

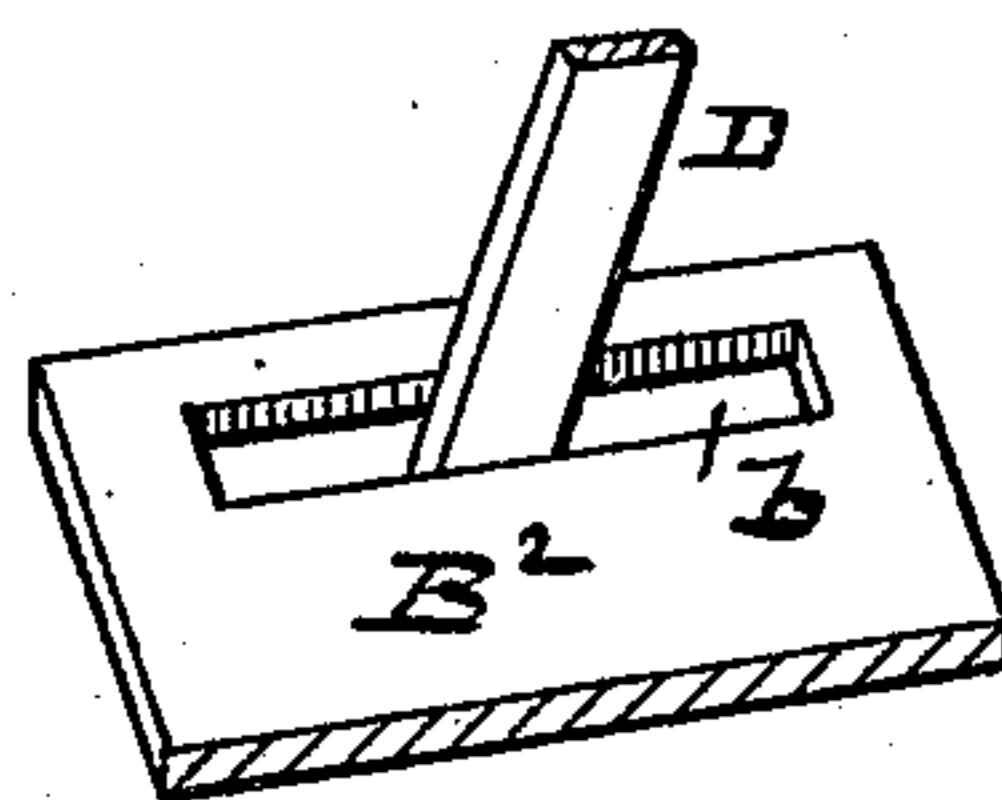
