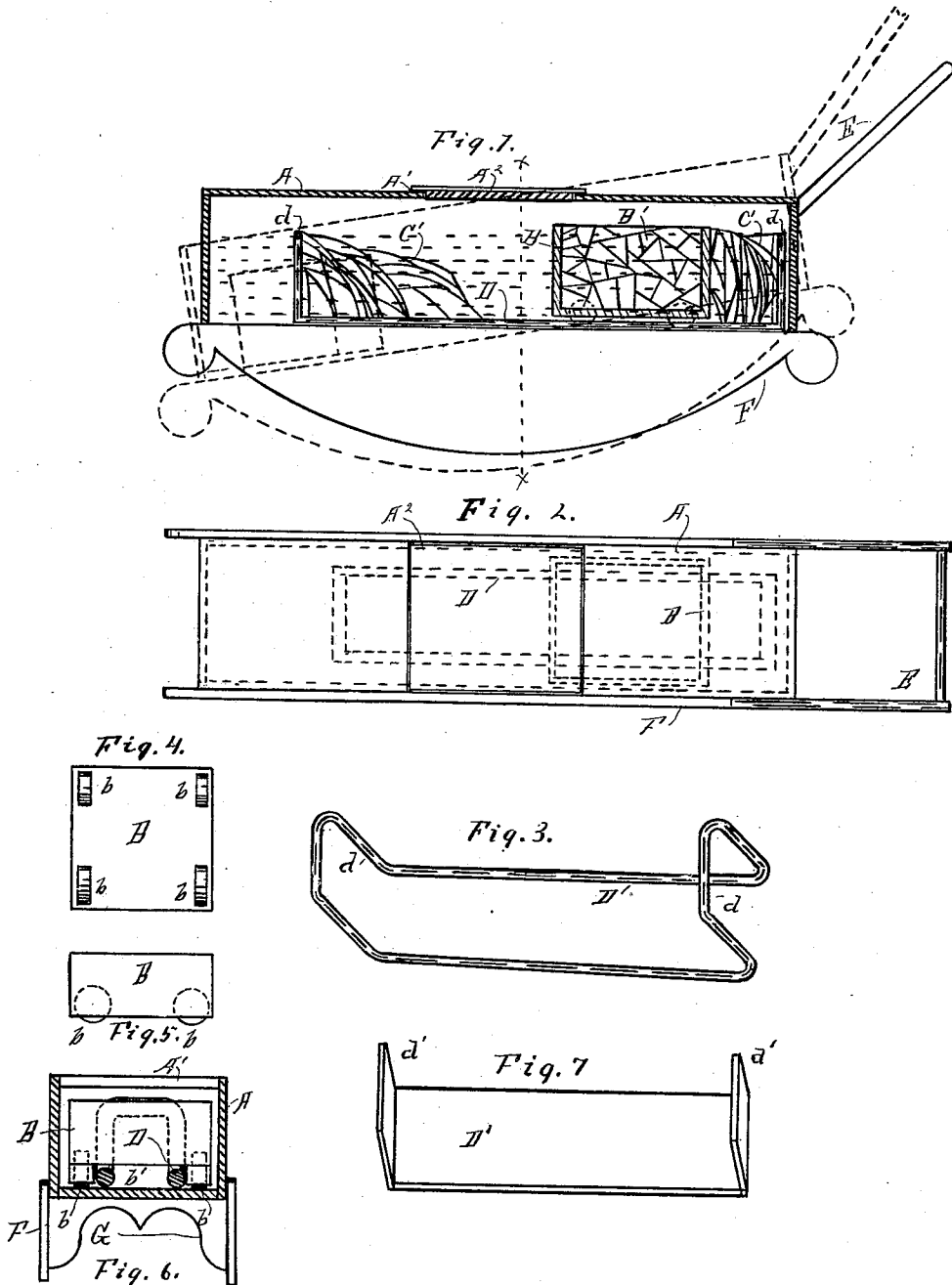


(No Model.)

J., C. & W. BEUKEMA.
WASHING MACHINE.

No. 520,841.

Patented June 5, 1894.



Witnesses:

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UNITED STATES PATENT OFFICE.

