

(No Model.)

W. V. LAWLOR.
WASHING MACHINE.

No. 339,065.

Patented Mar. 30, 1886.

Fig. 1.

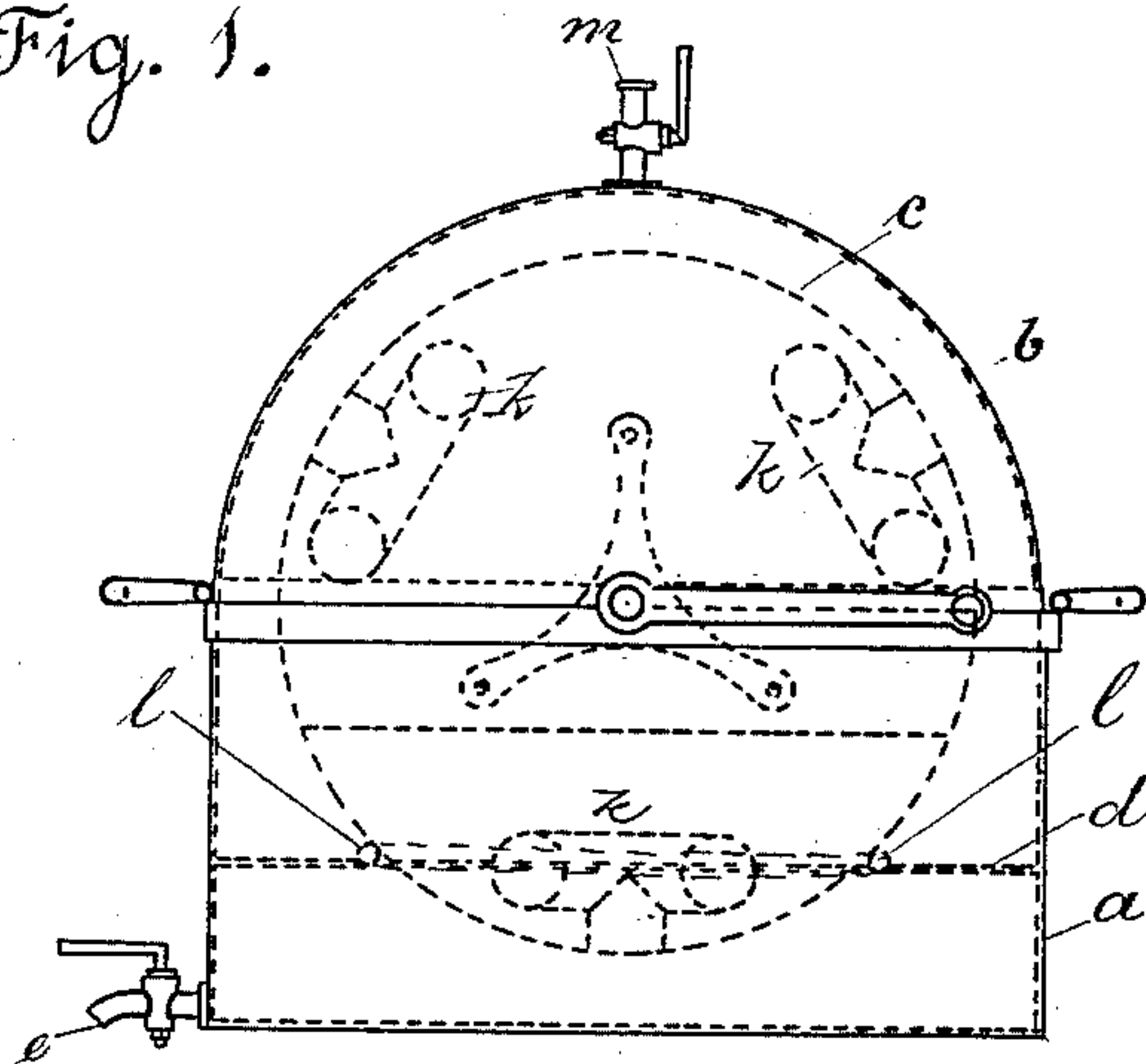


Fig. 8.

