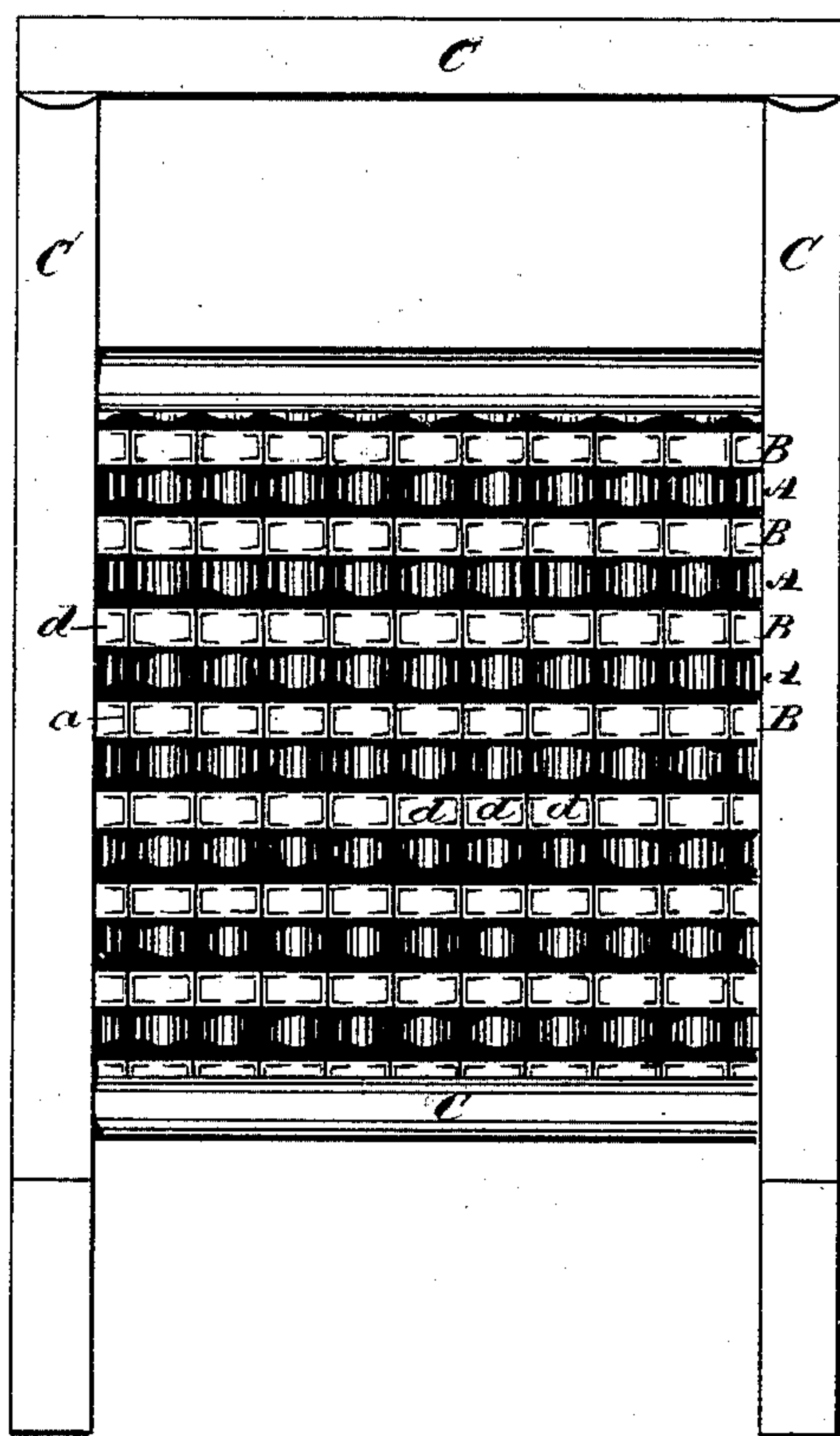


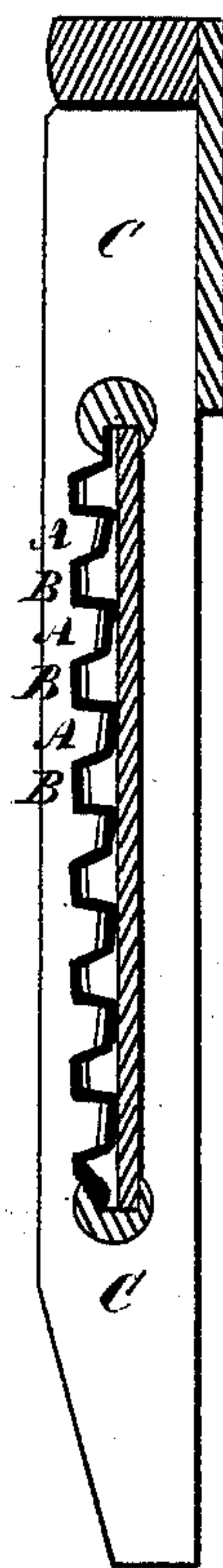
G. H. MILLEN.  
Wash-Board.

No. 223,600.

Patented Jan. 13, 1880.



*Fig. 1.*



*Fig. 2.*

*Witnesses*  
*John Griot*  
*F. J. Ross*

*Inventor*  
*G. H. Millen*  
*By Henry Griot*  
*Attorney*

# UNITED STATES PATENT OFFICE.

GEORGE H. MILLEN, OF HULL, QUEBEC, CANADA, ASSIGNOR TO EZRA BUTLER EDDY, OF SAME PLACE.

## WASH-BOARD.

SPECIFICATION forming part of Letters Patent No. 223,600, dated January 13, 1880.

Application filed June 18, 1879. Patented in Canada, April 17, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE HENRY MILLEN, of Hull, in the county of Ottawa, in the Province of Quebec, Canada, have invented  
5 certain new and useful Improvements in Wash-Boards; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to the peculiar formation of the friction-surface of the metallic plate for wash-boards, both sides of the plate being uniformly alike; and my invention consists of  
10 a metallic plate channeled crosswise with square-sided corrugations, the raised face of the corrugations slightly indented crosswise  
15 at suitable distances, whereby crowning parallelogrammic forms are produced to constitute the frictional surface.

Figure 1 is a front elevation of a wash-board  
20 having my improved plate. Fig. 2 is a longitudinal section of the same.

A are the depressions or channels, and B the raised portions of the plate, the indentations and elevations being of uniform width.  
25 The sunken portions A form channels for holding copiously the exuded water, which is disturbed by the movement of the clothes in washing, and thus causes rapid cleansing.

