

No. 890,714.

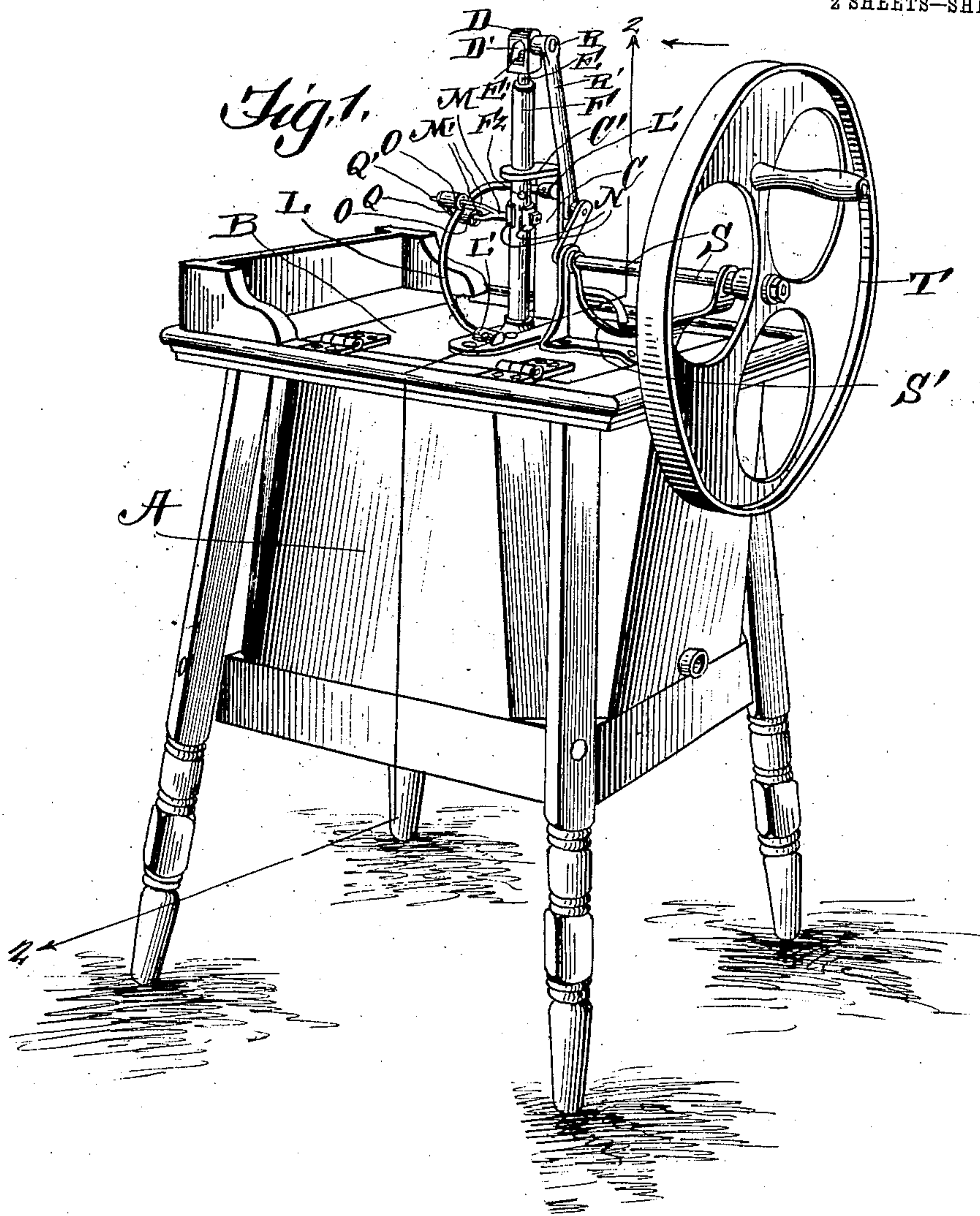
PATENTED JUNE 16, 1908.

A. A. & D. D. RULLMAN.

WASHING MACHINE.

APPLICATION FILED JUNE 12, 1907.