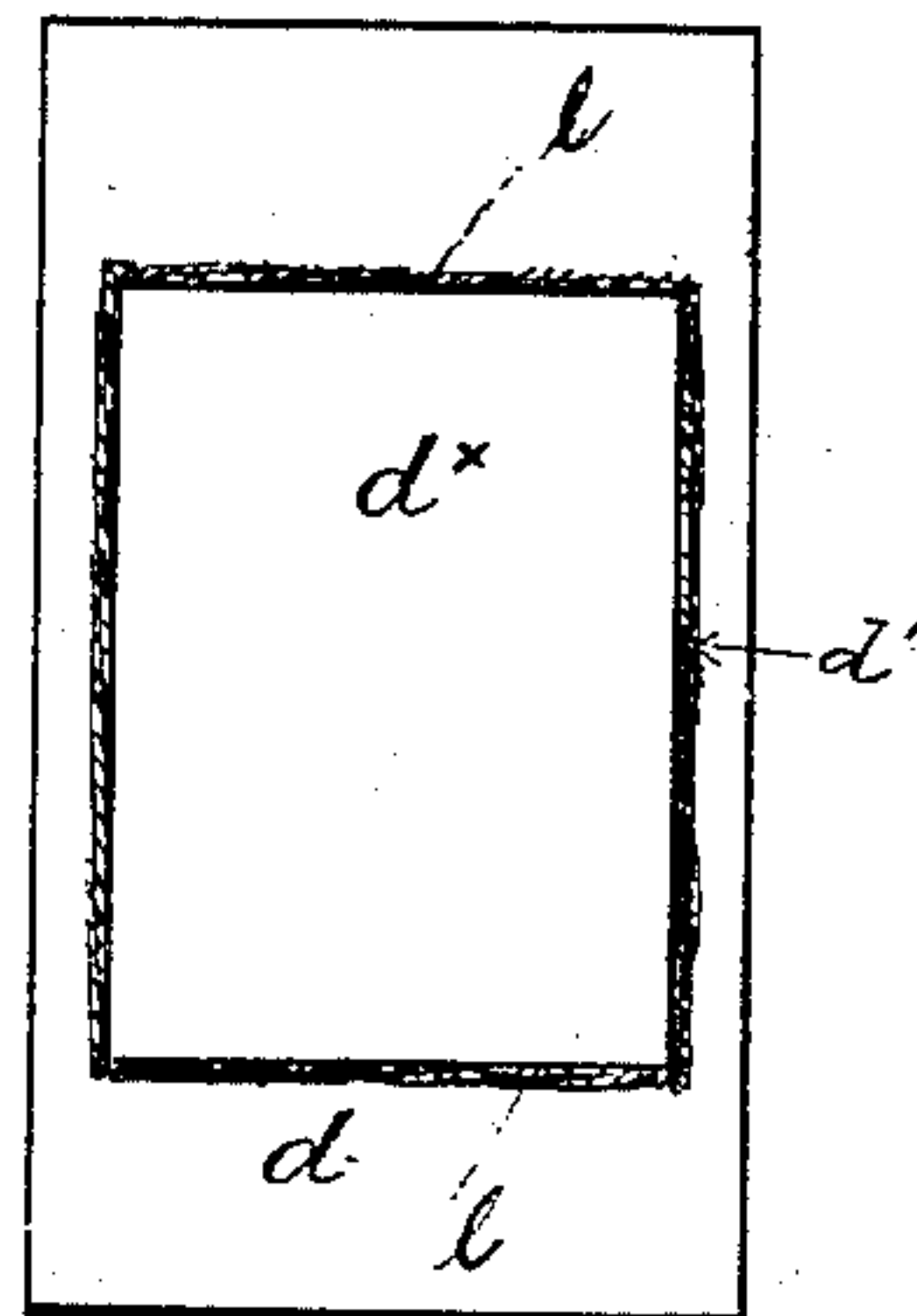


Fig. 2.