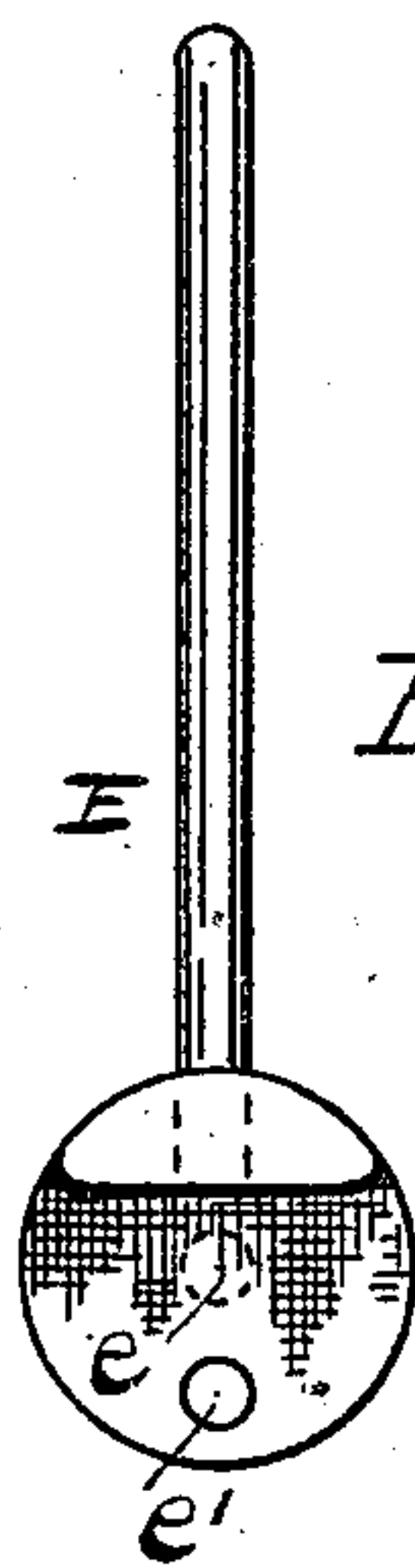
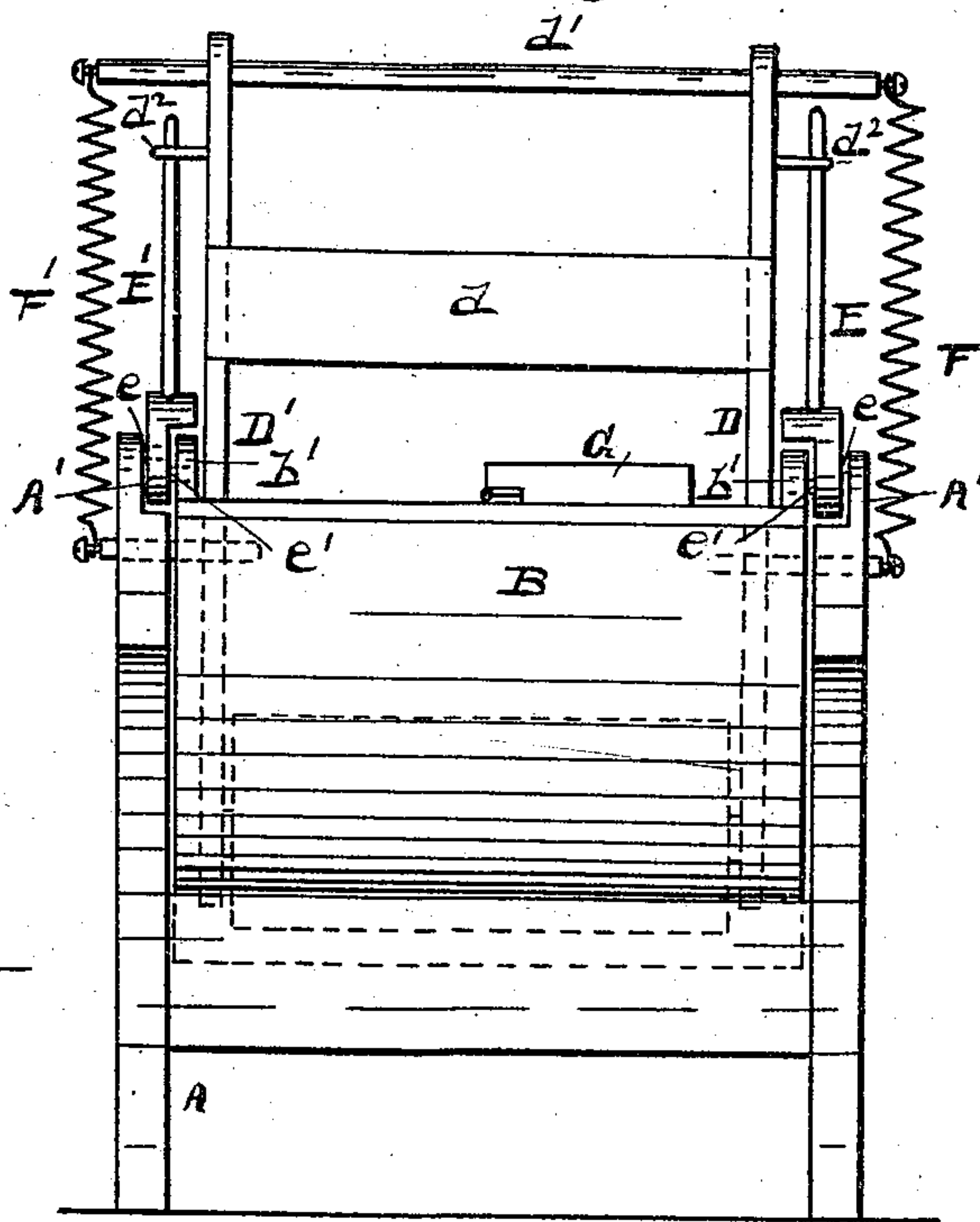
