

C. WATSON.
Washing-Machines.

No. 136,474.

Patented March 4, 1873.

Fig. 1.

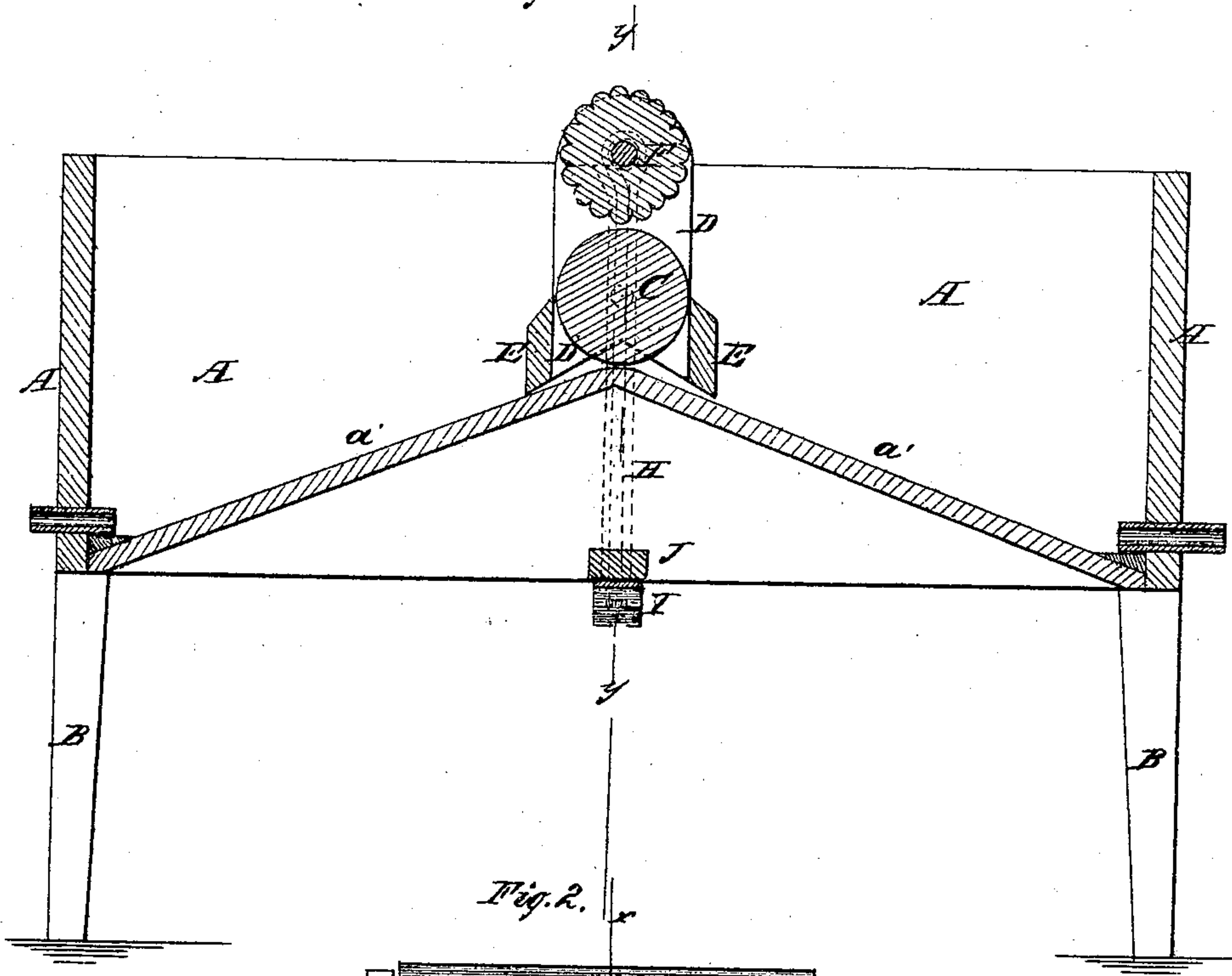


Fig. 2.