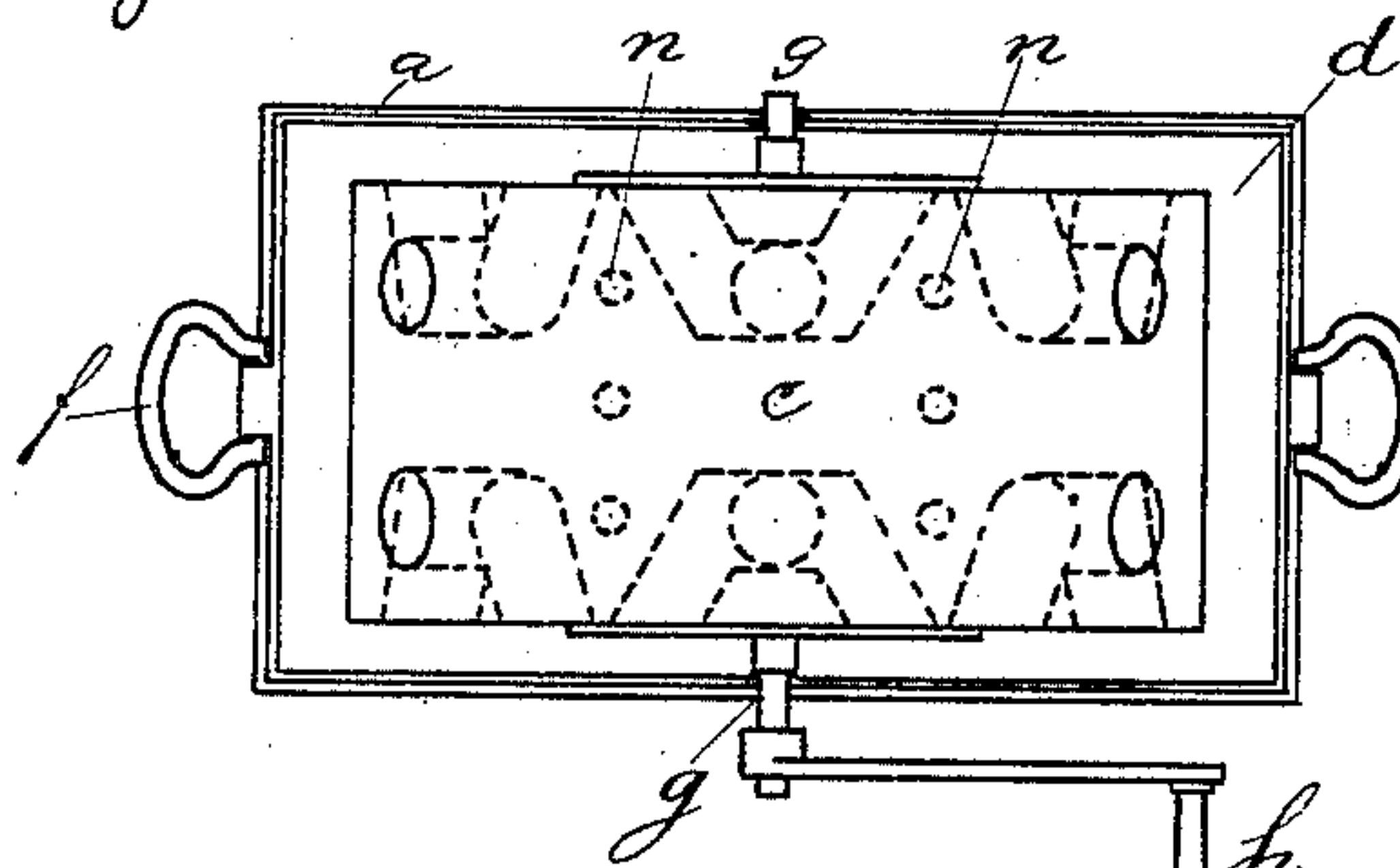


Fig. 7.

