

No. 864,583.

PATENTED AUG. 27, 1907.

J. A. WOLFLEY,
WASHING MACHINE.
APPLICATION FILED MAR. 17, 1906.

Fig. 1.

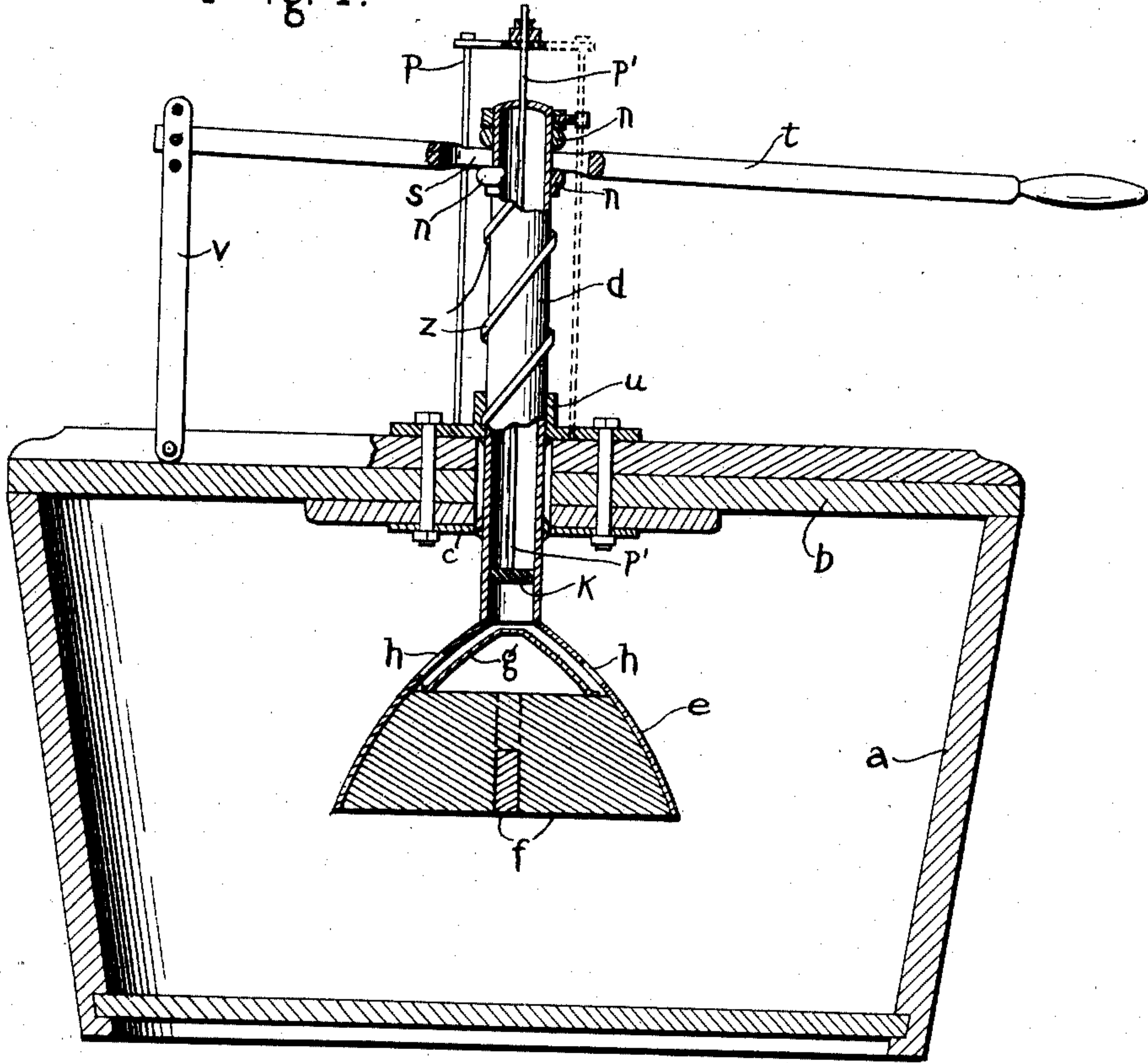


Fig. 2.