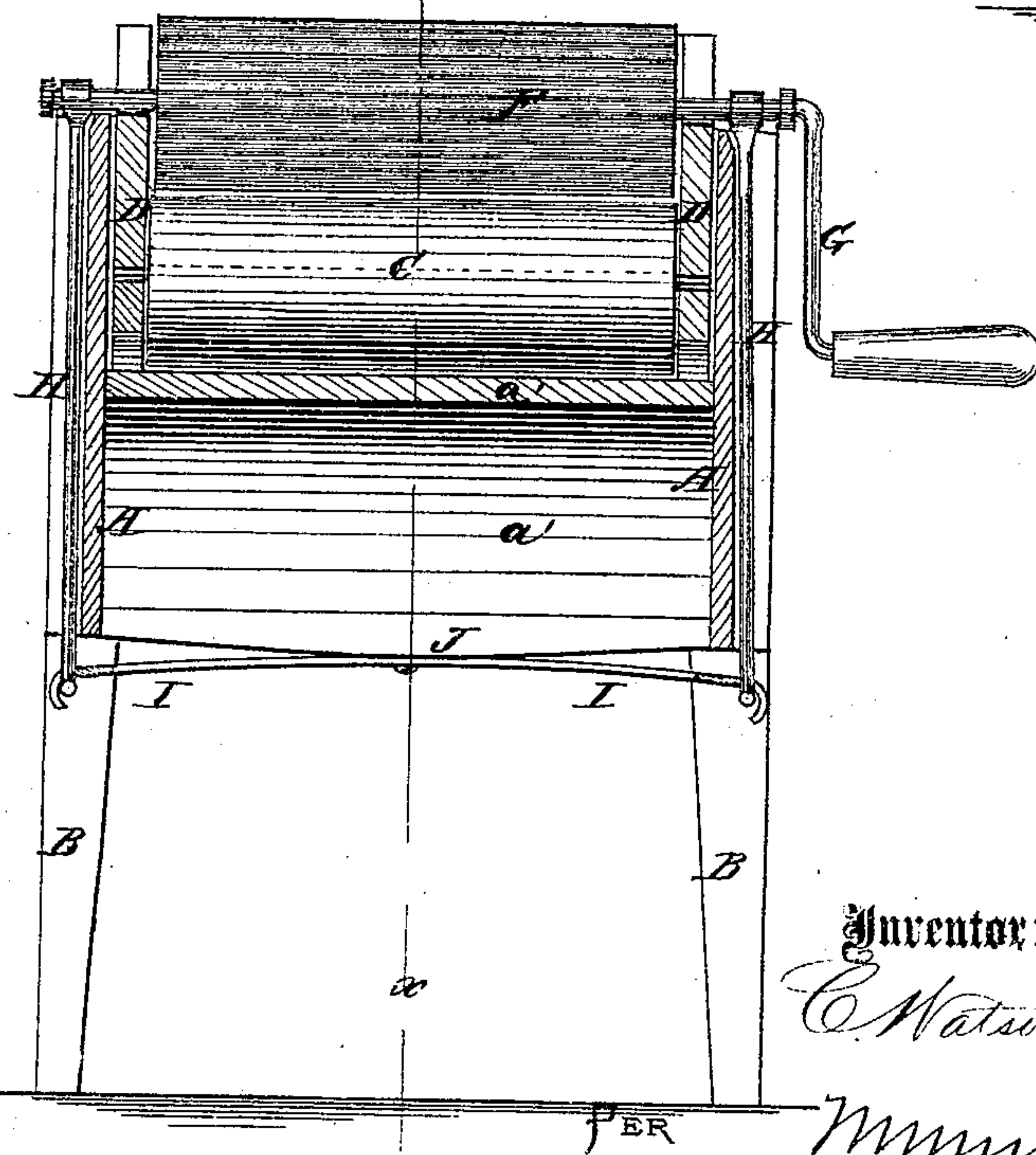
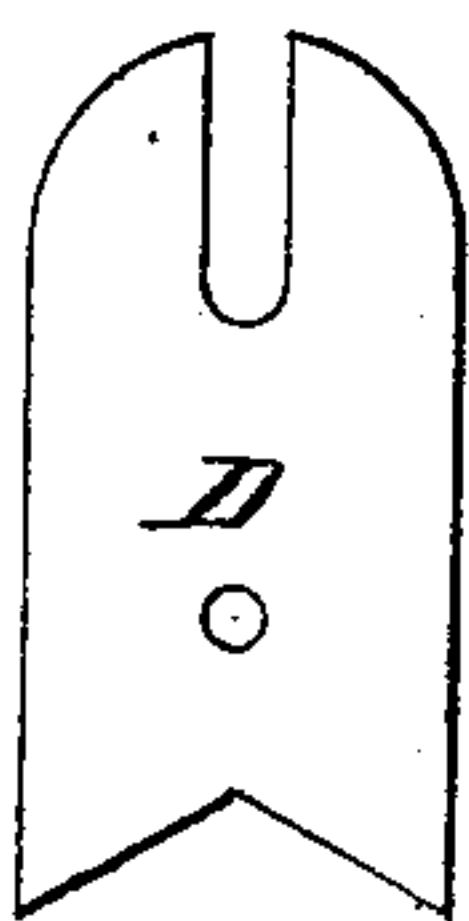


