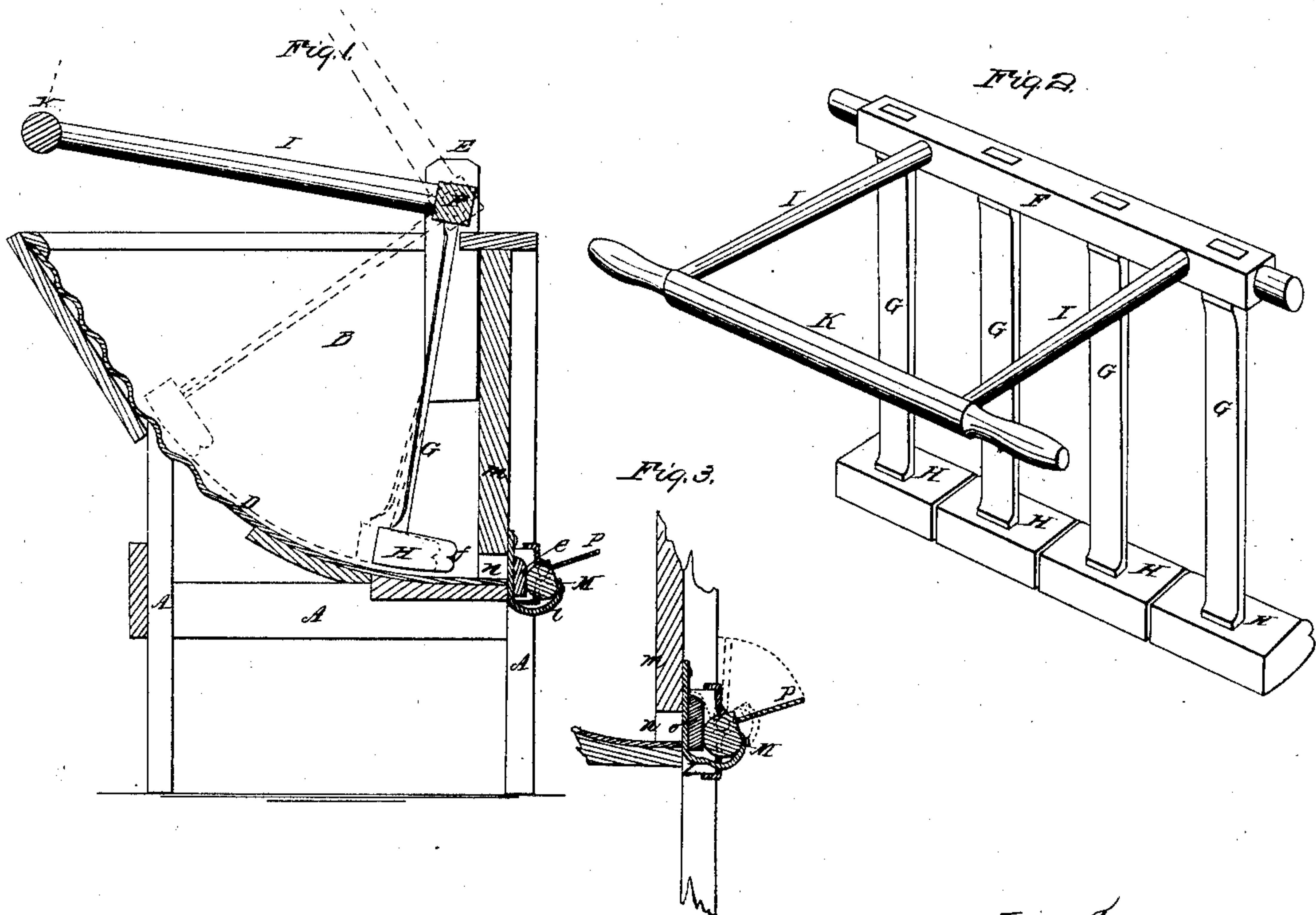


A. Seamans, *Washing Machine,*

Nº 30,705.

Patented Nov. 20, 1860.



Witness:
L. J. Allen
J. H. Hoops

Inventor:
Arba Seamans.
By his attorney
J. H. Hoops

UNITED STATES PATENT OFFICE.

ARBA SAMANS, OF BOWMANVILLE, NEW YORK, ASSIGNOR TO MARVIN SEAMANS, OF BOWMANVILLE, NEW YORK.

