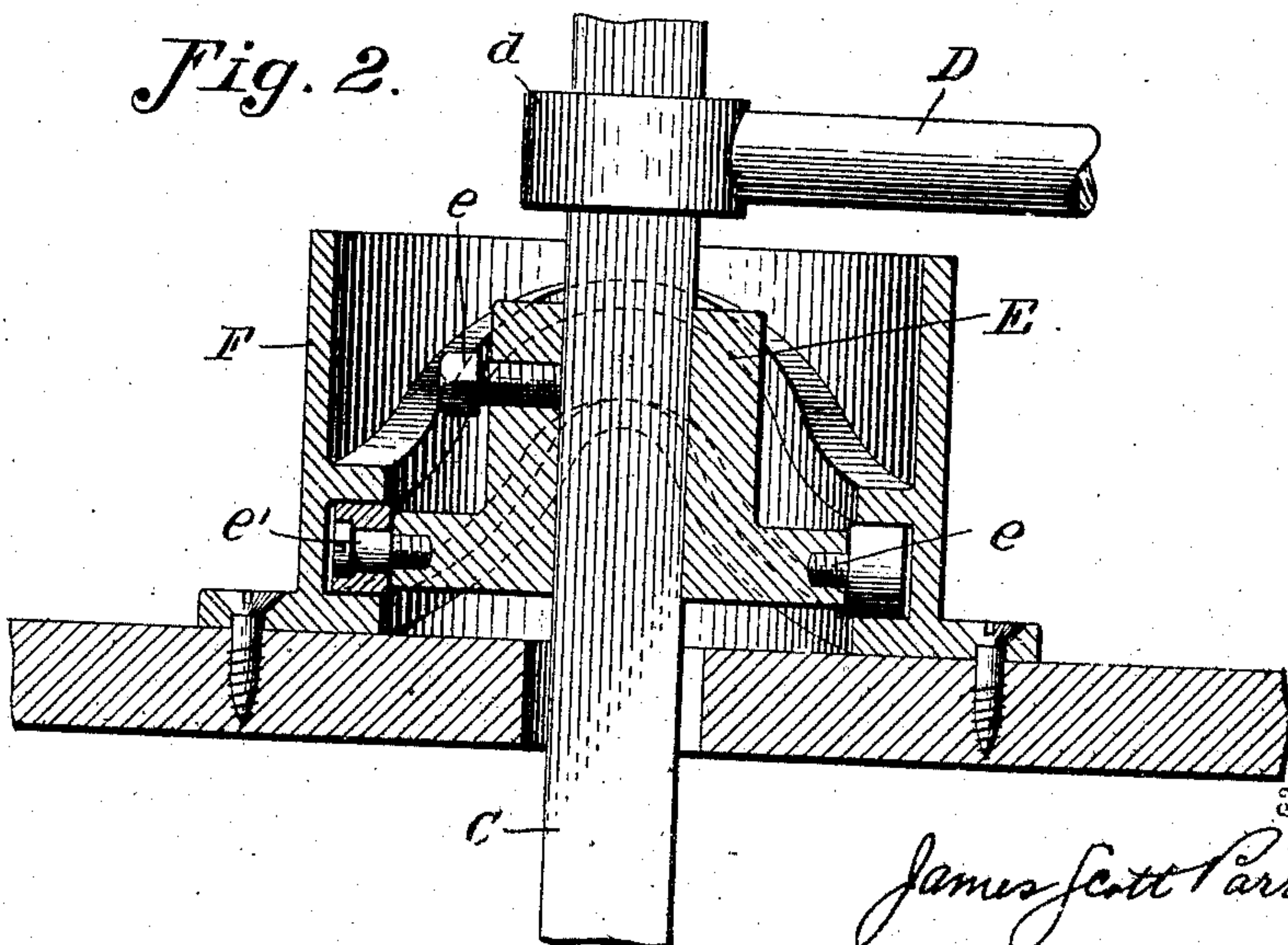
