

(No Model.)

D. G. COLBERT.

WASHING MACHINE.

No. 337,046.

Patented Mar. 2, 1886.

Fig. 1.

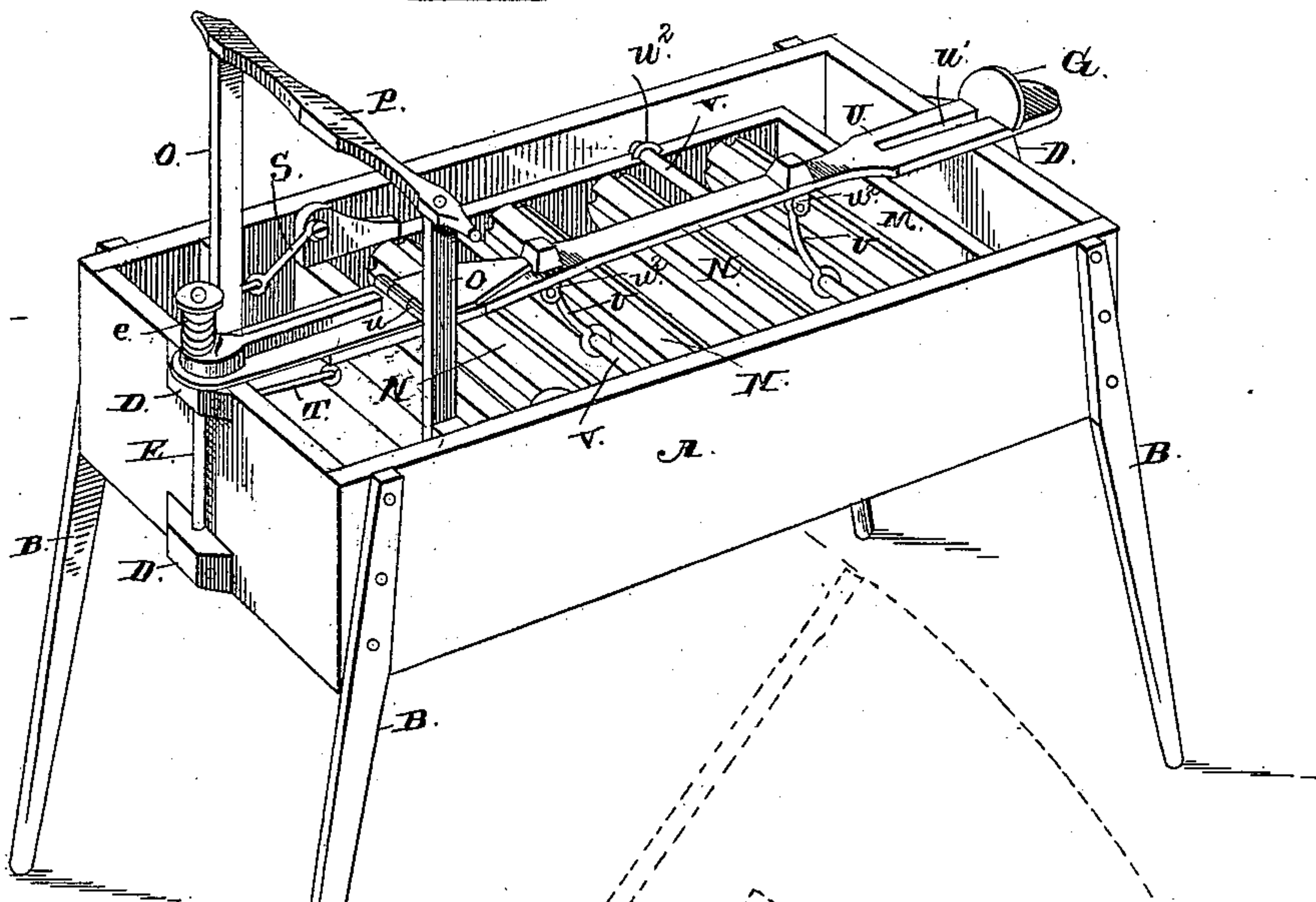
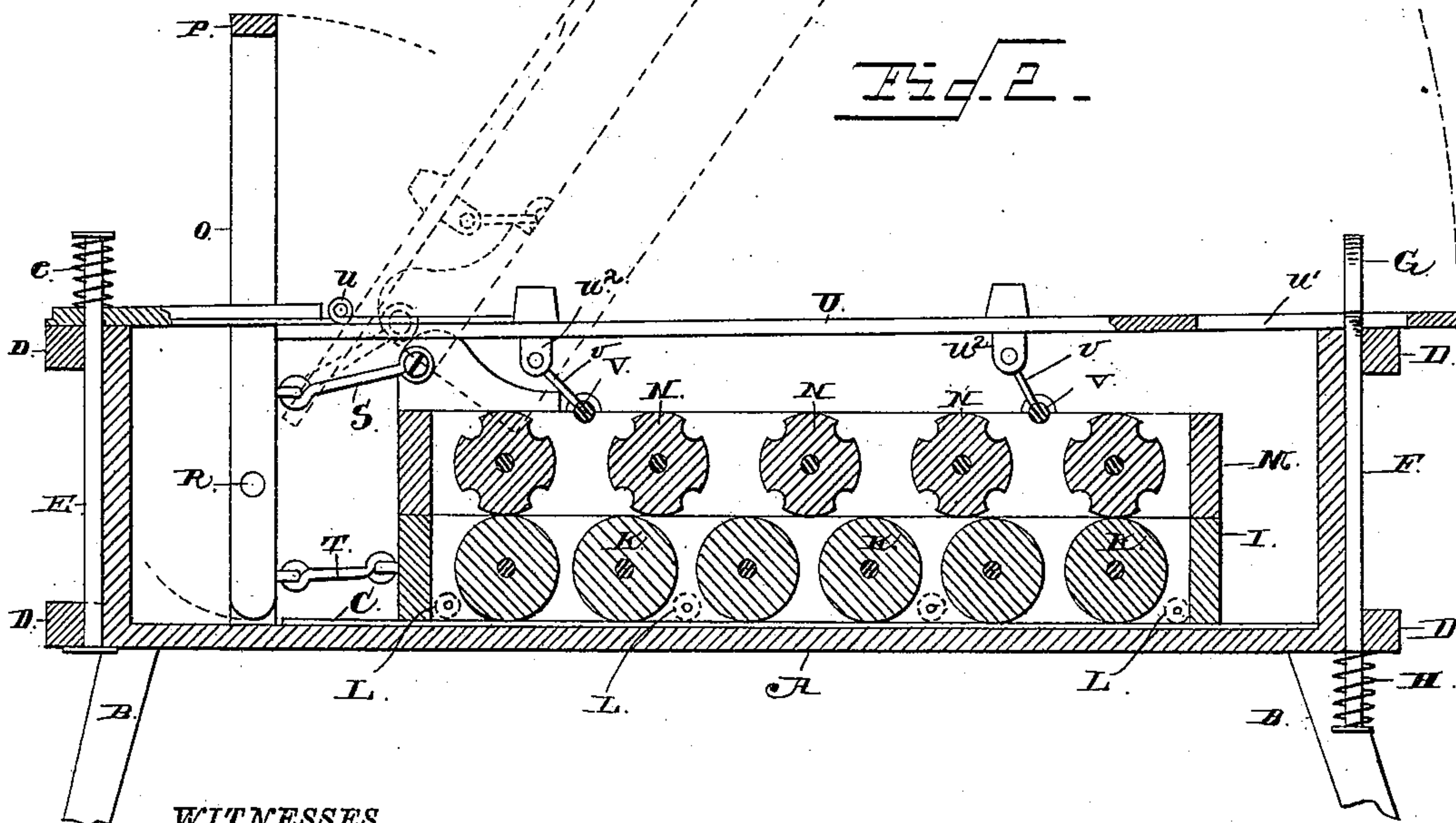


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

DANIEL G. COLBERT, OF GRAND RAPIDS, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 337,046, dated March 2, 1886.