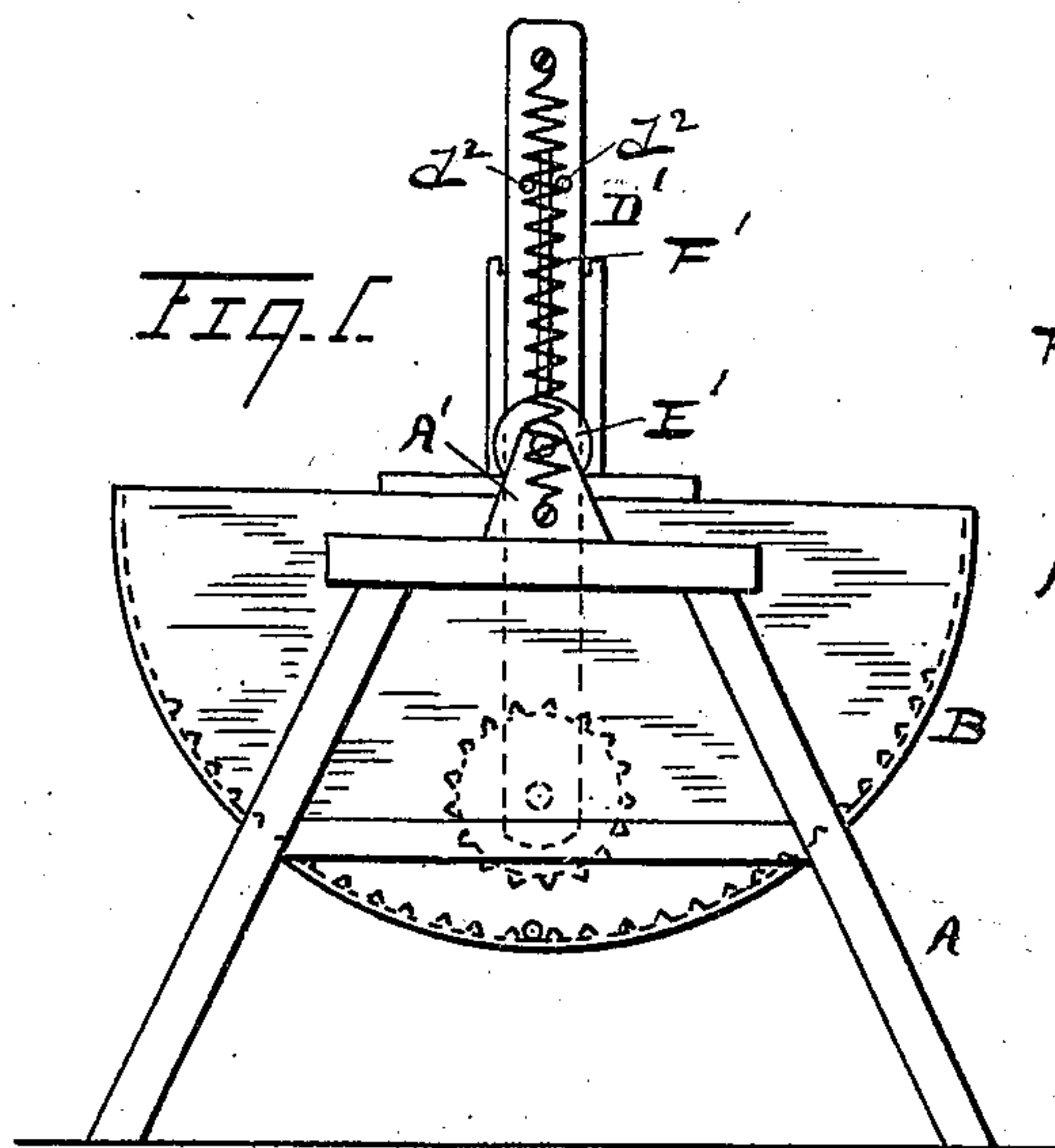
(No Model.)