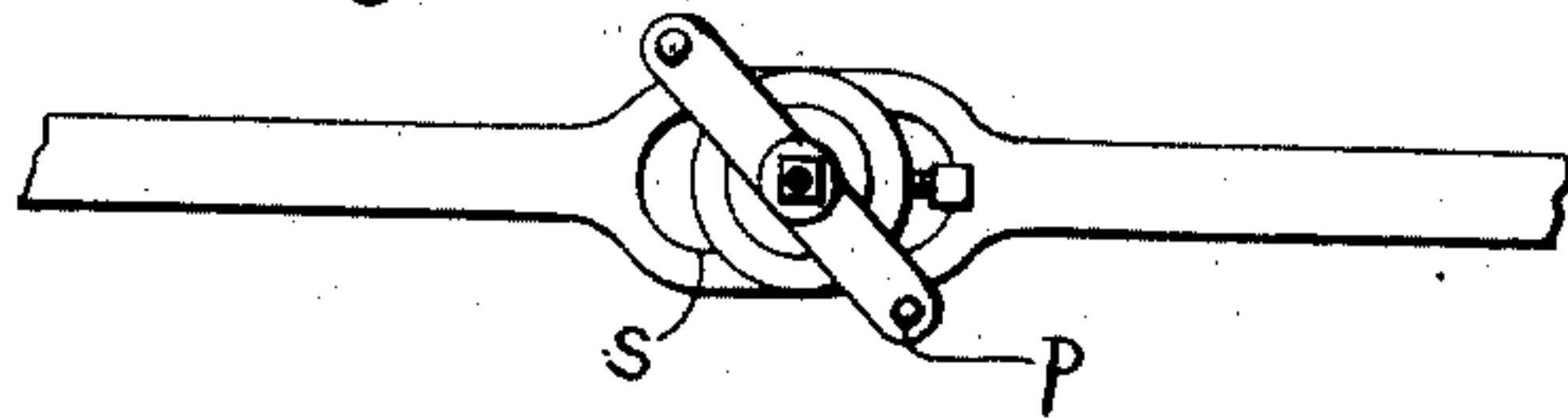


Fig. 3.

