G. L. Witsil,

Washing Machine.

No. 37,666. Patented Feb. 10, 1863.

Fig: 1.

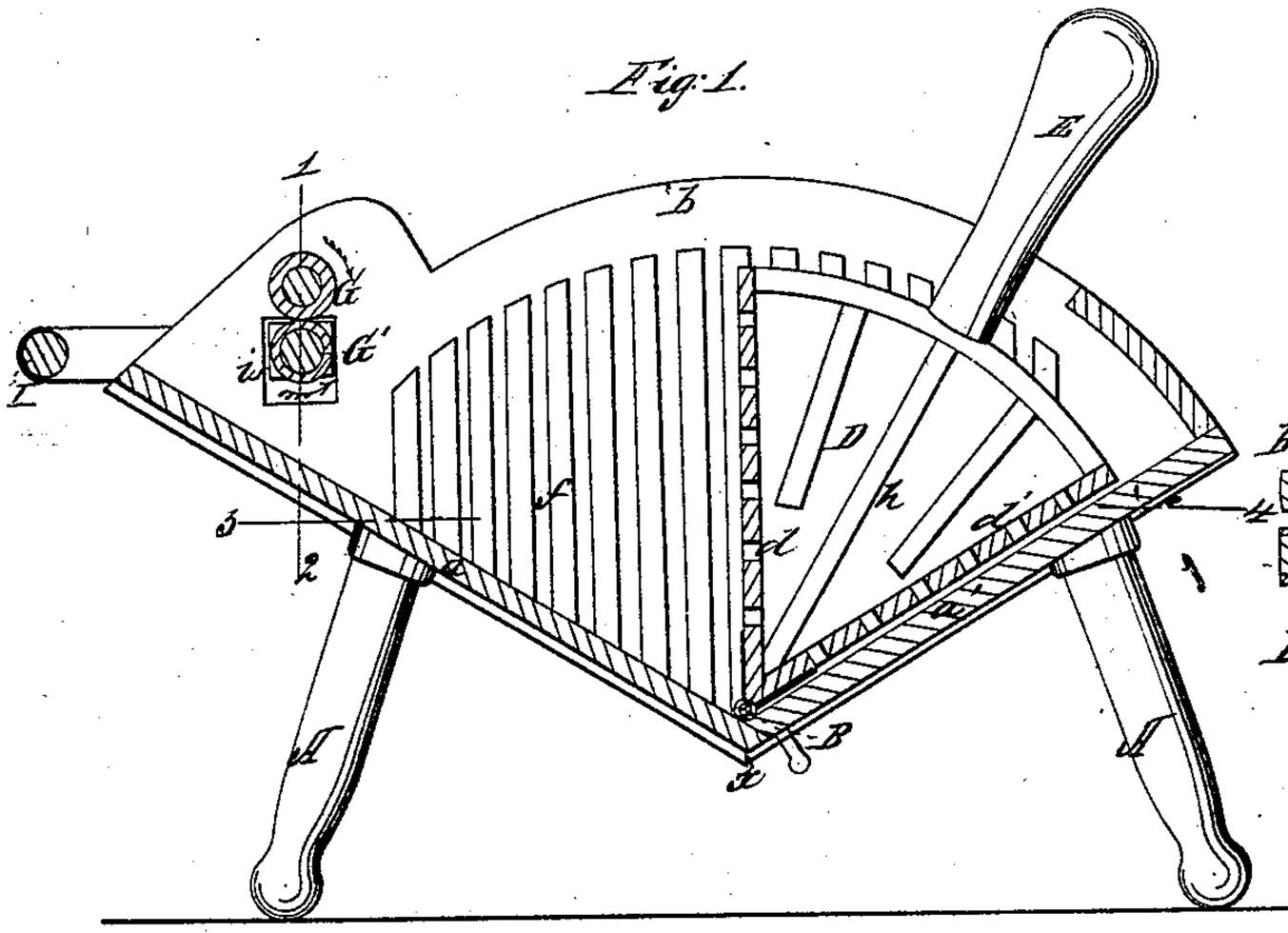


Fig: 2.