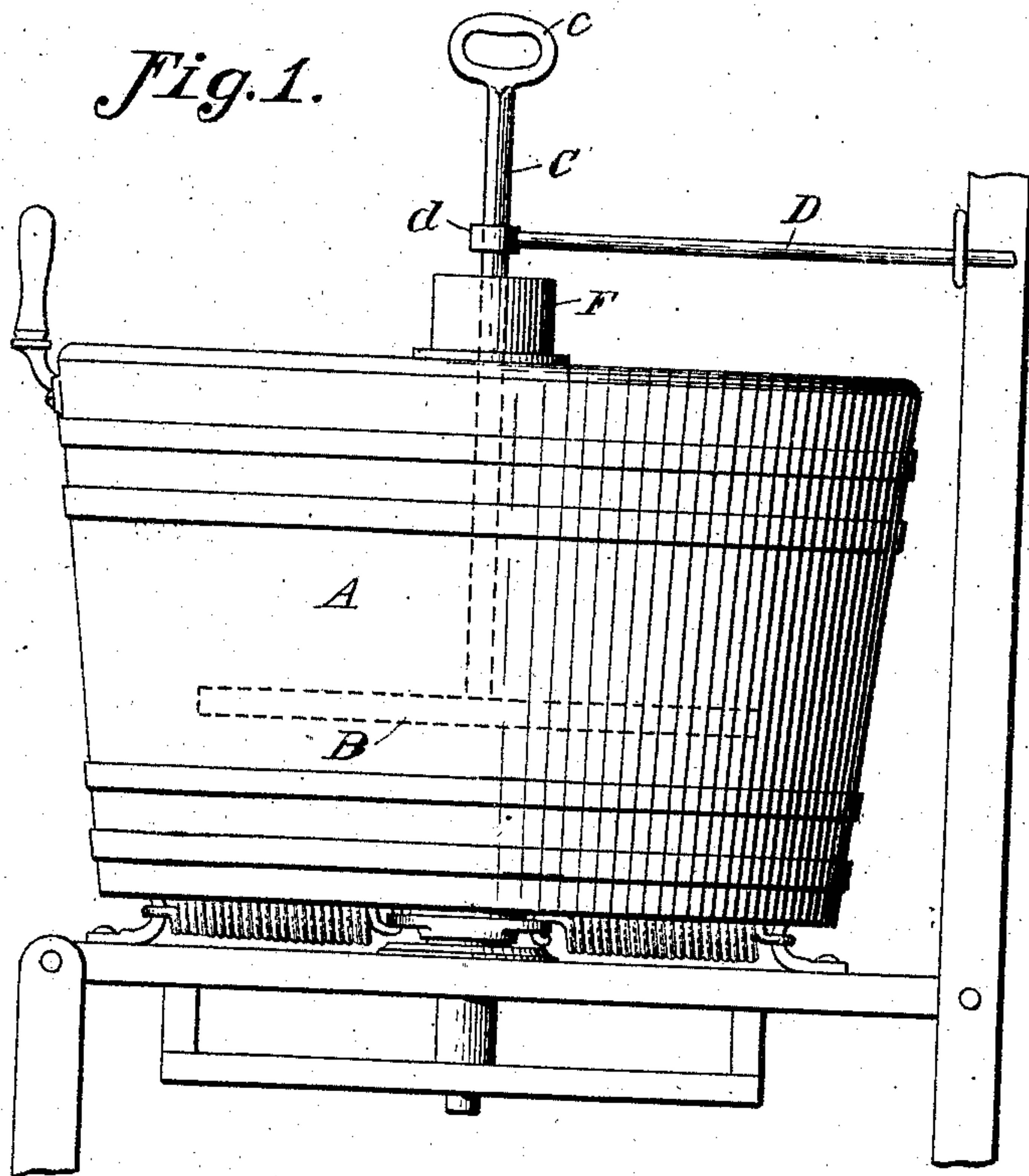