2 SHEETS—SHEET 1.



Witnesses

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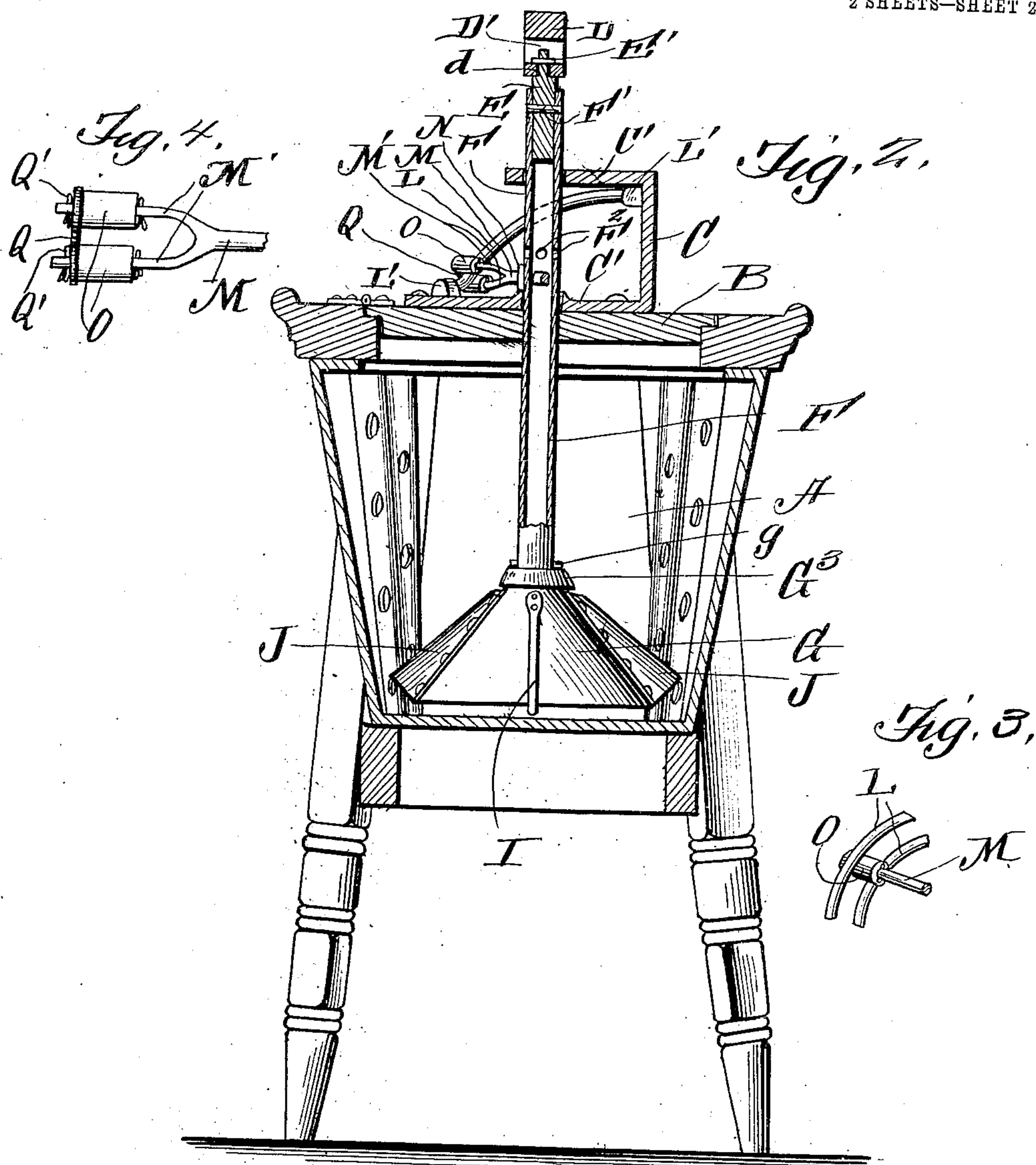
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UNITED STATES PATENT OFFICE.

ADOLPH AUGUST RULLMAN AND DAVID DOUGLASS RULLMAN, OF WATHENA, KANSAS.

WASHING-MACHINE.

No. 890,714.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed June 12, 1907. Serial No. 378,636.

To all whom it may concern:

Be it known that we, ADOLPH A. RULLMAN and DAVID D. RULLMAN, citizens of the United States, residing at Wathena, in the county of Doniphan and State of Kansas, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in washing machines, and the object of the invention is to produce an apparatus of this nature which is simple in construction and affording means whereby clothes may be thoroughly cleansed.

Our invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of our complete machine. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a detail view of a slight modification, and Fig. 4 is a detailed perspective view of part of the apparatus.

Reference now being had to the details of the drawings by letter, A designates the body portion of a machine and B designates a lid or top to which the operative mechanism of the machine is attached.

C designates a bracket having laterally projecting arms C' which are parallel to each other, said bracket being adapted to be bolted or otherwise secured to the lid or top of the washer.

