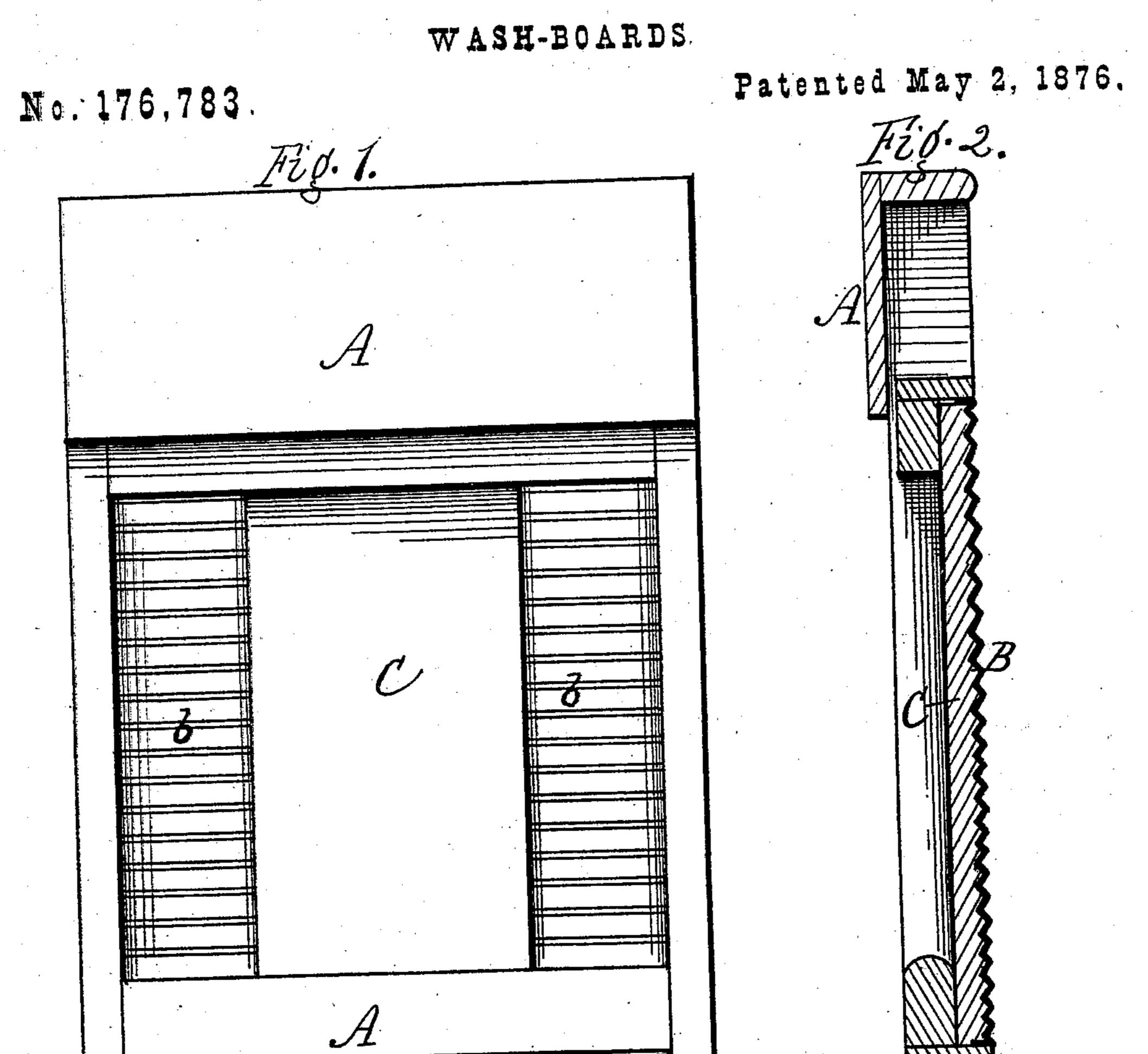
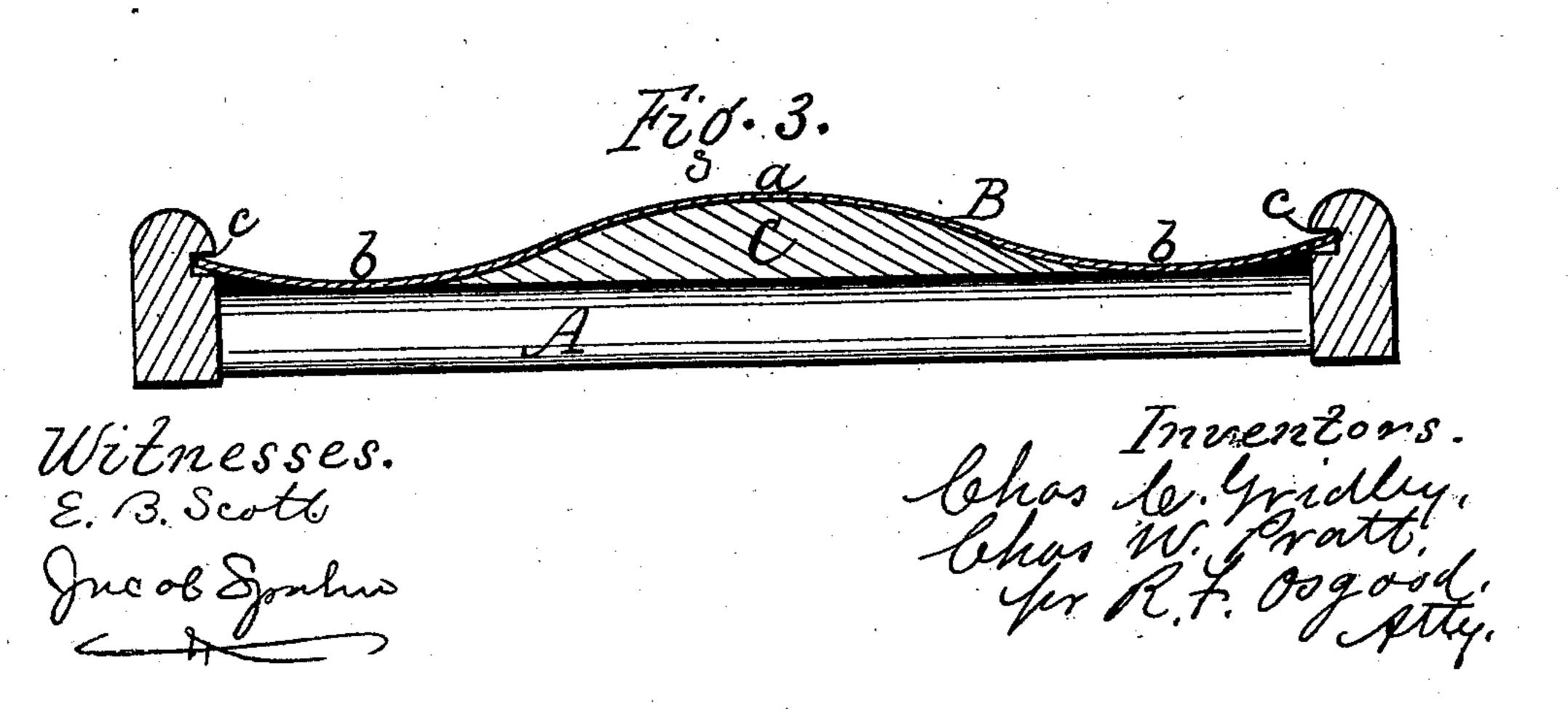
C. C. GRIDLEY & C. W. PRATT.





