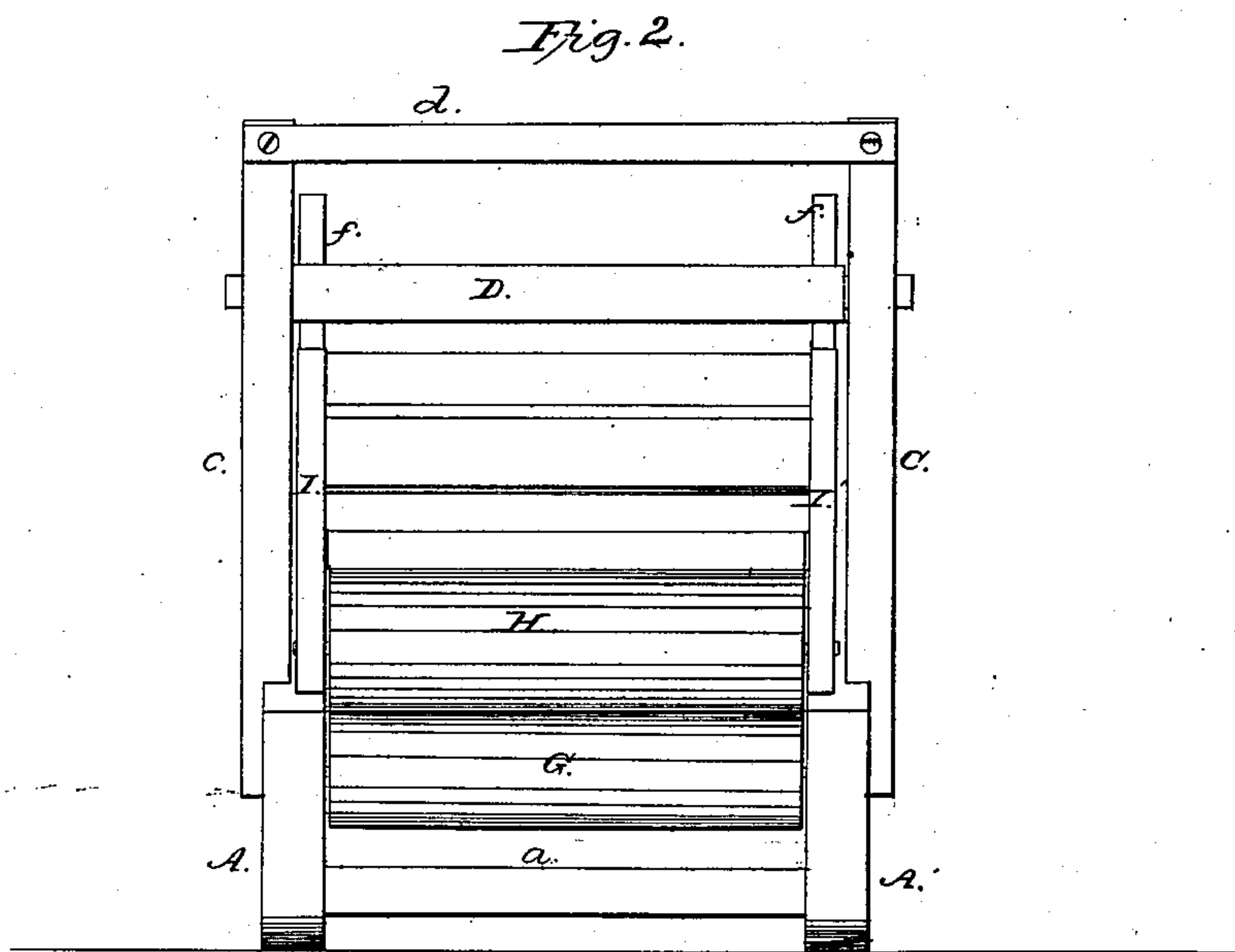
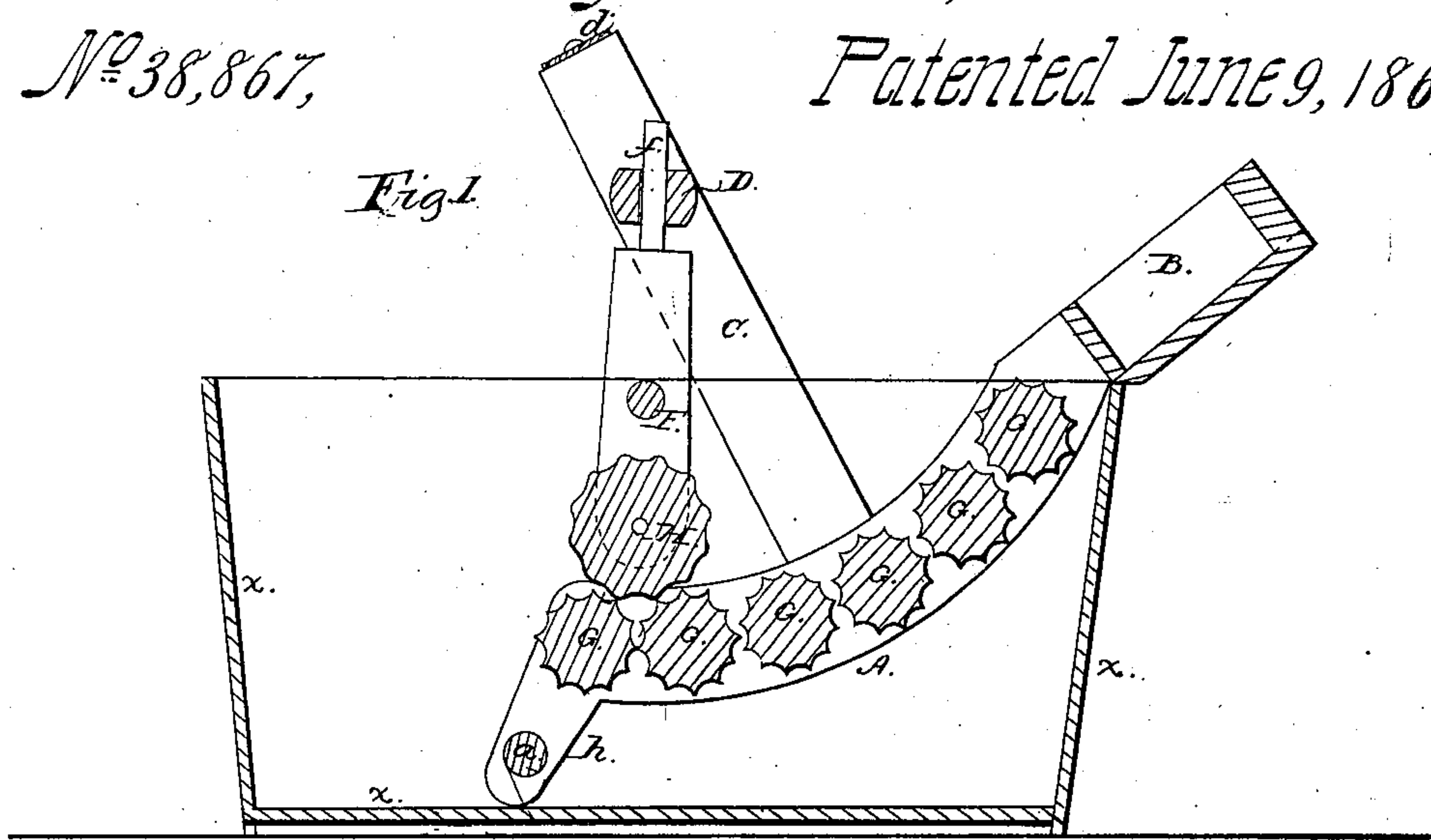