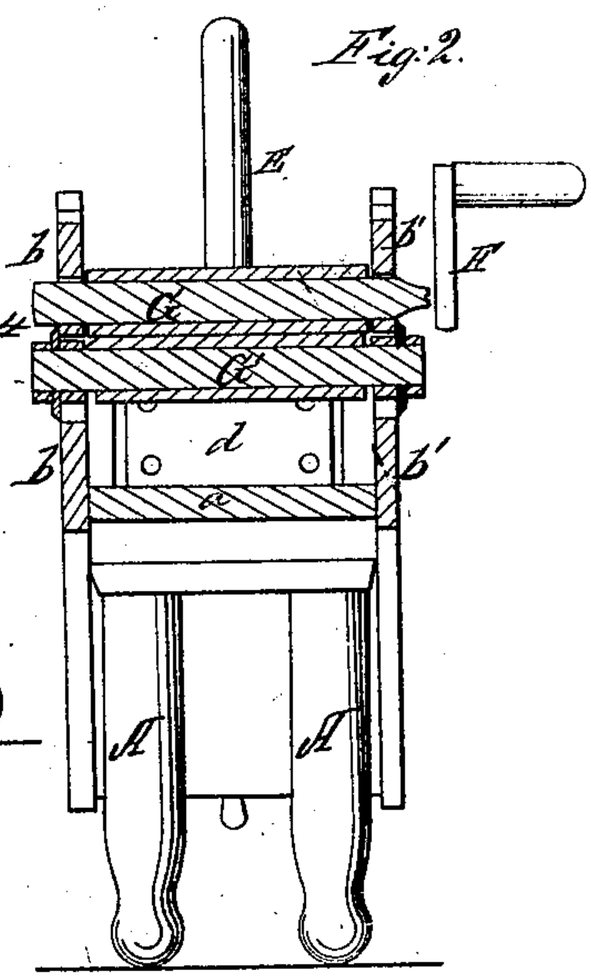


Fig: 4.

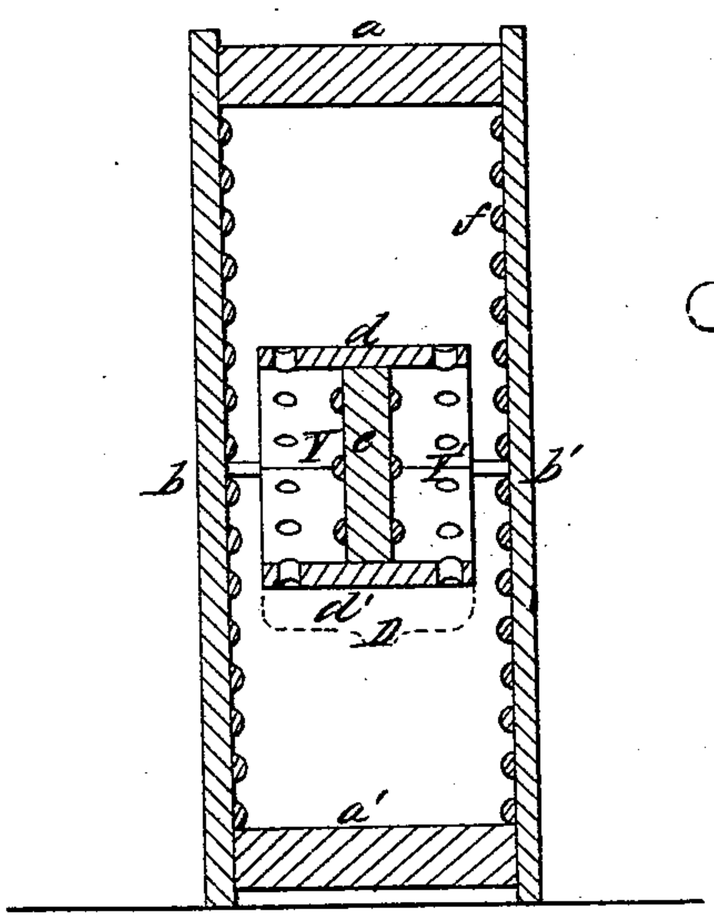
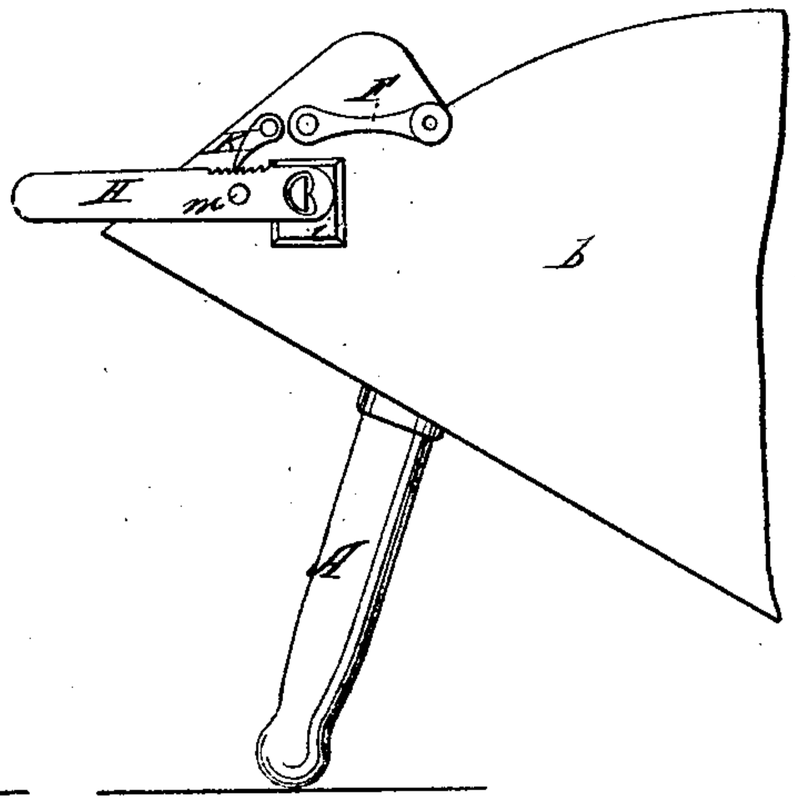


Fig: 5.