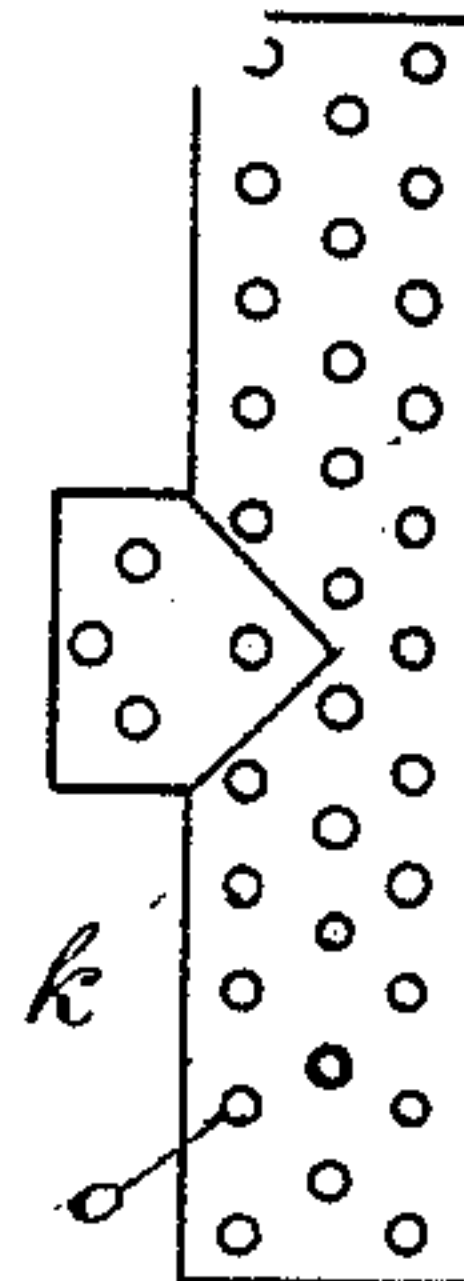


Fig. 3.