The raised and sunken corrugations are uniform on both sides of the plate, and extend  
30 crosswise of the wash-board.

The raised surfaces B are sharply and slightly indented transversely to the channels at suitable distances apart, whereby rows of parallelogrammic sections *d* are formed.  
35

The transverse indentations *a* are shown by the shaded lines between the elevations *d*, and by the light portions in the depressions A.

The raised portions of the corrugations which are indented form the rubbing-surface  
40 of the plate, and it will be observed that each section of the surface dips slightly below the plane level. This is accomplished by deepening the channels A on one side more than on the other, whereby the upper side of the cor-  
45 rugations will be raised more than the lower side, and by being slightly indented crosswise a greater prominence is given to the upper edge of each section than to the lower edge. Thus the indentations *a* will be greater  
50 on the upper part than on the lower part of each section *d*.

The object of giving an inclination to each section *d* is to cause greater friction on the downward than on the upward rub.  
55

The plate is inserted in the wash-board frame C in the usual manner.

I claim as my invention—

A wash-board surface consisting of approximately rectangular channels A, having one  
60 side higher than the other, and intervening inclined elevations, B, in parallel lines, divided into parallelogrammic sections *d* by transverse V-shaped indentations *a* at suitable intervals, as and for the purpose set forth.

GEO. H. MILLEN.

Witnesses:

JOHN GRIST,  
F. J. ROSS.