UNITED STATES PATENT OFFICE.

CHARLES C. GRIDLEY AND CHARLES W. PRATT, OF WATERLOO, N. Y.

IMPROVEMENT IN WASH-BOARDS.

Specification forming part of Letters Patent No. 176,783, dated May 2, 1876; application filed April 8, 1876.

To all whom it may concern:

Be it known that we, CHARLES C. GRID-LEY and CHARLES W. PRATT, of Waterloo, in the county of Seneca and State of New York, have invented a certain new and useful Improvement in Wash-Boards; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of our improved wash-board, looking on the rear side. Fig. 2 is a vertical section. Fig. 3 is a horizontal

section on an enlarged scale.

Our improvement relates to wash-boards which are curved transversely, having a raised ridge in the center, and hollows or channels on each side, running longitudinally, as shown in the patent of Joseph Keech, October 15, 1855. In an extensive manufacture of said boards we have found that the longitudinal middle bearing-bar framed to the wood work is insufficient to support the plate, the plate sagging or depressing on each side of the same under action, soon drawing the edges of the plate out of their supporting-grooves in the frame, and thus allowing the plate to bend or break over the sharp edge of the bar, thereby cracking the plate in the line of the corrugations, and soon rendering it useless. So great has been this difficulty it has been a serious obstacle to the manufacture of the goods. As an improvement on this wash-board, our invention consists of a curved bridge or stay attached at the back of the plate, conforming to its curvature, and made level or flush, on the back side, with the lower line of the depressions or hollows, as hereinafter more fully described.

A represents the frame, which is of ordinary construction. B is the zinc plate which forms the washing-surface. This plate is constructed with the raised longitudinal ridge a in the center and the depressed channels or valleys b b on the sides. This form increases the washing action by the straightening of the clothes over the central ridge, thereby producing greater rubbing friction than on a plain board. The plate is corrugated transversely, as usual, and the edges of the board rest loosely in grooves c c, Fig. 3, formed in

the sides of the frame. C is the bridge or stay attached at the back of the corrugated plate. On the front or contact side it is made curved in cross-section, to conform closely to the curvature of the plate, while on the back it is plain or flat, and extended, so as to come flush with the bottom of the depressions b b, as shown in Fig. 3. It thus exactly fills the hollow on the back side in the center of the plate. The bridge is made of wood, and in one or two parts, as may be desired. It is, preferably, made in two parts, as the two opposite curves or angles can thereby be fitted more easily and accurately to the swell of the plate. By the use of this bridge or stay, constructed as described, and attached at the back of the plate, we obviate the great difficulties which have been heretofore experienced from the bending or breaking down of the plate over a narrow bar, and its edges drawing out of the supporting grooves under pressure. The great advantage is, that the whole center ridge or swell of the plate is stiffened clear back transversely to the bottom of the depressions, but at the same time the thinning down of the wood as it nears the edges allows a certain degree of elasticity of the plate at the depressions, which is desirable in washing, and which would not be produced if the wood covered the entire back of the plate.

We do not claim, broadly, a supporting bar in the center of the plate; but

What we claim as new is—

The combination, with the plate B, of the longitudinal bridge or stay C, attached at the back of the plate, made curved in cross-section, to fit the central curvature of the plate, and filling the entire central depression of the plate on a line with the depressions b b, as shown and described, and for the purpose specified.

In witness whereof we have hereunto signed our names in the presence of two subscribing

witnesses.

CHARLES C. GRIDLEY. CHARLES W. PRATT.

Witnesses:

WM. L. MERCER, M. D. MERCER.