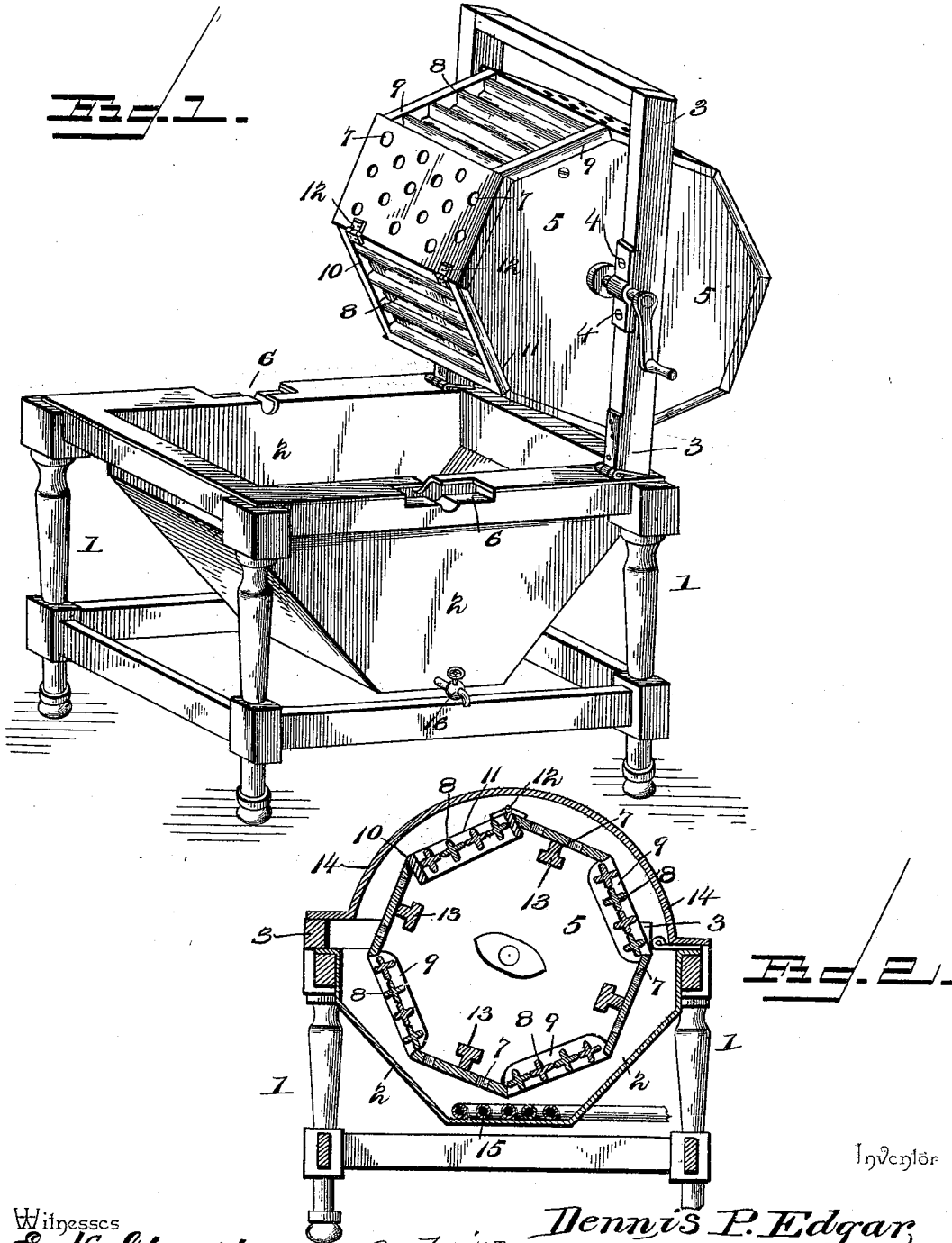


(No Model.)

D. P. EDGAR.
WASHING MACHINE.

No. 520,771.

Patented June 5, 1894.



Witnesses
C. S. Stewart
N. W. Riley

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UNITED STATES PATENT OFFICE.