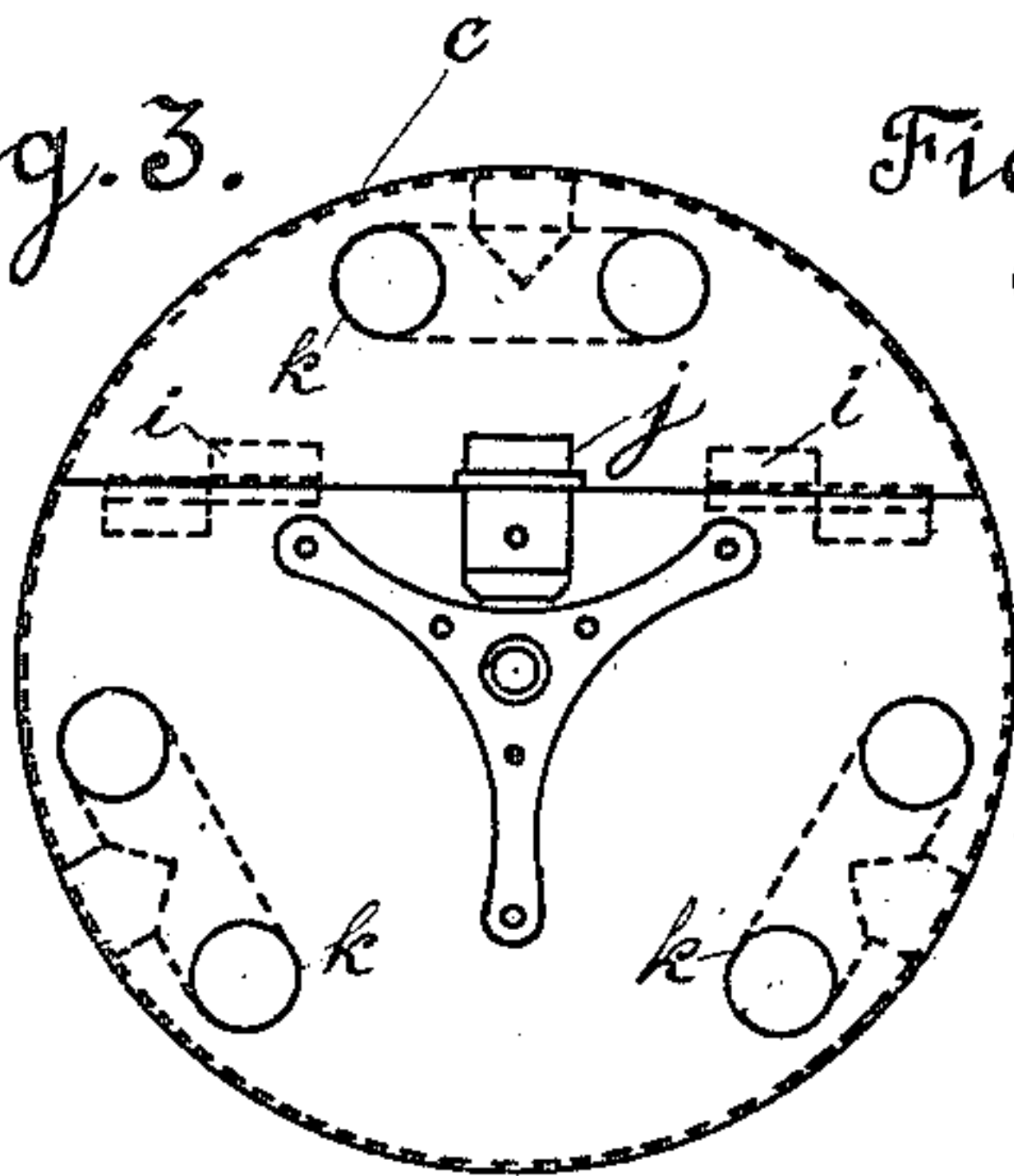


Fig. 4.