Application filed August 20, 1885. Serial No. 174,906. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL G. COLBERT, a citizen of the United States, residing at Grand Rapids, in the county of Wood and State of Ohio, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in washing-machines; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a washing-machine embodying my invention. Fig. 2 is a vertical longitudinal sectional view of the same.

A represents the suds-box, which is rectangular in form, and is supported upon suitable legs, B. This suds-box may be made either of wood, galvanized iron, or other suitable material, and is provided with a track, C, in its bottom. On the ends of the box, at the center thereof, are secured brackets or blocks D, in one pair of which, at one end of the box, is secured a vertical rod, E, and in the other pair, at the opposite end of the box, is secured a vertically-movable rod, F, which is provided with a head, G, and at its lower end, below the bottom bracket or block, an extensile coiled spring, H.

I represents a rectangular frame, in which are journaled a number of rollers, K. These rollers may be made either of wood or hard rubber, or other preferred material, and may be either fluted or plain. The roller-frame is provided on its lower side with anti-friction rollers L, that work on the track in the bottom of the suds-box.

M represents a second rectangular frame, that bears on the upper side of the frame I, and is provided with a series of rollers, N, which are journaled in said frame. In one end of the suds-box are fulcrumed the levers O, which are connected at their upper ends by a horizontal hand-bar, P. The upper roller-frame is connected to the levers, above the fulcrums R, by rods S, and the lower roller-frame is also connected to the said levers, below the fulcrums, by rods T, as shown. By

this construction it is evident that when the levers are moved back and forth by taking hold on the hand-bar the roller-frames are reciprocated back and forth in opposite directions simultaneously and in contact with each other, and thus subject clothes placed between the frames to the rubbing action of their rollers, and cause the dirt to be loosened from the clothes and dissolved in the suds, thus thoroughly cleansing the clothes.

U represents a spring-bar that is provided with a hinged joint, *u*, near one end, which is secured on the upper end of the rod E. A coiled extensile spring, *e*, is placed on the upper end of this rod, and bears upon the jointed end of the spring-bar, to keep the latter normally bearing on the upper edges of the suds-box. In the free end of the spring-bar is made an elongated slot, *u'*, that permits the head G of the rod F to be passed up through it, when the said rod is turned through a half-rotation, to cause the head to lock the free end of the spring-bar. The spring H serves to cause the slotted end of the spring-bar to bear on the top of the suds-box. In the upper roller-frame are journaled rock-shafts V, having bails or arms *v*, that are pivoted in keepers *u''* on the under side of the spring-bar, thus securing the upper roller-frame to the latter, and causing it to bear forcibly upon the lower roller-frame. When the free end of the spring-bar is released and raised, the upper roller-frame is raised from the lower roller-frame, as shown in dotted lines in Fig. 2, so as to permit clothes to be placed in the machine on the lower frame, or to be taken therefrom after being rubbed.

A washing-machine thus constructed is cheap and simple, and thoroughly cleanses the clothes.

Having thus described my invention, I claim—

The combination of the suds-box, the roller-frame I therein, the hinge-jointed bar U on the upper side of the box, and having the slot *u'* in its free end, the roller-frame I in the box, the roller-frame M on the frame I, and connected to the free end of the bar U, the rod E, passed through one end of the bar U, and the spring *e*, bearing downwardly

on the bar, the spring-actuated turning-rod  
F, having the head G, to enter the slot *u'*,  
and the levers pivoted in the suds-box and  
connected to the roller-frames to reciprocate  
5 the latter simultaneously in opposite direc-  
tions, substantially as described.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in  
presence of two witnesses.

DANIEL G. COLBERT.

Witnesses:

GEO. LASKEY,

ROBT. A. SNIVELY.