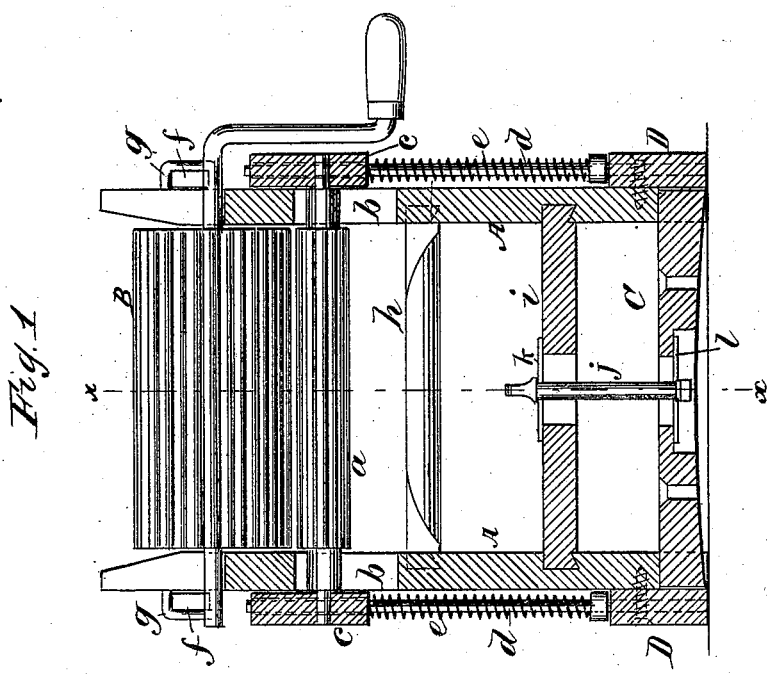
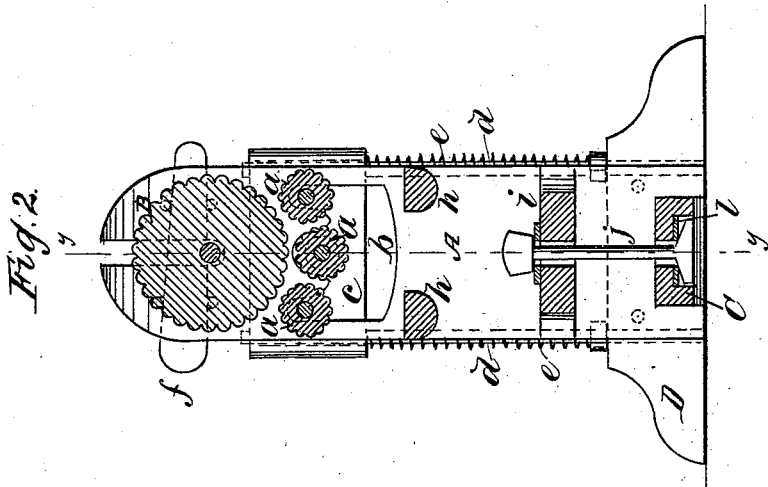


A. M. CORNELIUS.
Washing-Machine.

No. 196,139.

Patented Oct. 16, 1877.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AARON M. CORNELIUS, OF OREGON CITY, OREGON.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **196,139**, dated October 16, 1877; application filed May 21, 1877.

To all whom it may concern:

Be it known that I, AARON M. CORNELIUS, of Oregon City, county of Clackamas, and State of Oregon, have invented a new and Improved Washing-Machine, of which the following is a specification:

In the accompanying drawing, Figure 1 is a side elevation of my improved washing-machine, in section, on line *yy*, Fig. 2. Fig. 2 is a transverse section of the same on line *xx* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to that class of washing-machines that employ a corrugated roll that revolves over a bed consisting of two or more smaller corrugated rolls; and it consists in the arrangement of spring-followers for carrying the smaller rolls up against the larger rolls, and in the arrangement of supports and a device for fastening the machine in the tub.

In the drawing, A A are the legs or supports of the machine, which are slotted at their upper ends to receive the journals of the roller B. The lower ends of the supports A are notched to receive the fastening-piece C, and to them the cross-pieces D are attached, which form feet or braces for the supports A, and also close the outer side of the notch which receives the fastening-piece C, and prevents the machine from sliding endwise in the tub.

a a a are small rollers, whose journals extend through openings *b* in the supports A, and are supported by followers *c*, that slide upon rods *d*, which project upward from the cross-pieces D. Upon the rods *d*, and between the cross-pieces D and followers *c*, springs *e* are placed, which carry the rolls *a* upward, and cause them to bear against whatever may be placed between them and the roll B.

The shaft of the roll B is held down against this pressure by the keys *f*, which pass through staples *g*, that project from the supports A.

The supports A are connected together by bars *h i*, the bar *i* being slotted centrally to receive a key, *j*, and provided with a metallic slotted plate, *k*, to guard against wear.

The fastening-piece C consists of a bar of wood, which is concaved in the direction of

its length upon its under side, is slotted centrally and recessed to receive the key *j*, and is provided with a slotted plate, *l*, which takes the wear of the key.

The key *j* consists of a rod having at its upper end a thumb-piece by which it is turned, and which is of such thickness as to be incapable of passing through the slot in the cross-bar *i*. Upon the lower end of the key *j* there is a T-shaped head, which is beveled downward each way from the shank.

The fastening-piece C is secured to the bottom of the tub by means of screws, and the machine is placed so that the said fastening-piece is received by the notches in the lower ends of the supports A. The key *j* is then placed through the slots in the bars *i* C and is turned, when, by the engagement of the beveled T-shaped head with the plate *l*, the machine is drawn firmly down against the tub-bottom. The machine is prevented from tipping sidewise by the cross-pieces D.

When the key *j* or the piece C becomes worn so that the machine is not secured by turning the key, the piece C, being concave, may be screwed down, so as to increase the distance between its center and the bar *i*, thus rendering the key again effective.

The principal advantage claimed for this machine over others now in use is its great durability, the various parts adjusting themselves to wear, and all being made strong and upon mechanical principles.

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

1. The combination of the concaved slotted fastening-piece C, having the plate *l*, the key *j*, and the slotted cross-bar *i* of a washing-machine, substantially as herein shown and described.

2. The supports A, notched at their lower ends and provided with the openings *b*, staples *g*, and slots for receiving the shaft of the roller B, the cross-bars D, spring-followers *c*, rollers *a* B, and key *f*, in combination, substantially as herein shown and described.

AARON MILLER CORNELIUS.

Witnesses:

C. A. REED,
C. SWEGLE.

1950
www