DENNIS P. EDGAR, OF JACKSON, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 520,771, dated June 5, 1894.

Application filed October 11, 1893. Serial No. 487,841. (No model.)

To all whom it may concern:

Be it known that I, DENNIS P. EDGAR, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing machines.

The object of the present invention is to improve the construction of washing machines, and to provide a simple and efficient one, capable of rapidly and thoroughly washing clothes without wearing, tearing or otherwise injuring the fabrics.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a washing machine constructed in accordance with this invention, the cover being removed, and the washing cylinder being swung back. Fig. 2 is a longitudinal sectional view of the same, the parts being in operative position.

Like numerals of reference indicate corresponding parts in both figures of the drawings.

1 designates a rectangular stand, supporting a tank or washing machine body 2 and having hinged to it at one end a rectangular frame 3, which is provided at opposite sides with bearing plates 4 receiving the journals of a rotary washing cylinder 5. The rotary washing cylinder is preferably octagonal or of other polygonal form, and the body or tank 1 is provided with inclined ends and it conforms to the general configuration of the washing cylinders. The frame 3 is adapted to be swung upward and rearward past a vertical position for supporting the washing cylinder clear of the body 2; and the stand 1 has its upper side bars recessed at 6 to receive the projecting portions of the bearing plates to enable the hinged frame to fit snugly upon the stand when the parts are in operative position. One of the journals of the washing cylinder is extended and has attached to it a crank handle, by means of which the washing machine is operated.

The periphery of the washing cylinder consists of alternately arranged perforated plates 7 and series of fluted or corrugated rolls 8, which are journaled between bars 9. One of the series of rollers is journaled in a rectangular frame 10 which is arranged at an opening or entrance 11 of the cylinder, and is hinged at 12 at one side thereof, and is provided at the opposite side of the opening with a catch for securing it in position. The corrugated rolls form series of rubbing surfaces against which the clothes, during the rotation of the cylinder, are brought in contact. The clothes being washed are prevented from collecting in a ball by transversely disposed clothes separators and lifters 13, which are secured to the inner faces of the perforated plates 7, and which extend inward into the cylinder. These clothes separators and lifters are T-shaped in cross-section and form double buckets for lifting water and causing the same to fall with considerable force upon the clothes being washed. The rotation of the cylinder agitates the water within the tank or body 2 sufficiently to force the same through the clothes to dislodge the particles of dirt; and by this means the finest fabrics and delicate laces may be rapidly and thoroughly washed without injury.

During the operation of the machine, the upper portion of the washing cylinder is arranged within a removable cover 14, which forms a hood for retaining the steam and heat.

The water in the tank may be heated by any suitable means, but in large machines the heating is preferably effected by the use of coils of pipe 15 which are designed to communicate with a suitable source of steam or hot air.

A faucet 16 is provided for drawing off the water of the body or tank; and when the water runs clear it indicates that the clothes are thoroughly washed.

It will readily be apparent that the washing machine is simple and comparatively inexpensive in construction and that it is capable of rapidly and thoroughly effecting the operation of washing with a minimum amount of labor and without injury to the clothes.

Changes in the form, proportion and the minor details of construction may be resorted

to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

- 5 1. In a washing machine, a washing cylinder of polygonal shape provided at its periphery with perforated rectangular plates, and having at the intervals between the plates corrugated rolls arranged in series and forming rubbing surfaces at the interior of the washing cylinder, one of said series of rolls being mounted in a hinged frame to form a door to provide access to the cylinder, substantially as described.
- 10 2. In a washing machine a polygonal washing cylinder provided with perforated rectangular plates arranged at intervals, series of corrugated rolls arranged transversely in

the intervals between the plates, and the inwardly extending transversely disposed T-shaped clothes lifters and separators secured to said plates, substantially as described. 20

3. In a washing machine, a washing cylinder of polygonal shape provided at its periphery with perforated rectangular plates, and having at the intervals between the plates, corrugated rolls arranged in series and forming rubbing surfaces on the interior of the washing cylinder, substantially as described. 25

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 30

DENNIS P. EDGAR.

Witnesses:

A. F. FREEMAN,
JAMES KELLY.