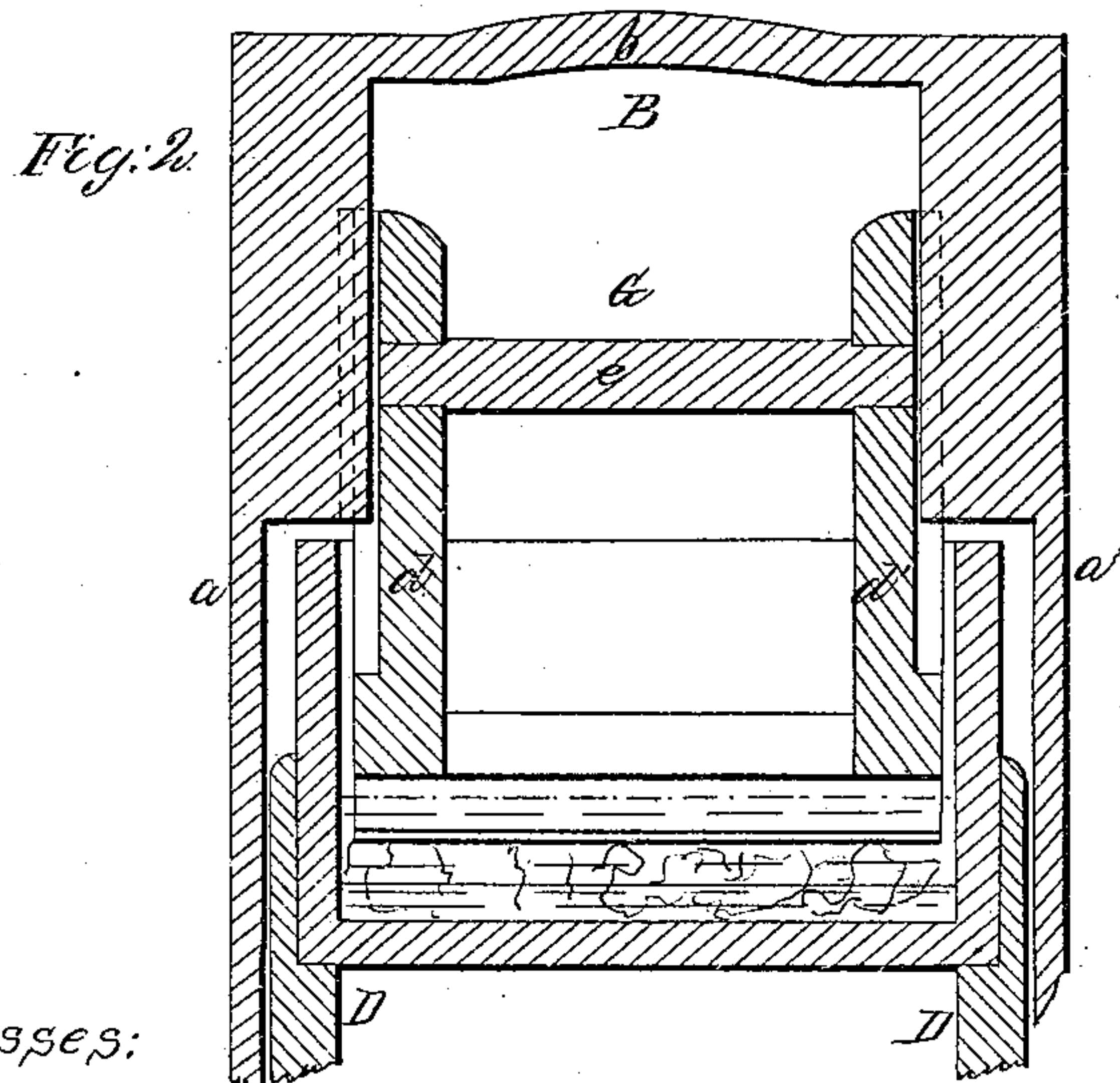