No. 850,539.

PATENTED APR. 16, 1907.

J. S. PARRISH.
WASHING MACHINE.
APPLICATION FILED JAN. 21, 1907.



Witnesses:

A. R. Bridge
R. M. Bishop

By

James Scott Parrish,
Davis & Davis,

Attorneys.

UNITED STATES PATENT OFFICE.

JAMES SCOTT PARRISH, OF RICHMOND, VIRGINIA.

WASHING-MACHINE.

No. 850,539.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed January 21, 1907. Serial No. 353,373.

To all whom it may concern:

Be it known that I, JAMES SCOTT PARRISH, a citizen of the United States of America, and a resident of Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Washing-Machines, of which the following is a full and clear specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of an oscillating-tub washing-machine provided with my improvement. Fig. 2 is a vertical sectional view through the upper part of the cover of tub, showing the manner of connecting the rubber stem or shaft to the cover.

This invention has reference particularly to the oscillating-tub type of washing-machine, in which the tub is rotatably mounted on a vertical pivot attached to its bottom, and the rubber disk inside the tub is held against rotation by means of a stem attached thereto and passing up through the cover of the tub and locked against rotation by means of a rod or bar connected at a convenient point to a stationary part of the frame, the rubber disk or dolly being gravitatingly supported so that it rests upon the body of clothing being washed.

The object of the present improvement is to provide simple means whereby the flat horizontal rubbing disk or dolly shall be automatically and positively moved up and down during the oscillation of the tub back and forth, the tub itself causing this intermittent vertical reciprocation of the disk and its shaft, as more fully hereinafter set forth.

To the accomplishment of this object and such others as may hereinafter appear the invention consists of the parts and combination of parts hereinafter fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, forming a part of this specification, in which the same reference characters designate like parts throughout the several views.

Referring to the drawings by reference characters, A designates the tub, which is rotatably mounted in the usual way and is adapted to be automatically returned at the end of each of its oscillations in opposite directions by means of the usual springs mounted on the tub-support below the tub.

The letter B designates the usual horizontal

rubber mounted in the tub and provided with a shaft or stem C, which is rectangular in cross-section and passes up through the hole in the cover of the tub and is provided at its upper end with a handle *c* for convenience in lifting it when the cover is to be swung open. This angular rod or stem is held against rotation by means of a horizontal rod D, which at one end is detachably connected in a suitable way to a stationary part of the bench and at its other end is provided with a squared head *d*, through which the squared rod loosely passes and by which it is held against rotation.

Affixed to the shaft C of the rubber is a collar E, which may be adjusted up and down and rigidly affixed in its adjusted position by means of a set-screw *e*, this vertical adjustment being for the purpose of enabling the machine to be adapted for batches of clothing of different sizes. Projecting from diametrically opposite points of this collar are a pair of pins *e'*, each of which carries an antifriction-roller. These rollers engage in an internal cam-groove formed in a cast ring F, affixed to the top of the tub-cover.

It will be observed that as the tub is oscillated back and forth the cam plate or ring will through the medium of the collar and its radial arms or pins cause the rubber to regularly rise and fall, thus subjecting the batch of clothing to an alternate squeezing and releasing action in addition to the rotary rubbing action, whereby the cleansing of the clothing will be greatly facilitated without adding materially to the power required to oscillate the tub.

A great desideratum in this class of machines is that the tub shall be rotatable with the least possible expenditure of energy. With my attachment I accomplish the desirable intermittent squeezing of the clothing without adding materially to the friction of rotation, since I avoid bodily raising and lowering the tub to cause the rotation of the tub to transmit to the rubbing-disk the vertical movement desired.

My attachment also enables me to quickly adjust the machine for different batches of clothing, since this adjustment is accomplished simply by loosening the set-screw *e* and then raising or lowering the rubber to the desired point and then securing it at that point.

Having thus fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. In combination with a support, a horizontally-rotatable tub mounted thereon, a
5 rubbing-disk within the tub and provided with a shaft extending up through the cover thereof, means engaging the upper end of this shaft to hold it against rotation, a vertically-adjustable collar on this shaft carrying
10 ing radial pins, and a cam device secured to the top of the tub and engaging said pins, for the purpose set forth.

2. The combination of a support, an oscillating tub having a cover, a rubber in the tub
15 carrying a shaft extending up out through the cover, means engaging this shaft for holding it against rotation, and means for raising and lowering said shaft during the oscillation of the tub, said means consisting of two
20 members one a cam and the other a radial device, one member being on the shaft and

the other on the cover of the tub, for the purpose set forth.

3. The combination of a support, an oscillating tub having a cover, a rubber in the tub
25 carrying a shaft extending up through a hole in the cover, means engaging this shaft for holding it against rotation, and means for raising and lowering said shaft during the oscillation of the tub, said means consisting
30 of a cylinder affixed to the top of the tub and carrying an internal cam, and a radial device attached to said shaft and engaging in said cam, for the purpose set forth.

In testimony whereof I hereunto affix my
35 signature, in the presence of two witnesses, this 19th day of January, 1907.

JAMES SCOTT PARRISH.

Witnesses:

M. F. JAMES,
A. J. BRENT.