G. S. NEWSOM.

Washing-Machines.

No. 143,371. Patented September 30, 1873.

Fig. 3.

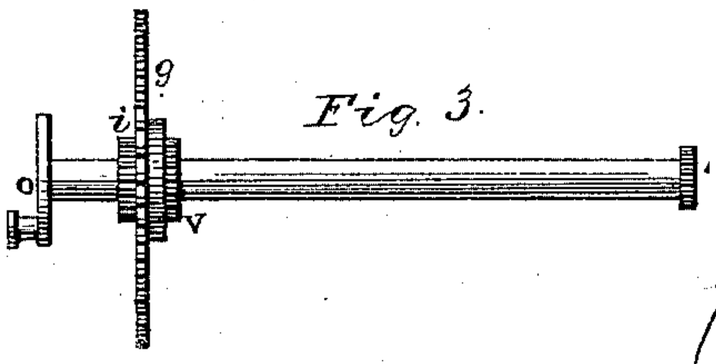

Fig. 1

Fig. 5.

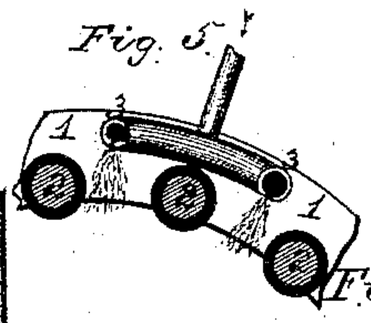

Fig. 4

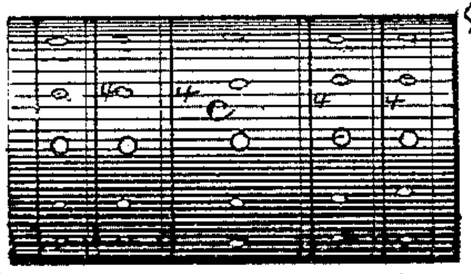

Fig. 2.

WITNESSES.

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GODFREY S. NEWSOM, OF EDGEFIELD, TENNESSEE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **143,371**, dated September 30, 1873; application filed August 1, 1873.

To all whom it may concern:

Be it known that I, GODFREY S. NEWSOM, of Edgefield, county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification:

The nature of my invention relates to an improvement in washing-machines; and it consists in the arrangement and combination of parts which will be more fully described hereafter.

The accompanying drawings represent my invention.

a represents a rectangular box, having an elevated backward extension, upon which the operating parts are supported, as shown in Fig. 2, so that no water will be in the rear of the large perforated roller *c*, upon which the clothes are washed. Upon the end of the driving-shaft *d*, which may be operated either by hand or power, is placed a lantern-wheel, *e*, which gears with the large spur-wheel *g* placed upon the end of one of the rollers, for pressing out the water from the goods after they have been washed. Outside of this wheel is placed a pinion, *i*, on the same shaft, which meshes with the spur-wheel *j*, and causes the hollow perforated roller *c* to slowly revolve. Upon the top or upper rear side of this roller is placed a circular roller-frame, 1, held down in position by a number of friction-rollers, and to which are secured a number of rollers, 2, which have their pressure upon the roller *c*, regulated by a set-screw and spiral spring. This frame is caused to reciprocate back and forth by an eccentric, *l*, placed upon the driving-shaft *d*, and connecting-rod *n*, so that as the goods are passing between the rollers they will be thoroughly rubbed, the roller *c* being made hollow and perforated, so that the water pressed and rubbed out of the clothes will escape downward through it into the box below. Upon the end of the shaft to which the wheels *g i* are secured is a crank, *o*, which operates the plunger of the pump *p*, drawing the water from the front end of the box, through a filter, *r*, of any suitable kind, and forcing it through a pipe, up along the side of the box into the two slotted pipes 3, placed between the rollers 2 in the circular frame 1. As this water is forced through the pipes with considerable power the streams from the slots strike the clothes and wash out the dirt, which has been loosened by the action of the rollers. As the water runs back into the box it first runs into the compartment *s*, which is divided off from the box by means of a sliding frame, *t*, covered with flannel or other straining material, so as to strain the dirty water before it again mingles with the clean water in the box. By means of this strainer, after the water has once come in contact with the clothes and become defiled, it never again touches them in the same condition, but is purified as often as it is used.

In the surface of the hollow roller *c* there are a number of grooves made, in which are fitted the brass rods 4, which extend backward over the top, and have their rear ends turned outward, and extending into the slots or grooves formed in the surface of the roller *u*. By having the ends curved outward in this manner, the clothes are made to leave the roller at the proper point, instead of continuing on down, and by extending into the grooves of the roller *u* the clothes are prevented from choking them up and winding on around it. This roller is caused to rotate by the cog-wheel 5 upon its end, which meshes with the pinion *v* on the same shaft as the wheels *g i* and crank *o*, and acts as a guide to conduct the clothes to the two presser-rolls 6, the grooves serving to allow the water to escape downward into the box beneath. The two presser-rolls 6—the lower one being rubber, and the other metal or hard wood—are geared together, and have their pressure upon the clothes regulated in the usual manner, and are used for pressing the water out of the clothes after being washed. Just in the rear of the rollers is placed a broad plate, 7, which extends up and touches the lower elastic roller, and prevents the clothes from winding around it after being pressed. Above the upper hard roller is secured a plate, 8, which prevents the water from the clothes from passing over the top of the roller. Above the top of the large perforated hollow roller is placed a soap-box, 9, having a slot cut in its side, and provided with a suitable slide or cut-off, through which the soft soap drips upon the clothes below before they pass under the elastic rollers of the washing-frame.

Having thus described my invention, what

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

1. The combination of the box *a*, provided with an elevated extension for support of operating mechanism, with roller *c*, and operating mechanism substantially as set forth, all arranged and operating to keep the goods being washed elevated above the sediment or "dirty suds" that settle at the bottom of compartments *s* and *a*.

2. In a washing-machine, the hollow perforated grooved cylinder *c*, upon which the clothes are rubbed, substantially as set forth.

3. In a washing-machine, the rods 4, permanently attached at one end, passing over the cylinders *c* and *u*, as and for the purpose set forth.

4. The combination, in a washing-machine, of the force-pump *p*, provided with induction and eduction pipes, with perforated pipes 3 3, substantially as shown and described.

5. The shaft *d*, eccentric *l*, connecting-rod *n*, and frame 1, in combination with cylinder *c*, substantially as set forth.

6. The combination, in a washing-machine, of the wash-frame 1, having rollers 2, with the cylinder *c*, substantially as shown and described.

7. The combination of the rollers *c u* 6, and rods 4, substantially as described.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 17th day of July, 1873.

GODFREY S. NEWSOM.

Witnesses:
W. C. COOK,
M. O. QUADE.