WASHING-MACHINE.

Specification of Letters Patent No. 30,705, dated November 20, 1860.

To all whom it may concern:

Be it known that I, ARBA SAMANS, of Bowmanville, in the county of Erie and State of New York, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a vertical section of my improved machine. Fig. 2, is a perspective view of the shaft F, and its appurtenances, detached. Fig. 3, is an enlarged section of the escape valve M.

Like letters designate corresponding parts in all of the figures.

My invention has for its object the construction of a machine which shall, by mechanical action assimilating the motion of the human hands, perform the operations of rubbing, squeezing, or pounding, and turning the garments at the same operation, whereby the labor is greatly expedited and facilitated.

My improvements are also especially designed to preserve the garments from that injury and rapid wearing to which they are so subject from machine washing.

As represented in the drawings, A, is a frame supporting the box, or vat, B, in which the washing is effected, which is of square form except the bottom D, which approaches, in form, the segment of a circle. It is constructed of zinc, though wood may be used and will answer nearly as well. It is corrugated like an ordinary washboard for about one half of the distance which it occupies, commencing at the top of the vat, the remainder being plain.

A pair of short standards E, upon each side of the vat, form the boxes or bearings of a transverse horizontal shaft F; (shown fully in Fig. 2;) and from this shaft a series of spring-slats G, G, descend, supporting on the lower end of each a block, or head, H, arranged in a line parallel with the shaft E, and with the ends or back of the vat B. The slats are framed into mortises, and securely pinned or otherwise held, in both the shaft and blocks, and are made so thin, especially near the blocks that they will readily bend, but they should be formed of flexible wood, such as ash or hickory, which possesses sufficient strength to render it suit-

able for the purpose. The blocks form a uniform row, having but little space between them, and the face side, *f*, may be grooved or corrugated to have a better effect on the clothing.

At right angles with the slats G, rods I, I, connect to the shaft a transverse hand piece K, which forms a convenient lever for giving motion to the rubbing and squeezing blocks H.

The method of washing consists in filling the vat B, partly full of water, or suds, into which the garments are thrown. During the filling of the vat the operating device described should be removed out of the way by turning the handle K, over back, which raises the rubbing blocks above the top of the machine. To bring it into use, it is returned again to the vat, and a vertical oscillating motion given to the handle, which causes the blocks H, to perform the part of rubbing the clothes over the corrugations of the board D, much in the manner of hand rubbing,—their flexibility allowing them to yield to the pressure of large masses and avoid tearing or other injury, and yet causing them to bear with nearly equal pressure on the thinner portions. With each oscillation the clothes are brought between the "butting board" *m*, of the vat, and the blocks H, and the suds pressed through and out of them, as in the process of pounding. And here the flexibility of the rubbing blocks proves of great importance both in yielding to the irregularity of the mass of fabrics, so as not to strike with too much force, and in reaching every part notwithstanding the irregularities. The reverse motion of the brake keeps the clothes turning over and over so as effectually to present all parts to the operation. It is worked with ease and performs the whole operation of cleansing the clothes, if properly managed, and has the advantage of compactness of form, and economy of cost with great ease of working.

M, is a valve for discharging the water from the tub when desired. Above the hole *n*, on the outer side of the box, a leather strap *l*, or its equivalent, is nailed, having a block *o*, sufficiently large to cover the hole, attached thereto, in the proper position for that purpose. This strap is passed partly around the eccentric roller M, and fastened to it. The roller turns by the small lever *p*, on pivots at either end of it, and when the

lever is elevated to a vertical position the winding up of the strap *l*, draws off the block *o*, and opens the vent hole *n*. The pressing of the lever downward to the horizontal, or nearly so, brings the eccentric portion of the roller against the block and forces it upon the hole so closely as to entirely close it. This forms a convenient mode of letting off the water, and one not subject to get out of repair.

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

The combination and arrangement of the

several rubbing and pounding blocks *H*, *H*, attached to the spring slats, or arms, *G*, *G*, and acting simultaneously but separately, the concentric bottom *D*, having its upper portion corrugated and its lower portion plain, or smooth, and the "butting" board, or back, *m*, substantially as and for the purposes herein specified.

ARBA SAMANS.

Witnesses:

JAS. M. GREENE,
S. A. SEAMANS.