats D. These slats may be plain cylinders, or they may be octagonal, or pentagonal, or of any desired appearance to the operating face of the wash-board.

I do not limit myself in any manner to the number of strands C, or to the material of which they are composed; nor do I limit myself in any manner to the shape or style of the rubbing-slats D, or to the material of which they are constructed, as they may be made of metal, wood, or any elastic material, if desired.

It will be observed that the ends of the rubbing-slats have no attachment with the frame A, but are secured in place by the strands C passing bodily through them. This construction gives an elastic and yielding rubbing-surface.

It will also be observed that by my construction the wash-board presents two similar

surfaces, each equally operative, and constituting, in fact, two complete wash-boards in a single implement.

By my construction I have produced a wash-board exceedingly cheap and simple of construction, consisting of but few pieces, and these pieces united with the minimum number of joints, and without the necessity of employing nails or any metal whatever in its construction, except it be the strands C.

By constructing the frame A of a single bent piece, it is obvious that great strength is secured, together with an increased wearing capacity, owing to the absence of joints found in wash-board frames of ordinary construction.

I have shown a method of joining the cross-pieces B and frame A, which, while I consider preferable, is but one means of many which may be employed. This joint is made by forming the ends of the cross-pieces B into a half-dovetail, as shown, and then keying them into position by the wedge E, which forms a very acceptable joint.

Instead of forming the frame A of a single bent piece, as I have shown, the ordinary style of frame may be employed.

What I claim is—

1. A wash-board plate, consisting of slats strung upon strands C, substantially as and for the purpose described.

2. A wash-board plate, consisting of slats strung upon strands C, in combination with cross-pieces B, substantially as and for the purpose described.

3. An elastic wash-board plate, consisting of slats strung upon strands, said slats being free and independent from the sides of the wash-board frame, substantially as and for the purpose described.

4. The combination of the frame A, cross-pieces B, rubbing-slats D, and strands C, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID E. HALL.

Witnesses:

FRANCIS TOUMEY,  
LEVERETT L. LEGGETT.