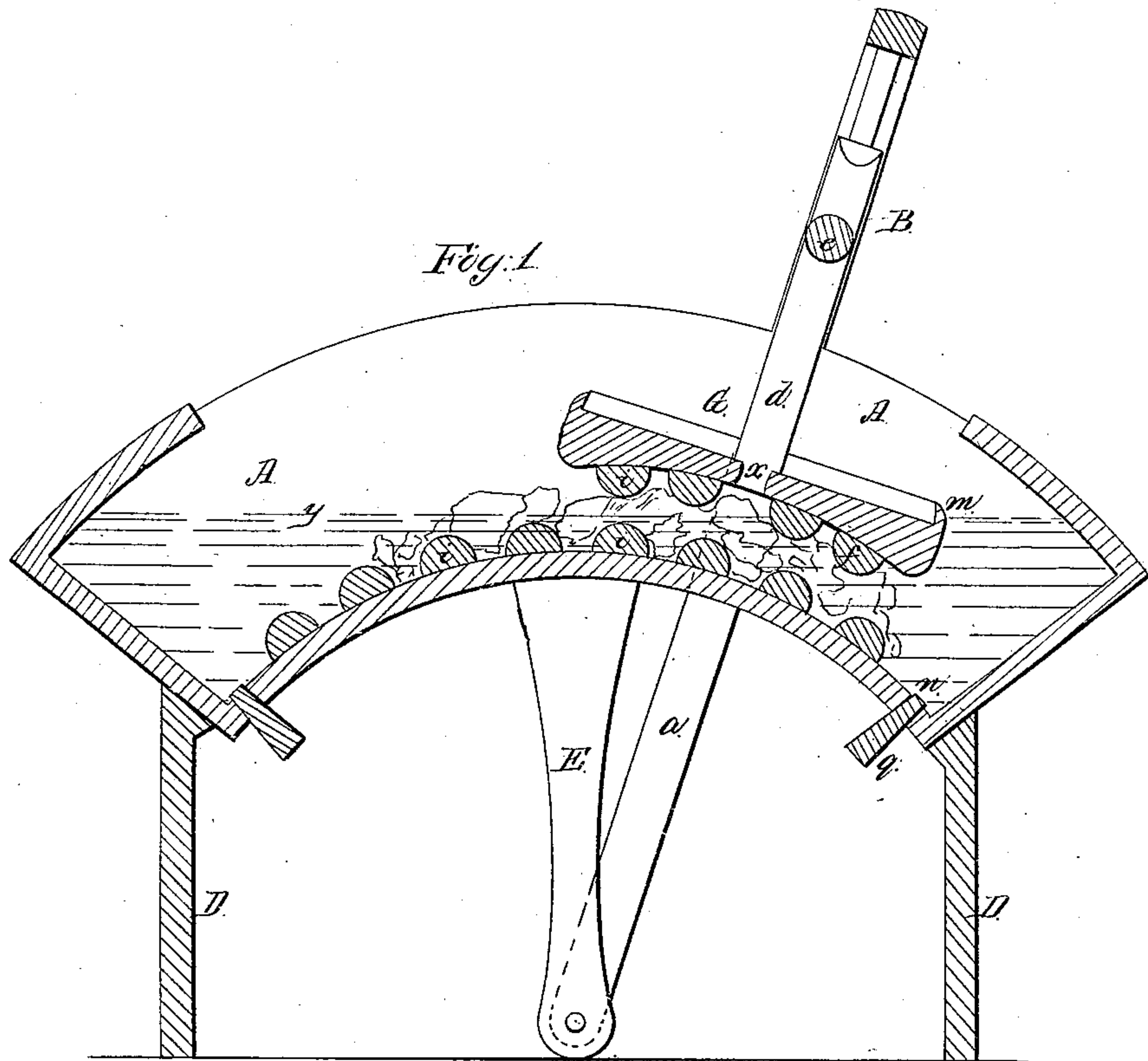


