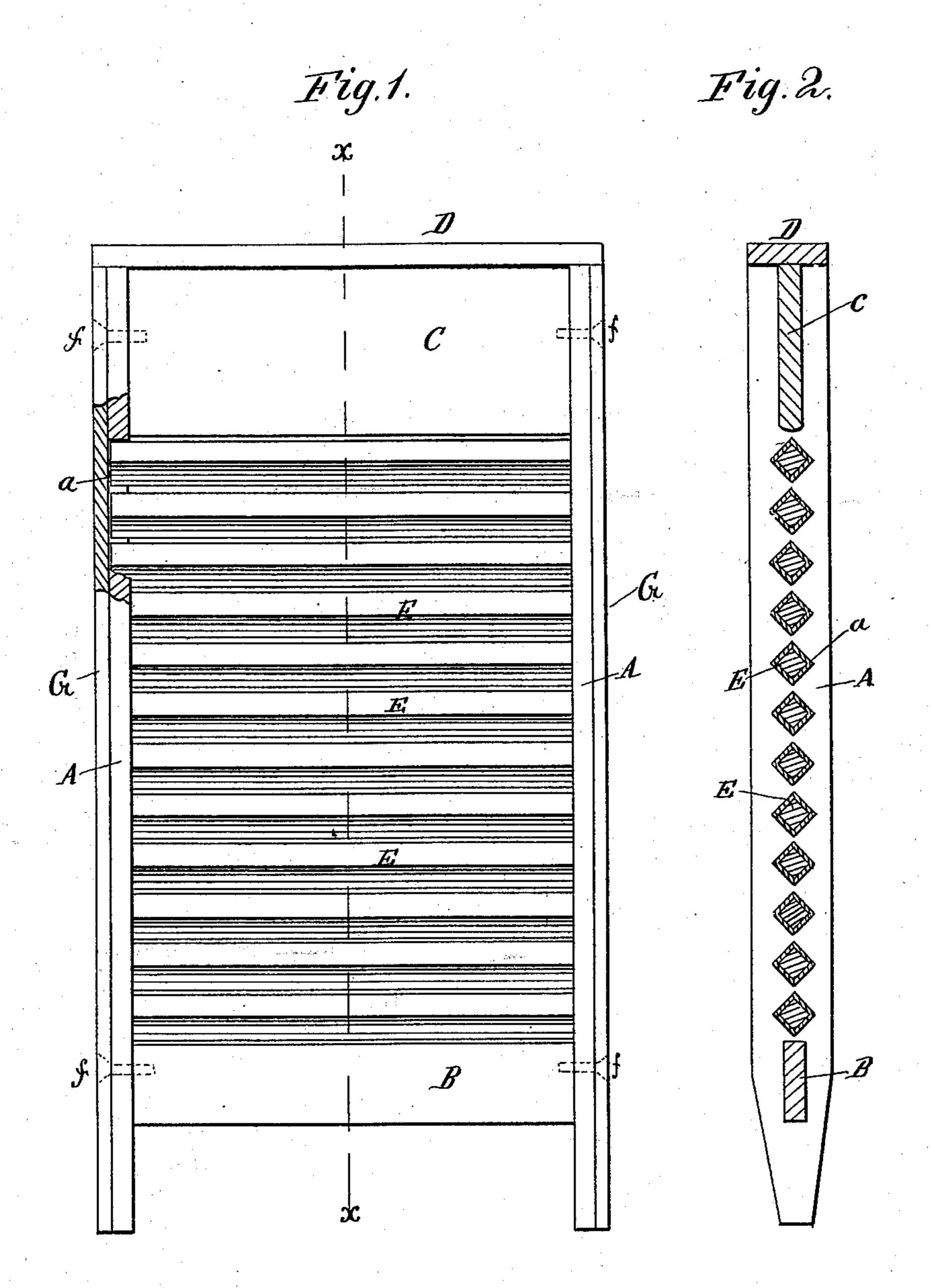
## F. M. SMITH. Wash-Board.

No. 219,026.

Patented Aug. 26, 1879.



WITNESSES:

Henryt N. Miller 6. Seugwick INVENTOR:

BY Munt

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

FRANKLIN M. SMITH, OF THIVENER P. O., OHIO.

## IMPROVEMENT IN WASH-BOARDS.

Specification forming part of Letters Patent No. 219,026, dated August 26, 1879; application filed March 29, 1879.

To all whom it may concern:

Be it known that I, Franklin Monroe SMITH, of Thivener P.O., in the county of Gallia and State of Ohio, have invented a new and useful Improvement in Wash-Boards, of which the following is a specification.

My invention relates to improvements in the manufacture of wash-boards, with a view to reducing the cost of manufacture, and at the same time producing a superior article.

The invention consists in a novel construction of the frame of the wash-board, and of bars used in connection therewith, to form a rubbing-surface for the clothes, whereby provision is made for placing the bars in position, and for removing them and changing their positions when they become worn.

The accompanying drawings represent a wash-board constructed according to my invention, Figure 1 being a side view, and Fig. 2 a longitudinal section in the line x x.

Similar letters of reference indicate corre-

sponding parts.

The frame of the wash-board is composed of two side rails, A A, connected by a lower bar, B, an upper bar, C, and a head-rail, D. The side rails, A, are provided with mortises a, for the reception of the ends of the bars E, which form the rubbing-surface. These mortises are of quadrangular form, and arranged diagonally with relation to the length of the rails A.

The bars E are of corresponding form, and when in place in the frame the two opposite angles of each bar form part of the rubbingsurface, while the intermediate angles are in line with the corresponding angles of the other bars, and thus the whole series of bars produce the same effect as a corrugated surface.

The bars may be either close together or far enough apart to allow the water to run through, as may be preferred.

The bars E are made of zinc, and in order to render them strong and solid and prevent them from being bent or battered, they are provided with a filling consisting of wooden bars fitting snugly in them, as represented in section in Fig. 2.

The bars are placed in position in the frame to form the rubbing-surface by inserting their ends in the mortises a of the side rails, A. They are then secured in place by means of wooden strips or bars G, placed against the outer sides of the rails A, and fastened thereto by screws f.

When the rubbing-surface becomes worn by reason of the rounding of the angles of the bars E, the screws f may be loosened and the strips G removed. The bars E may then be turned so as to bring their intermediate angles to the positions formerly occupied by the angles first used, and thus form a sharp new rubbing-surface. Moreover, if the bars in one portion of the board should become more worn than other portions, their positions may be reversed, so as to place the bars which are least worn in the positions of those which are most worn.

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

An improved wash-board having its rubbing-surfaces formed by quadrangular removable bars E, held in correspondingly-shaped mortises a, cut diagonally in the side rails, A, by the detachable strips G, substantially as and for the purpose set forth.

## FRANKLIN MONROE SMITH.

Witnesses:

J. M. SMITH, A. F. Moore.