D designates a metallic block having an arched opening D' formed therein and an aperture *d* extends through the bottom of said arched opening and block and through which aperture, a shaft E passes, being held therein by means of the pin E' or other suitable means.

F designates a tubular shaft in which is a reinforcing plug F' which is fastened stationary to the shaft E. By this construction, it will be noted the shaft F also shaft E will have rotary movement independent of the block D in which it is swiveled. Said shaft

F has an aperture F² formed therein through which air is allowed to enter, and, if desired, a plurality of apertures may be formed in the shaft to allow a greater quantity of air to enter.

Fixed to the lower end of the shaft F is a pounder G which is preferably funnel-shaped with a hole in its apex through which said shaft extends. The upper movement of the pounder is limited by means of a conical-shaped washer or stop G³, the upper movement of which is prevented by means of a pin *g* passing through the shaft. It will be noted, therefore, that the pounder is securely held and reinforced upon the shaft by means of said conical-shaped washer.

I, I designate two rods which are bent to form loops and which are fastened to the pounder by means of rivets, as shown.

J designates a half cup-shaped air chute tapering toward its upper end and is attached to the pounder by means of rivets or other fastening means.

L designates a curved rod, the ends of which are fastened in the socket members L' upon said bracket.

M is a forked shaft, passing through an aperture in the shaft F and is held in place by means of the concaved clamping plates N. Said shaft has arms M' upon the contracted portions of which are anti-friction rollers O which are positioned to turn upon opposite sides of the rod L. Said rollers are held upon their bearings by means of the bar Q, which latter is held in place by means of a pin Q'.

Projecting from the swiveled block D is a bearing pin R upon which a pitman R' is pivotally mounted, said pitman being in turn pivotally connected to a crank on the shaft S journaled in the stirrup-shaped bracket S'. A suitable fly wheel T is mounted upon the end of the crank shaft S.

In operation, the block or head D is made to reciprocate by means of the pitman which is actuated by the crank shaft, thereby causing the shaft F to be raised and lowered at any desired height and speed. A direct rotary movement is given to said shaft F by the two anti-friction rollers O which straddle the rod L and contact with the same at positions upon opposite edges thereof, thereby giving a quick and oscillating movement, as well as a reciprocating movement, to the pounder.

When the washer is in operation, the

pounder is raised and lowered at great speed, at the same time rotating it back and forward, turning the clothes over and over so that the pounder will strike a new place each time and forcing the suds and steam through the clothes.

As the receptacle is preferably of octagonal shape with hollow V-shaped pieces in the corners, which reach from the top to the bottom with one or more holes to allow water to pass through, the clothes will be prevented from lodging in the corners and also the peculiar shape of the body of the machine assists in agitating the water.

By the provision of the apparatus shown and described, it will be noted that a great agitation of the water in which the clothes are being washed will be caused by reason of the quick and peculiar movements which are imparted to the pounder, and by having the anti-friction rollers at a distance from the shaft which are adapted to rock, a greater leverage is afforded than would be the case if the anti-friction rollers were nearer to said shaft, and with this leverage the rotation of said pounder is made very light.

What we claim is:—

1. A washing apparatus comprising a bracket having laterally projecting arms adapted to be fastened to the lid of the machine, a curved and inclined rod, the ends of which are fastened in sockets in said bracket, a reciprocating shaft mounted in registering apertures in the lateral projections of the bracket, a pounder at the end of the shaft, a forked member having a shank portion

passing through an aperture in said shaft, means for holding said member to the shaft, anti-friction rollers journaled upon contracted ends of the arms of said forked member and one upon each side of said rod against which they are adapted to contact, and means for reciprocating said shaft, as set forth.

2. A washing apparatus comprising a bracket having laterally projecting arms adapted to be fastened to the lid of the machine, a curved and inclined rod, the ends of which are fastened in sockets in said bracket, a reciprocating shaft mounted in registering apertures in the lateral projections of the bracket, a pounder at the end of the shaft, a forked member having a shank portion passing through an aperture in said shaft, means for holding said member to the shaft, anti-friction rollers journaled upon contracted ends of the arms of said forked member and one upon each side of said rod against which they are adapted to contact, a block to which said shaft is swiveled, a pitman pivotally connected to said block, a crank shaft connected to said pitman, a fly wheel fixed to said crank shaft, and a bracket member in which the latter is journaled, as set forth.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

ADOLPH AUGUST RULLMAN.
DAVID DOUGLASS RULLMAN.

Witnesses:

EMMA MOUIRGUIES,
J. S. LIBEL.