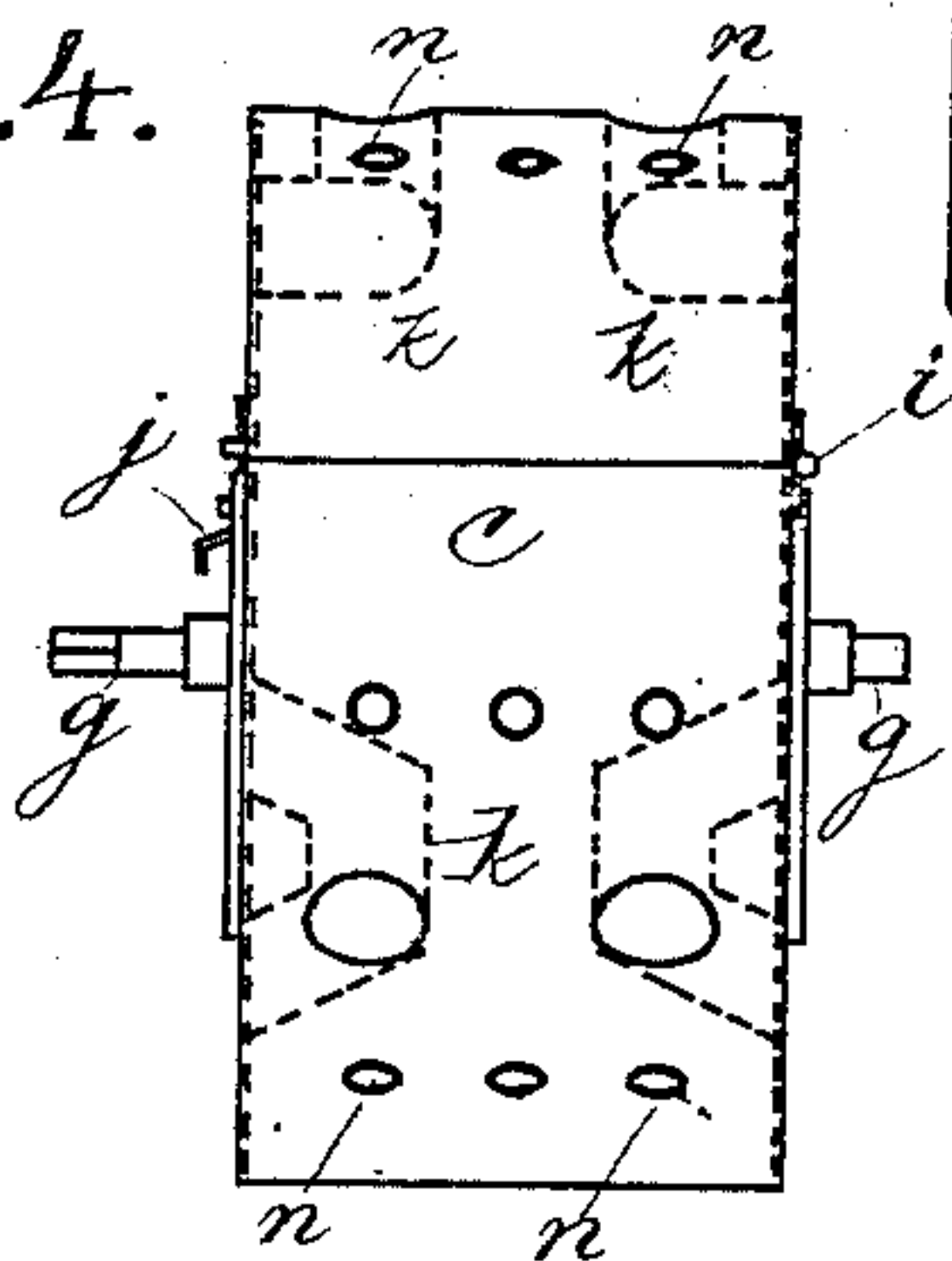


Fig. 5.

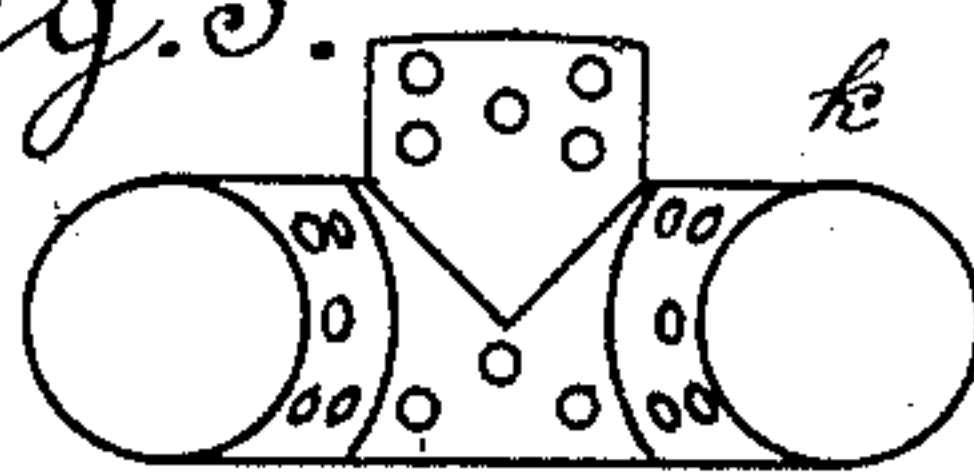
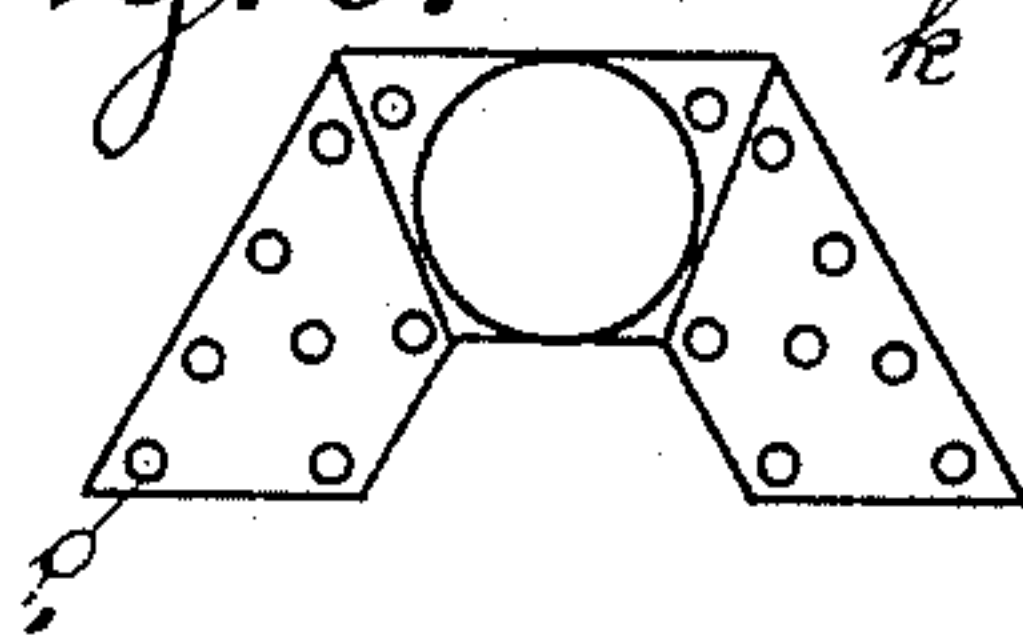


Fig. 6.