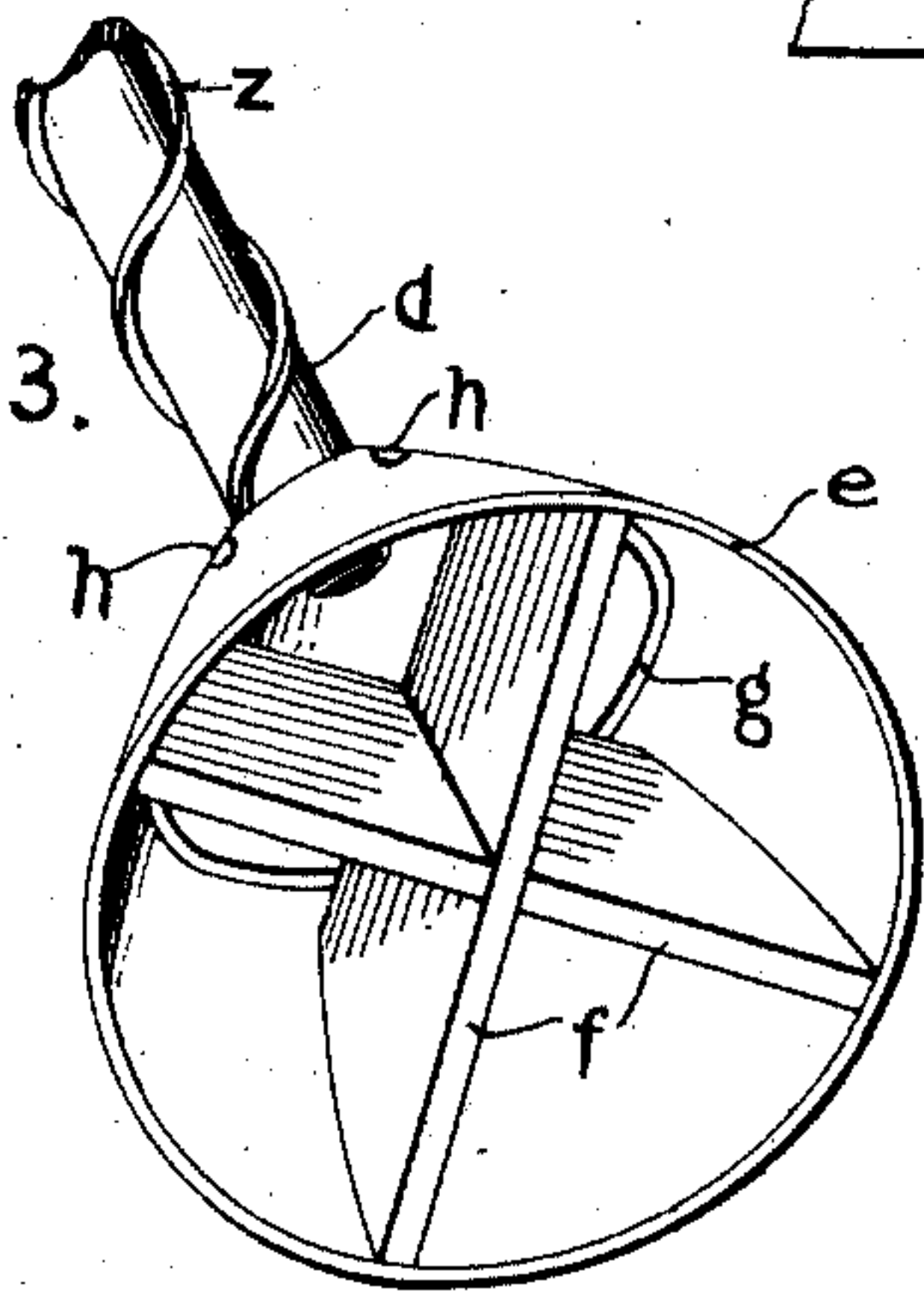


Fig. 4.



Witnesses:

Stuart Hilder.
George M. Anderson.

By

Inventor
Joseph A. Wolfley
C. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

JOSEPH A. WOLFLEY, OF HIAWATHA, KANSAS.

WASHING-MACHINE.

No. 864,583.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed March 17, 1906 Serial No. 306,641.

To all whom it may concern:

Be it known that I, JOSEPH A. WOLFLEY, a citizen of the United States, and a resident of Hiawatha, in the county of Brown and State of Kansas, have made
5 a certain new and useful Invention 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 invention, reference being had to
10 the accompanying drawings, and to letters or figures or reference marked thereon, which form a part of this specification.

Figure 1 is a central vertical section through the washing machine, partly broken away and showing
15 parts in dotted lines. Fig. 2 is a fragmentary detail plan view of the operating lever. Fig. 3 is a detail perspective view of the plunger and a portion of its stem. Fig. 4 is a detail sectional view of the nut *u*.