Witnesses:

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Charles Howson

Inventor:

Henry Howson
Atty for G. L. Witsil

UNITED STATES PATENT OFFICE.

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

IMPROVED WASHING AND WRINGING MACHINE.

Specification forming part of Letters Patent No. **37,666**, dated February 10, 1863.

To all whom it may concern:

Be it known that I, G. L. WITSIL, of Philadelphia, Pennsylvania, have invented a new and Improved Machine for Washing and Wringing Clothes; 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 certain mechanisms, fully described hereinafter, for effectually washing clothes, and for discharging the water from the same after they have been washed.

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 vertical section of my improved washing-machine and clothes-wringer; Fig. 2, a transverse vertical section on the line 1 2, Fig. 1; Fig. 3, an exterior view of part of the machine, and Fig. 4 a sectional plan on the line 3 4, Fig. 1.

Similar letters refer to similar parts throughout the several views.

The reservoir for containing the water, suds, &c., is composed of the opposite angular side pieces, *b* and *b'*, connected together by the two inclined boards *a* and *a'*, which meet each other at the point *x*, and which form the bottom of the reservoir, the whole being supported on suitable legs, A A.

To the reservoir at the point where the two angular boards *a* and *a'* of the same meet each other is secured a shaft, B, to which is connected the lower end of the vibrating dasher D, the latter consisting of a triangular frame composed of the two perforated boards *d* and *d'*, connected together by the angular piece *e*, which occupies a position midway between the opposite edges of the said boards *d* and *d'*, this angular piece *e* being provided with a suitable handle, E.

To the inside of both of the sides *b* and *b'* of the reservoir are secured the vertical ribs or corrugations *f*, and to both sides of the angular piece *e* of the vibrating dasher are secured any suitable number of ribs, *h h*.

Near one end of the reservoir are two rollers, G and G', which are covered with gum-elastic tubing, the journals of the upper roller, G, turning in the opposite sides *b* and *b'* of the reservoir, and the journals of the lower roller turning in boxes *i i*, which are arranged to slide vertically in openings formed in the said sides of the reservoir.

Two arms, H H, connected together by a cross-bar, I, are arranged one on one side and the other on the opposite side of the reservoir, each arm being hung to a pin, *m*, and being so connected to one of the boxes *i* of the lower roller, G', that, on depressing the said cross-bar I, the two boxes with the roller will be simultaneously elevated.

The upper roller is provided on the outside of the reservoir with a suitable handle, F, and two pawls, K, one being hung to a pin on each side of the reservoir, and, both pawls having points adapted to notches in the arms H, serve to maintain these arms in the position to which they have been depressed, and consequently to maintain the lower roller, G', in forcible contact with the upper roller, G.

It will be observed, on reference to Fig. 4, that the vibrating dasher D forms with the opposite corrugated sides *b* and *b'* of the reservoir two receptacles, Y and Y', and that the angular piece *e* of the said dasher forms the partitions between these two receptacles.

The desired quantity of water with suds having been poured into the reservoir, and the clothes placed into the two receptacles Y and Y', a vibrating motion is imparted to the dasher by means of the handle E or by any suitable mechanism connected to the said dasher.

As the latter vibrates the clothes in the receptacles will be rolled backward and forward and constantly change their position so that all portions of the fabrics are exposed to the forcible jets of water, which, owing to the motion of the dasher, must pass through the perforations of the inclined boards *d* and *d'*, the jets of water thus penetrating the interstices of the fabrics, and forcing therefrom the accumulated dirt.

After the clothes have been sufficiently washed the dasher with its contents is moved so as to rest on the inclined portion *a* of the bottom of the reservoir. The operator then draws the saturated clothes in the direction of

he rollers G and G′, and after depressing the arms H H sufficiently to cause the under roller to bear with the desired force against the upper roller, turns the handle F, causes the rollers to revolve in the direction of the arrows, and the clothes to pass between the rollers, and over the edge of the reservoir while the water wrung by the rollers from the clothes passes down the inclined portion *a* of the bottom of the reservoir.

It will be seen without further description, that while the clothes are effectually cleansed by the combined action of the dasher and corrugated sides of the reservoir and forcible jets of water, the usual trituration and friction by which clothes are damaged in other washing-machines is obviated. It will also be observed that the peculiar arrangement of the wringing-rollers on the reservoir is such as to enable the operators to readily direct the washed clothes to the same.

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

1. The vibrating dasher D, composed of the perforated boards *d* and *d′* and angular piece or partition *e*, or its equivalent, when constructed, combined with, and operating within a reservoir, substantially as and for the purpose described.

2. The arms H H, connected together by the cross-bar I, arranged on and hung to the reservoir and connected to the sliding boxes *i i* of the roller G′, 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.