JACOB BEUKEMA, CORNELIUS BEUKEMA, AND WILLIAM BEUKEMA, OF
GRAND RAPIDS, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 520,841, dated June 5, 1894.

Application filed December 29, 1893. Serial No. 495,134. (No model.)

To all whom it may concern:

Be it known that we, JACOB BEUKEMA, CORNELIUS BEUKEMA, and WILLIAM BEUKEMA, citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

Our invention relates to improvements in washing machines for domestic use, and its objects are: first, to provide an easy and convenient means of applying the pounding principle for washing clothes; second, to provide a washing machine with which the clothes being washed, or pounded, will be drawn from the resistance walls of the machine after each stroke of the pounder so that the water may circulate around and through them; and, third, to provide for loosening the clothes in the machine so that they may be easily removed when washed. We attain these results by the mechanism illustrated in the accompanying drawings, in which—

Figure 1. is a sectional elevation of our invention complete. Fig. 2. is a plan of the same showing the pounder and the slide in outline. Fig. 3. is a perspective of the slide upon an enlarged scale. Fig. 4. is a plan, and Fig. 5. is a side elevation of the pounder. Fig. 6. is a vertical cross section of the machine on the line $x x$ of Fig. 1., and Fig. 7. shows the slide constructed of wood.

Similar letters refer to similar parts throughout the several views.

The first element of our invention consists of a water tight oblong box or tub A, having an opening A' in the top, and a cover A², therefore, that may be made water tight, and may be removed for the purpose of inserting or removing the clothes. Inside of the box A we place a second box B, of cubical form and of a proper size to slide freely in the main box, and provided with small rollers or wheels b upon which it may roll freely from end to end of the main box. To increase the utility of this box as a pounder, we fill it with small stone B' or other suitable, heavy material that will increase its weight and cause it to strike heavily against the clothing when the machine is thrown up to the position indicated by the dotted lines in Fig. 1.

The main box A is supported upon a pair of rockers that extend its entire length so that it may be rocked longitudinally to change its position so that the weight box or pounder B will be drawn, by gravity, from one end of the main box to the other, alternately so that it will strike forcibly against the clothing with each oscillation of the machine.

For the purpose of drawing the clothes away from the ends of the box with each stroke of the pounder, we leave a space b' between the weight box and the bottom of the main box of sufficient size to allow the slide D to work freely therethrough. This slide is made somewhat shorter than the main box, and the ends are turned up as at d so that they extend well up toward the top of the box and are between the clothes and the ends of the box, at each end, so that each stroke of the pounder will draw the clothes away from the end of the box and allow the water to flow back of, and around them freely. A second object attained by the use of this slide is to loosen the clothes so that they may be readily removed from the box as follows: Without the slide the clothes would be packed more solidly into the ends of the box with each stroke of the pounder until they would become an almost solid mass; with the slide each stroke of the pounder draws them away from the opposite end of the box, prevents them from becoming packed, and leaves them floating in the water between each end of the slide and the pounder, and in convenient shape to be readily removed, piece by piece, when the washing is completed. This slide may be made of an iron rod bent to the form shown in Fig. 3, or it may be made of plank or boards constructed as in Fig. 7.

To use this washer we place the clothes in each end of the box with the pounder between them; we then fill the box about two thirds full of strong hot suds, put on the cover A² and secure it to place, and, taking hold of the handle E, rock the entire machine back and forth, causing the pounder to travel alternately to and from the two lots of clothes as hereinbefore indicated, until the clothes are thoroughly washed, when they can be removed from the box, the water changed, the clothes returned and the process repeated for rinsing the clothes.

We generally make the box and the rockers separate so that they can be put together for use, or separated for storing, with little or no trouble.

5 Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

10 The combination, with a washing machine, having a water tight box mounted upon rockers, and a weighted, sliding pounder within; of a longitudinal slide within said box said slide shorter than the box and longer than the

pounder and both ends bent to stand parallel with, and between, the ends of the pounder and the box, substantially as, and for the purpose set forth. 15

Signed at Grand Rapids, Michigan, this 23d day of December, 1893.

JACOB BEUKEMA.
CORNELIUS BEUKEMA.
WILLIAM BEUKEMA.

In presence of—

ITHIEL J. CILLEY,
GEORGE H. WHITE.