Fig. 3.



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UNITED STATES PATENT OFFICE.

CYRUS WATSON, OF WHITE CLOUD, KANSAS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 136,474, dated March 4, 1873.

To all whom it may concern:

Be it known that I, CYRUS WATSON, of White Cloud, in the county of Doniphan and State of Kansas, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a detail vertical section of my improved washing-machine taken through the line *x x* of Fig. 2. Fig. 2 is a detail vertical cross-section of the same taken through the line *y y*, Fig. 1. Fig. 3 is a detail view of one of the blocks in which the journals of the rollers work.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of that class of washing-machines in which the clothes are washed by passing them back and forth between a pair of rollers connected with the box or tub; and it consists in the combination of the spring and connecting-rods with the journals of the upper roller and with the box or tub, as hereinafter fully described.

A is the box or tub of the machine, the sides and ends of which are vertical, and its bottom *a'* inclines downward from the center toward each end, as shown in Fig. 1. The box A is provided with legs B of such a length as to raise the machine to a convenient height. C is the lower roller, which is made smooth, and its journals revolve in bearings in the blocks D, the lower ends of which are notched, as shown in Figs. 1 and 3, to rest upon the angle of the bottom *a'*. The blocks D are connected and held in their proper relative positions by cross-bars E, the ends of which are secured to the lower parts of the side edges of the said blocks D. The lower edges of the cross-bar E are beveled off to rest and fit upon the inclined bottom *a'*. The upper edges of the cross-bars E overlap the sides of the lower roller C, to prevent the clothes from working in beneath said lower roller C. The upper edges of the cross-bars E are beveled off so

that they may not obstruct, but may serve as a guide to the clothes in their passage between the rollers. The upper parts of the blocks D are slotted vertically to receive and serve as bearings to the journals of the upper roller F, so that the said roller may move up and down to adjust itself to the varying thickness of clothes that may be passing between the rollers C F. The upper roller F is corrugated or fluted, as shown in Figs. 1 and 2. The journals of the upper roller F project, and to one of them is attached the crank G, by which the machine is operated. H are vertical connecting-rods, which are placed in vertical grooves in the sides of the box A, and upon their upper ends are formed hooks, which hook over the journals of the upper roller F. Upon the lower ends of the rods H are formed cross-heads, as shown in Figs. 1 and 2, to receive the ends of the spring I, which ends are notched longitudinally to receive the bodies of the rods H, and are bent downward to form hooks to hook upon the cross-heads of the said rods H. The middle part of the spring I is secured to the middle part of the cross-bar J, the ends of which are attached to the lower edges of the sides of the box A. The lower side of the cross-bar J is beveled or inclined from its middle part toward its ends, so that it may not interfere with the movements of the spring I.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of tub A having bottom inclining downward from the center, the smooth roller C arranged between overlapping cross-bars E E and journaled in notched blocks D D, the fluted roll F having crank G and arranged in open slots of blocks D, and the spring-connected rods I H, all applied together as and for the purpose described.

Witnesses: CYRUS WATSON.

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