2 Sheets—Sheet 1.

J. GOEDDEKE.
WASHING MACHINE.

No. 502,961.

Patented Aug. 8, 1893.



Witnesses
John Schuman.
John F. Miller.

Inventor
Joseph Goeddeke.
By his Attorney
Newell S. Wright.

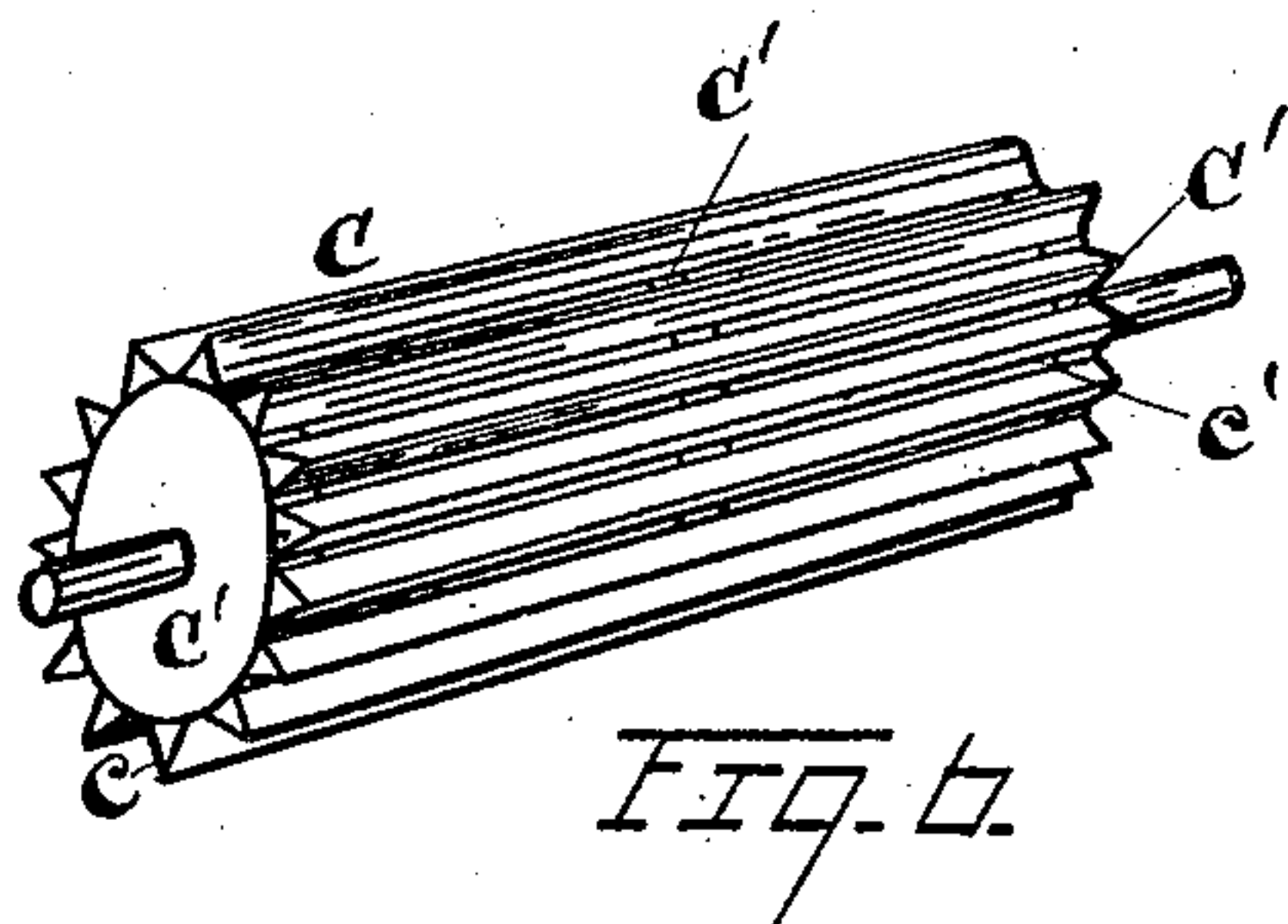
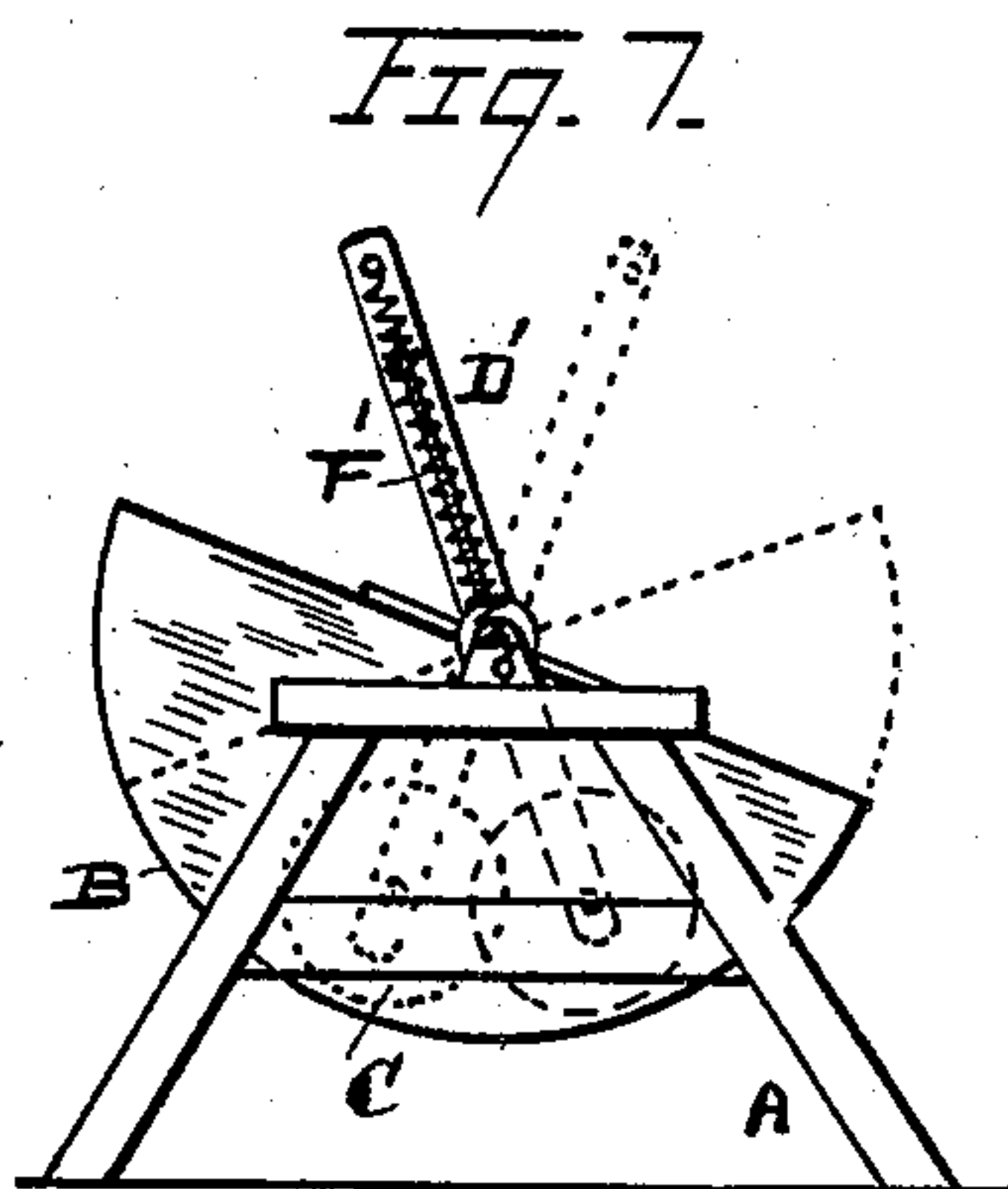