G. L. Witsil,

Washing Machine,

N^o 41,044.

Patented Dec. 22, 1863.



Witnesses:

*Charles Foster
H. Allen Secy.*

Inventor.

*Henry Flower
Atty. G. L. Witsil*

UNITED STATES PATENT OFFICE.

GEORGE L. WITSIL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HIMSELF AND PHILIP A. BOYLE, OF SAME PLACE.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **41,044**, dated December 22, 1863; antedated
December 4, 1863.

To all whom it may concern:

Be it known that I, G. L. WITSIL, of Philadelphia, Pennsylvania, have invented an Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My improved washing-machine consists in a vibrating rubber, having certain ribs or flanges and an opening or openings, in combination with an arched trough, the whole being arranged and operating substantially as described hereinafter.

The ends attained by my invention are the effectual washing of the clothes, the disposal of the particles of dirt washed therefrom, and economy in the use of water.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which forms a part of this specification, Figure 1 is a vertical section, and Fig. 2 a transverse vertical section, of my improved washing-machine.

A is a trough of the arched form represented in the drawings, and is supported on suitable legs, D D, the trough being open at the top, with the exception of a portion at each end, which is covered, as seen in Fig. 1. B is a vibrating frame, composed of the two arms *a* and *a'*, connected together at the top by the cross-bar *b*, and jointed at the lower end to legs or hangers E, secured to the trough. Another frame, G, is arranged to slide in guides formed in the vibrating frame B, this frame G consisting of the two side pieces, *d* and *d'*, connected together above by the cross-bar *e* and below by the rubbing-board *f*, the under side of which is arched to correspond with the arched bottom of the trough, the latter, as well as the under side of the rubbing-board, being provided with transverse ribs or corrugations *i*. In the middle of the rubbing-board is an oblong or other suitably-shaped opening or openings, *x*, and on the edges are ribs or flanges *m*. Sufficient water and suds are poured into the trough to just cover the most elevated of the ribs *i*, as indicated by the line *y*. After this the clothes are deposited in the trough, the sliding frame G is raised, the rubbing-board brought

to a position above the clothes and then depressed. The cross-bar *b* is then grasped by the hand of the operator and a vibrating motion imparted to the frame B, and consequently to the rubbing-board *f*, between the ribs of which and those on the bottom of the trough the clothes are rolled and kneaded, the water and suds within the folds of the clothes being forced through the interstices of the fabrics and the dirt effectually driven from the same. The rubbing-board may be pressed on the clothes with more or less force by grasping the cross-bar *e* with one hand and depressing the sliding frame G, while a vibrating motion is imparted to the two frames with the other hand. Every time the rubbing-board reaches the limit of its movement in either direction its end is dipped into the water, a portion of which, owing to the ledges *m*, is carried to the center of the trough, where it escapes through the opening *x* to the clothes and finds its way between the folds of the same to be compressed therefrom, and, with the dirt, through the interstices of the fabric by the action of the rubbing-board. The particles of dirt thus forced from the clothes find their way, owing to their gravity, to the lowest corners, *n*, of the trough, where they remain comparatively undisturbed and free from further contact with the clothes until the trough is emptied by withdrawing the plugs *q*. It will be seen that the form of the trough is such that but little water is required compared with the quantity necessary in other washing-machines, an advantage which will be appreciated in localities where the supply of water is deficient, and by those who have to fetch water from a considerable distance for washing purposes.

I claim as my invention and desire to secure by Letters Patent—

The vibrating rubbing-board *f*, with its ribs or flanges *m* and opening or openings *x*, in combination with the arched trough, the whole being arranged and operating substantially as and for the purpose herein set forth.

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

GEO. L. WITSIL.

Witnesses:

HENRY HOWSON,
JOHN WHITE.