The object of the invention is to provide an efficient
20 machine for washing clothes, and other articles of textile character, and the invention consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a* designates the tub or receptacle for the clothes and water, and *b*, the cover or lid, which may be secured to the tub by hooks or other suitable fastenings. The center of the lid is perforated to provide a bearing *c* for the hollow stem *d*, of the
30 plunger *e*, which is of conical form, open at the bottom, and is provided with cross arms *f*, which support an interior central cone or boss *g*, the apex of which is just below the open lower end of the hollow stem *d*. This cone *g* is of rounded contour at its upper end
35 and is designed to operate upon the water, which is forced downward out of said hollow stem in the operation of the machine. In the wall of the conical plunger *e* are made openings *h*, opposite the downward and outward sloping side wall of the cone *g*, through which
40 said cone is designed to spatter or spray the water which is forced downward out of the hollow stem *d* by the piston *k*. Upon the cover *b* is secured a frame *p*, which rising above its central portion serves for the attachment of the upper end of a stationary piston rod
45 *p'*, to the lower end of which is secured a suction piston *k*, which is designed to operate within the hollow stem *d*, as the latter is worked up and down by the lever *t*, one end of which is pivoted to the swinging fulcrum arms *v*. The hollow stem is provided at its upper
50 end portion with circular bearings *n*, *n*, which engage the upper and lower surfaces of the slotted portion *s* of the lever, in such a manner that while this stem can

be moved up and down by the lever, it can also have motion of rotation. To the central portion of the lid is secured a nut or threaded bearing *u*, through which
55 the central stem *d* passes, and which said stem engages by means of its spiral thread *z*. As the hollow stem is operated by means of the lever, it is turned by means of the nut, so that it has reciprocating motion of rotation, as well as the reciprocating motion of
60 translation.

The operation of this washing machine is as follows: The clothes being placed in the tub with the suds, and the lid fastened down, the lever is operated to
65 work the hollow stem and the plunger up and down. By this action, the plunger or agitator is caused to beat upon the clothes in the tub, and, at the same time, the rotation of this plunger causes the clothes to be moved about and from the center in a lively manner. As the plunger is pushed down, the piston
70 in its hollow stem, acts as a suction valve to draw the suds up into said stem, and by direct action to discharge a volume of suds through the apertures *h*, and as the plunger rises, the suds in the stem are forced
75 downward against the deflecting cone or spatter boss *g*, which sprays the suds outward through the apertures in the wall of the plunger, upon the articles in the tub.

This machine is thus designed to operate to separate and move about the articles in the tub, and to apply
80 the suds to different portions thereof, in an efficient manner for cleansing purposes.

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

1. In a washing machine, the combination of the cover
85 having a threaded bearing, a plunger having a hollow threaded stem engaging said bearing, a piston and piston rod in said stem, said piston rod having a supporting connection at its upper end with the cover, and means for reciprocating said plunger, said plunger being adapted
90 to receive the water forced out of the hollow plunger and distribute it laterally thereof.

2. In a washing machine, the combination of the cover
95 having a threaded bearing, a plunger having a hollow threaded stem engaging said bearing and provided with bearing rings at its upper end, a stationary piston and piston rod in said stem, said piston rod passing through a perforation of the plunger top, and having a supporting connection at its upper end with the cover, and means for reciprocating said plunger including a lever device having
100 a slotted portion embracing said stem between said bearing rings, said plunger being adapted to receive the water forced out of the hollow stem and distribute it laterally thereof.

3. In a washing machine, the combination of the cover
105 having an opening, a plunger having a hollow stem engaging said opening, a stationary piston and piston rod in said stem, said piston rod having a supporting connection

at its upper end with the cover, and means for reciprocating said plunger and stem, said plunger being adapted to receive the water forced out of the hollow stem and distribute it laterally thereof.

- 5 4. In a washing machine, the combination of the cover having an opening, a plunger having a hollow stem engaging said opening and provided with bearing rings at its upper end, a stationary piston and piston rod in said stem, said piston rod having at its upper end a supporting
10 connection with the cover, and means for reciprocating

said plunger including a lever device having a slotted portion embracing said stem between the bearing rings, said plunger being adapted to receive the water forced out of the hollow stem and distribute it laterally thereof.

In testimony whereof I affix my signature, in presence of 15 two witnesses.

JOSEPH A. WOLFLEY.

Witnesses:

JOHN WHITE,
SAMPLE F. NEWLON.