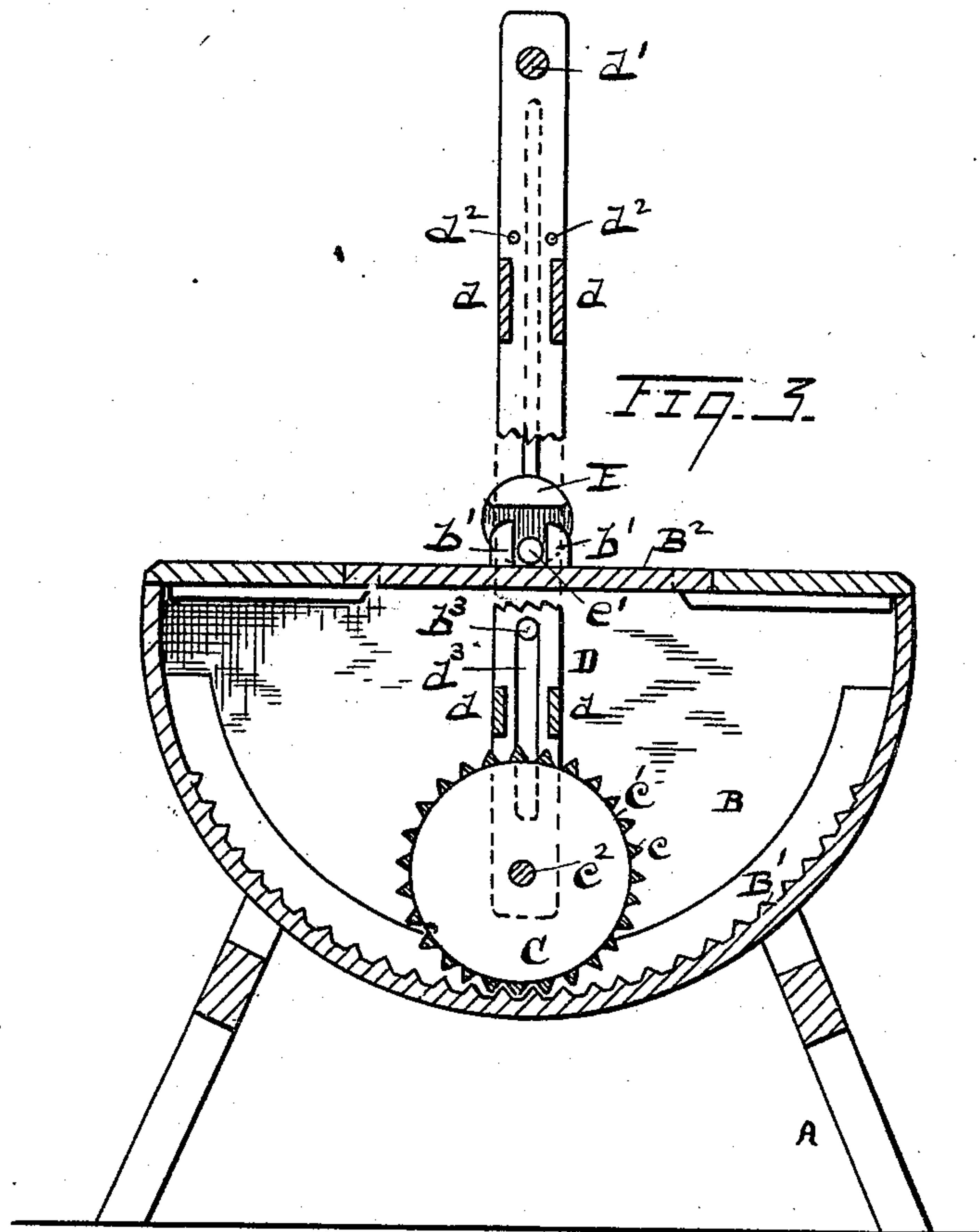
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UNITED STATES PATENT OFFICE.