Witnesses:

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WILLIAM V. LAWLOR, OF SAN FRANCISCO, CALIFORNIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 339,065, dated March 30, 1886.

Application filed March 5, 1885. Serial No. 157,811. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. LAWLOR, a resident of San Francisco, State of California, have invented an Improved Washing-Machine; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings.

My invention relates to an improved means for washing clothes and other articles by steam with facility and economy, and with the least damage and wear to the same.

The following description fully explains the nature of my said invention and the manner in which I proceed to construct, apply, and operate the same, the accompanying drawings being referred to by figures and letters.

Figure 1 gives a view of the elevation of the machine. Fig. 2 is a plan view showing the cover removed. Fig. 3 is a view of the elevation of the revolving cylinder. Fig. 4 is an end view of the same. Fig. 5 is an enlarged view of the internal perforated pipe. Fig. 6 is a plan view of the same. Fig. 7 is a view of the perforations in the internal pipe. Fig. 8 gives a view of the deflecting-plate in the machine.

Referring to Fig. 1, *a* is the boiler, of which *b* is the cover; *c*, the revolving drum; *d*, the deflecting-plate above the bottom of the boiler; *l*, rubber rollers at corners of the opening in the deflecting-plate, and *m* the steam-escape.

Referring to Fig. 2, the handles *f* of the machine and the crank *h* and pivot *g*, attached to the drum-shaft, are shown, and the perforation *n* in the circumference of the drum, for the entrance of steam and the escape of water.

Referring to Fig. 3, the revolving drum *c*, the hinges *i*, for the cover of the drum, and the bolt *j*, for fastening the same, and the position in the drum of the perforated pipe *k* are shown.

Referring to Fig. 4, the perforations *n* in the circumference of the drum are shown.

Referring to Figs. 5, 6, 7, the construction and arrangement in the drum of the pipe *k* and its perforations *o* are shown.

Referring to Fig. 8, *d* is the deflecting-plate, to prevent the steam from passing outside of the drum, and *d'* the opening in the plate for the drum to revolve.

As may be seen from the description, my improved machine is especially adapted for

household use, although it may be employed to equal advantage in washing clothes on a larger scale. The use of steam instead of water, as it is applied in my machine in the process of washing clothes, is a thorough, rapid, and economical means of effecting this result.

The machine is simple in construction, and its operation is as follows: It is made of any suitable metal, and of a size adapted to placing upon an ordinary kitchen-stove, for which it may be used as an ordinary boiler, if desired. The stove is the heating apparatus. The amount of water required in the boiler for generating steam is held in the space below the deflecting-plate. The revolving drum cuts through the opening in the deflecting-plate, as shown in Fig. 1. The sides and ends of the opening in the plate are cushioned with rubber, and at the corners of the opening are rubber rollers *l*, Fig. 1, for the drum to act upon. The drum, in which the clothes are placed, is perforated in its circumference for the entrance of steam and the escape of water, and inside of it are pipes perforated and of a peculiar construction, and arranged in position, as shown at *k*, for the purpose of properly distributing the steam, Fig. 3. The perforations in the drum admit steam from the boiler, as do also the perforations in the pipes, from which it is discharged through the drum. When clothes are to be washed, they are put into the drum, the cover of which is closed and fastened, and the drum is revolved by the crank until the clothes are thoroughly steamed and cleansed, a result which is achieved in a short time. If steam is generated too rapidly, it is allowed to escape by the valve, and when the operation of washing is completed there is a faucet for the discharge of the water.

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

In a washing-machine, the metallic drum *c*, and provided with perforated pipes *k*, attached inside, and deflecting-plate *d* and rubber rollers *l*, substantially as described and set forth.

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Witnesses:

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