*G.L. Mitsil,*  
*Washing Machine,*  
*No 38,867,* *Patented June 9, 1863.*



*Witnesses:*

*Charles Foster.*  
*H. Albert Steel.*

*Inventor:*

*Henry Howson.*  
*Atty for G. L. Mitsil.*



# UNITED STATES PATENT OFFICE.

GEORGE L. WITSIL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
CLEMENT CRESSON, OF SAME PLACE.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 38,867, dated June 9, 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 invention consists of a series of fluted or corrugated rollers, hung to a frame, in combination with a fluted or corrugated roller on a frame, to which a vibrating, as well as a vertical, reciprocating motion can be imparted, the whole being constructed, arranged, and operating and adapted to a wash-tub, as described hereinafter, for the purpose of effectually compressing and kneading the clothes without that disintegration of the fibers of the fabric and that wear and tear of the hands of the operator which result from the use of the ordinary corrugated wash-boards.

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 form a part of this specification, Figure 1 is a sectional elevation of my improved washing-machine, and Fig. 2 is a front view.

The frame of the washing-machine is composed of the two side pieces, A and A', connected together at the lower end by the cross-bar *a* and at the upper end by the box B, which forms a receptacle for the soap, a post, C, being secured to each of the side pieces, A and A', and the two posts being connected together at the top by the cross-bar *d*. In the opposite side pieces, A and A', turn the journals of the rollers G, which are arranged as close as possible to each other without being in actual contact, each roller having a fluted or corrugated surface. The journals of a fluted or corrugated roller, H, turn in the lower end of the movable frame, composed of the two side pieces, I and I', which are connected together by a cross-bar, F, the upper end of each side piece terminating in a stem, *f*, and each stem fitting loosely, so as to slide freely in a bar, D, which is arranged to turn in the opposite posts, C C, of the frame. In the present instance the side pieces, A and A', which carry the rollers G G, are of the curved form represented in the drawings, each piece

terminating at the lower end in a projection, *h*, and the two projections resting on the bottom of the wash-tub, which is represented by the dotted lines *xx*, one corner of the box B (which, as before remarked, serves to connect the opposite side pieces, A and A', together) forming a shoulder for resting the upper end of the frame upon the edge of the tub.

In using the apparatus the operator leans over the edge of the wash-tub and grasps the cross-bar F of the movable frame with one hand, raises the frame, and with the other hand deposits the clothes on the fluted rollers G G, and then depresses the frame, so that the fluted roller H rests on the clothes. After this the operator imparts a vibrating motion to the movable frame and at the same time applies such a downward pressure to the same as may be deemed sufficient. The clothes are thus submitted to the desired pressure and are at the same time moved to a limited extent backward and forward, the combined action of the fluted roller H and fluted rollers G G having the desired effect of kneading the fabric and dislodging the dirt embedded in the interstices, all this being accomplished without that trituration and disintegration of the fibers of the fabric and that wear and tear of the hands of the operator which result from the use of the usual corrugated wash-boards.

I wish it to be understood that I do not claim, broadly, the use of a bed of fluted rollers G, in combination with a vibrating roller, H, for kneading the clothes; but

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

A washing-machine, consisting of the frame with the revolving fluted rollers G, posts C C, and the vibrating frame, carrying the fluted roller H, when the whole are arranged as described, and adapted by means of the projection *h* and the shoulder formed by the box B to a wash-tub, substantially as 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.