JOSEPH GOEDDEKE, OF DETROIT, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 502,961, dated August 8, 1893.

Application filed August 31, 1892. Serial No. 444,626. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH GOEDDEKE, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Washing-Machines; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in washing machines, and has for its object to provide a washing machine of simple construction, which shall be easy of operation and of superior efficiency.

To these ends my invention consists of the construction, combination and arrangement of devices and appliances as hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is an end elevation. Fig. 3 is a longitudinal section. Fig. 4 is a separate view of the lever which oscillates the receptacle. Fig. 5 is a detail view showing a part of the cover portion B². Fig. 6 is a separate view of the rubbing cylinder. Fig. 7 is a side elevation, illustrating the oscillation of the apparatus.

I carry out my invention as follows:

A represents any suitable support.

B denotes an oscillatory chamber or receptacle, provided on the interior with a rubbing board B' extending longitudinally thereof on the arc of a circle. In this receptacle the clothes are placed which are to be washed.

C is an oscillatory, rotatable rubbing cylinder suspended within the receptacle B, to engage the clothing between it and the rubbing board B'. The periphery of the rubbing cylinder is made open so as to permit the passage of water therethrough. As shown the rubbing cylinder is constructed of heads C', upon the periphery of which is secured a series of suitably shaped rubbing bars or slats "c," a head being preferably located at each end of the rubbing cylinder and also one intermediate the ends to give it firmness and strength. The bars "c" are separated

one from another, leaving spaces "c'" therebetween. This allows the water to pass freely through the cylinder between the slats as the cylinder is oscillated and rotated over the clothing, thereby facilitating the cleansing of the clothing. The cylinder is journaled in the lower extremities of hanger arms D D' as at "c²," said arms being suitably held together by cross braces "d," and provided with an operating handle or cross bar "d'" at the top thereof.

E E' denote lever arms fulcrumed toward their lower ends as at "e" upon a bracket A' secured upon the support A. These lever arms are upwardly extended, and are engaged toward their upper ends by pins "d²" projecting laterally from the hanger arms D D' on each side of the lever arm, so as to throw the lever arm back and forth simultaneously with the oscillation of the hanger arms D D'.

B² is a portion of the cover of the receptacle B, constructed with an elongated slot "b" at each end through which the hanger arms are extended, and also with upwardly extended shoulders "b'" at each end. The lower end of each of the lever arms E E' is constructed with a pin "e'" engaging between the shoulders "b'" of the cover to oscillate the receptacle A as said hanger arms are oscillated by the operator. I do not however limit myself to this specific means of engaging the lever arms with the hanger arms and with the receptacle, nor to this specific manner of oscillating the receptacle A simultaneously with the oscillation of the rubbing cylinder. It will be perceived that normally the rubbing cylinder C rests upon the rubbing board B', or upon the clothing therebetween, the hanger arms D D' being held in place laterally by the pins "e'" at the lower ends of the lever arms E E', engaging between the shoulders "b'" on the cover B², and by the pins "d²" on the hanger arms, embracing the upper ends of the lever arms E E'. It will also be observed that the engagement of the pins "d²" of the hanger upon the upper ends of the lever arms E E' allows the hanger arms D D' to move upward so that the rubbing cylinder can be adjusted vertically as may be desired, to suit the quantity of clothing being washed. Springs F F' engage the ends of the

