

UNITED STATES PATENT OFFICE.

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WASHING-MACHINE.

964,106.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID L. HOUGH, a citizen of Canada, and residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

This invention relates to a machine which is more particularly designed for washing small pieces of fabric such as napkins, 10
diapers and handkerchiefs and has the object to produce a machine of simple, durable and inexpensive construction whereby articles of this character may be washed, quickly, 15
conveniently and thoroughly.

In the accompanying drawings: Figure 1 is a vertical section of my improved washing machine. Fig. 2 is a horizontal section thereof in line 2—2, Fig. 1. Fig. 3 is a frag- 20
mentary vertical section, on an enlarged scale, of the rack which receives the articles to be washed.

Similar letters of reference indicate corresponding parts throughout the several views.

25 A represents the tank or washing chamber of the machine which is preferably constructed of sheet metal in the form of an upright cylinder. Near its top the tank is provided with a water supply or inlet nozzle *a* which 30
may be connected with a supply pipe B containing a valve, if desired, for supplying the tank either intermittently or continuously with water. From the lower end of the tank the water is discharged either intermittently 35
or continuously through a drain or outlet nozzle *c* which may be opened or closed by a plug or stopper C arranged on the inner side of the tank and having a handle *d* reaching to the upper part of the tank for convenience 40
in manipulating the outlet stopper.

E represents a cover which closes the top of the tank and which has a central opening *e*. This cover is preferably divided into two parts, the line of division extending 45
through said opening *e* and two sections of the cover being hinged individually to the tank, as shown at *e*¹.

The articles to be washed are soused up and down in the water in the tank by means of a 50
pounder comprising a horizontal rack F which is moved vertically in the tank by a vertical shifting or supporting rod G passing through the central opening in the cover and connected at its lower end with the 55
center of the rack while its upper end is provided with a handle *g* for manipulating the

same. The rack is preferably of circular form and provided with a plurality of radial inwardly tapering slots *h*, *h*¹ which are adapted to receive the articles to be washed. 60
These articles are fastened to the rack by pushing the same from the wide to the narrow parts of the slots therein, whereby the articles are gripped by the rack and caused to move up and down with the same. Inas- 65
much as the marginal part of the rack is of greater area than the central part, the slots *h*¹ are made long and other slots *h* short, and these long and short slots alternate circum- 70
ferentially, thereby utilizing the entire area of the rack for washing purposes. For further securing the articles to be washed to the pounder the upper end of each article is slipped over one of a plurality of hooks *i* 75
arranged on the supporting rod above the rack and in order to confine these articles on the hooks and in the narrow ends of the slots the same are engaged on their outer sides between the hooks and rack by a retaining ring J which is slipped over said articles 80
from the top. When thus secured to the pounder the articles may be freely dashed up and down in the water of the tank without danger of becoming detached therefrom. 85
During this dashing of the articles, the dirt on the same is loosened and washed off and carried away by the water through the drain of the tank.

After a batch of articles has been washed the pounder is removed from the tank with 90
the articles and after the latter have been replaced by another unwashed lot of articles the pounder is again placed in the tank.

The edges *h* of the slots in the rack are preferably beveled, so that these slots or 95
openings flare downwardly, as shown in Figs. 1 and 3, thereby preventing undue splashing of the water as the pounder is pushed downwardly but causing the water to be directed upwardly through the rack in 100
proximity to the articles, whereby the cleaning of the same is expedited.

I claim as my invention:

1. A washing machine comprising a tank adapted to receive water, a circular hori- 105
zontal rack movable vertically in said tank and provided with laterally extending slots adapted to receive the articles to be washed, and fastening means movable with said rack and arranged above said slots and adapted 110
to hold said articles.

2. A washing machine comprising a tank

adapted to receive water, a movable rack arranged in the tank and provided with slots adapted to receive the articles to be washed, a support which carries said rack, and a plurality of hooks arranged on said support and adapted to be engaged by the articles to be washed.

3. A washing machine comprising a tank adapted to receive water, a movable rack arranged in the tank and provided with slots adapted to receive the articles to be washed, a support which carries said rack, a plurality of hooks arranged on said support and adapted to be engaged by the articles to be washed, and a ring adapted to engage with said articles between said rack and said hooks.

4. A washing machine comprising a tank

having a water inlet at its upper end and a water outlet at its lower end, a cover closing the top of the tank and provided with an opening, an upright rod movable vertically in said opening and provided above the cover with a handle, a rack arranged on the lower end of said rod within the tank and provided with slots which receive the articles to be washed, hooks arranged on said rod above the rack and adapted to receive said articles, and a ring adapted to engage said articles between the rack and hook.

Witness my hand this 25th day of August, 1909.

DAVID L. HOUGH.

Witnesses:

THEO. L. POPP,
ANNA HEIGIS.