

S. NEEDLES.  
WASHING-MACHINE.

No. 192,705.

Patented July 3, 1877.

Fig. 1.

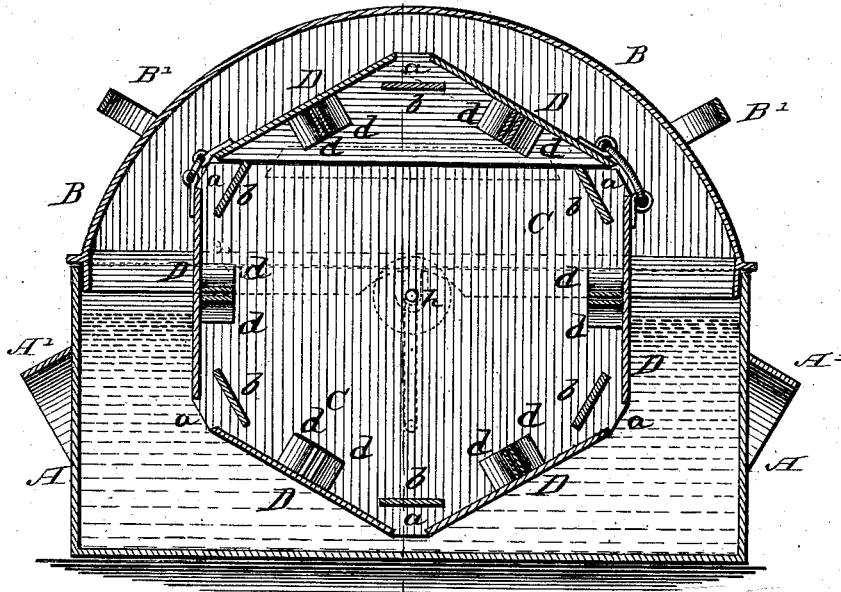
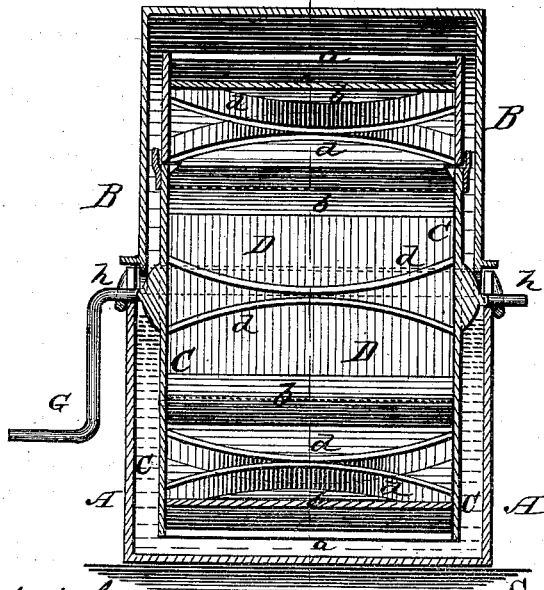


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

SIMGESMER NEEDLES, OF HOLDEN, MISSOURI, ASSIGNOR OF ONE-HALF HIS RIGHT TO W. M. COVENTRY, OF SAME PLACE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **192,705**, dated July 3, 1877; application filed April 30, 1877.

*To all whom it may concern:*

Be it known that I, SIMGESMER NEEDLES, of Holden, in the county of Johnson and State of Missouri, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a washing-machine, as will be hereinafter more fully set forth.

In the annexed drawing, which fully illustrates my invention, Figure 1 is a central vertical section, and Fig. 2 is a transverse section, of my invention.

A represents the boiler of the washing-machine, made of any suitable dimensions, and provided with a semicircular lid or cover, B. The boiler A and lid B are provided, respectively, with suitable handles A' and B'.

Within the boiler is placed a rotating cylinder, composed of two hexagonal heads, C C, connected by plates D D. The corners of the heads C C are cut off, and the plates D extend only to ends of the slides thus cut off, leaving openings *a a* between said plates. In other words, the entire cylinder is of hexagonal form, and has the corners cut off to form said openings *a a*.

Within the cylinder thus formed, and directly opposite each opening *a*, is fastened a narrow plate or strip, *b*, as shown; and in the center, on the inner side of each plate D, are secured two curved flanges, *d d*, which curve in opposite directions, the backs of said flanges being fastened together and the ends fastened to the hexagonal heads C. These flanges form or act as buckets to carry up the water while turning the cylinder in either direction, the

water passing in and out of the cylinder around the strips *b*, through the openings *a*. The strips *b*, opposite these openings, serve a twofold purpose: one to act as breakers to prevent the too rapid escape of the water, and also to prevent the clothes from clogging up said openings.

The heads C C are on their outer sides in the center provided with projecting journals *h h*, which lie in notches made in the sides of the boiler A, and one of them provided with a crank, G, by means of which the cylinder is rotated; or ears may be attached to the sides of the boiler for the reception of the journals, and the sides of the cap slotted to pass over the same.

A part of the interior cylinder, constructed as above described, is cut off and hinged to the main part to form a door through which the clothes may be put in and taken out as required. This door is hinged at one end and fastened at the other by suitable hooks.

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

1. The rotating hexagonal cylinder C D, formed with the corner-openings *a a*, and provided on the inside with the strips *b*, and curved flanges *d*, substantially as and for the purposes herein set forth.

2. The combination of the boiler A, the semicircular cover B, and the hexagonal rotating cylinders C D, provided with corner-openings *a* and interior strips *b*, and curved flanges *d*, and supported on journals *h*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SIMGESMER NEEDLES.

Witnesses:

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