operating bar "d'" with the brackets A' to cause a tension of the rubbing cylinder upon the clothing between it and the rubbing board B'. When it is desired to hold the rubbing cylinder in an upward position away from the clothes, as when taking them out, the hanger arms are lifted and a block G, hinged upon the cover B², may be raised into upright position, engaging under one of the cross braces "d," thereby suspending the rubbing cylinder. It will be perceived that since the hanger arms D D' engage the lever arms above the fulcrum of the lever arms as at "d²," and the lever arms engage the receptacle on the opposite side of the fulcrum of the lever arms as at "e'," the receptacle and the rubbing cylinder are oscillated in opposite directions. This construction also enables the rubbing cylinder to rotate and oscillate from one end of the rubbing board B' to the other. Not only does the water pass freely through the rubbing cylinder but as the receptacle A oscillates from side to side the water is thrown from end to end, thoroughly agitating it and carrying out therewith the dirt from the clothing which is rubbed out by contact with the rubbing board on the one side and with the rubbing cylinder on the other side thereof. The rubbing cylinder being rotatable is in no wise liable to do any injury to the clothing in the way of tearing off buttons or doing other damage thereto. It will be perceived that the oscillating rubber or rubbing cylinder oscillates concentric with the rubbing board B'.

As shown in Fig. 3, the hanger arms are constructed toward their lower ends with elongated slots "d³," said slots each receiving a pin "b³" projecting thereinto to assist in holding the hanger arms and rubbing cylinder in proper position relative to the receptacle, and yet allowing the vertical adjustment thereof. In Fig. 3 a part of the hanger arm is shown broken away, in order to illustrate the two shoulders "b'" embracing the pin "e'." I do not limit myself solely to these specific details above described for oscillating the receptacle B and the rubbing cylinder C, as my invention contemplates any suitable means of oscillating said parts in the manner described.

What I claim as my invention is—

1. In a washing machine, the combination, with a support, of an oscillatory receptacle pivotally secured thereto at the sides, an oscillatory lever arm pivotally secured to each side of the support above the pivotal point of the receptacle, the lower end of which engages with the receptacle above the point of support of the latter, an oscillatory vertically movable hanger pivotally secured at each point of support of the receptacle, the upper portion of each of which engages with the upper portion of the lever arm, a handle at the upper end of the hangers, and a rubber jour-

naled in the lower end of the hangers, substantially as set forth.

2. In a washing machine, the combination, with a support, provided with an inwardly projecting pin at each side, an oscillatory receptacle journaled upon said pins, oscillatory lever arms secured to the sides of the support, and to the sides of the receptacle, a slotted, spring actuated hanger pivotally secured upon each of the pins, the upper portion of each of said hangers engaging with the upper portion of said lever arms, and provided with a handle, and the lower ends of said hangers being provided with a rubbing roller, substantially as set forth.

3. In a washing machine, the combination, with a support provided with internally projecting pins at its sides, an oscillatory receptacle journaled upon said pins, an oscillatory lever arm pivotally secured at each side of the support and engaging with the receptacle, a slotted hanger pivotally secured upon each pin, and engaging with the lever arm, a rubber journaled in the lower ends of said hangers, a handle at the upper ends of the hangers the ends of which handle project beyond the hangers, and a spring secured to the projecting ends of the arms and to the outer ends of the pins upon the sides of the support, substantially as set forth.

4. In a washing machine, the combination, with a support, of an oscillatory receptacle pivotally secured therein, the cover of which receptacle is provided with an elongated slot and upwardly extending shoulders at each end, a hanger arm through each slot and pivotally secured within the receptacle, a rubber journaled to the lower ends of said hangers, the upper ends of said hangers being provided with projections upon the outer sides thereof and with a handle, an oscillatory lever arm pivotally secured to each side of the support, the lower end of which engages with the shoulders upon the sides of the cover, and the upper end engages with the projections upon the hangers, substantially as set forth.

5. In a washing machine, the combination, with a support, of an oscillatory receptacle pivotally secured therein, an oscillatory rubber journaled concentrically with said receptacle, the upper ends of which is provided with a handle, and lever arms pivotally secured to the support, the lower ends of which engage with the receptacle and the upper ends engage with the handle of the rubber, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

JOSEPH GOEDDEKE.

Witnesses:

N. S. WRIGHT,
JOHN F. MILLER.