

F. L. COPP.

Improvement in Washing-Machines.

No. 115,170.

Patented May 23, 1871.

Fig.1.

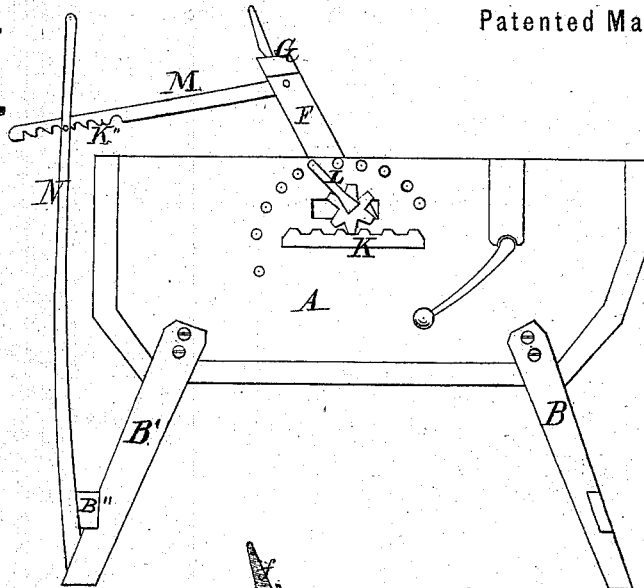


Fig.2.

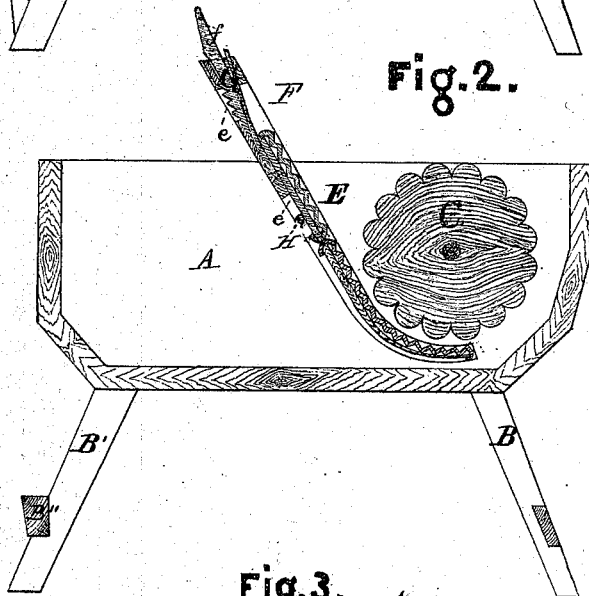
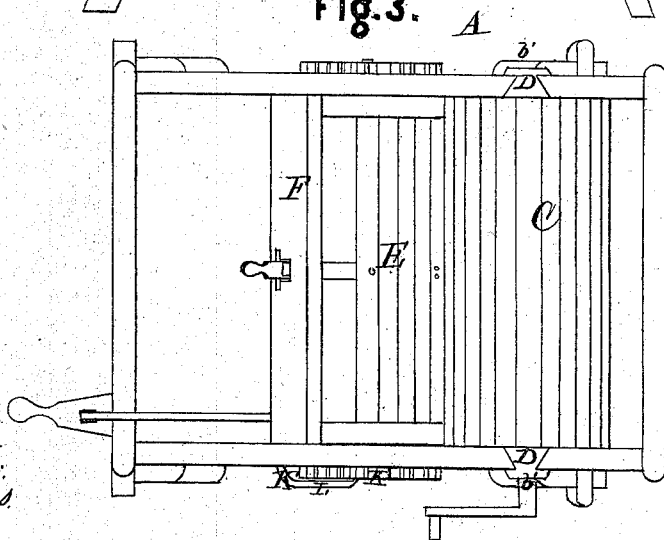


Fig.3.



Witnesses

E. H. Bates.
J. B. Curtis.

Inventor:

F. L. Copp
Chipman & Son, Attys.

UNITED STATES PATENT OFFICE.

FERDINAND L. COPPS, OF ATLANTA, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 115,170, dated May 23, 1871.

To all whom it may concern:

Be it known that I, FERDINAND L. COPPS, of Atlanta, in the county of Logan and State of Illinois, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a side view of my invention. Fig. 2 is a central vertical longitudinal section. Fig. 3 is a top view of the same.

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

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

A represents an oblong box, of any suitable dimensions, resting upon legs B B'. C represents the cylinder, the periphery of which is fluted longitudinally. Said cylinder is placed transversely in the box and provided with journals b' having their bearings in the sides of the box. D are slides placed in vertical slots b' in the sides of the box A, and so arranged that they can be raised for the adjustment of the cylinder C. E represents a pressure-board of concave form, the upper surface of which is fluted transversely and covered with tin, zinc, or any other suitable material. The upper part of this pressure-board is moved and adjusted in the grooves e of the frame F by means of a spring-latch, f, provided with a series of notches arranged to hold the board down at any desired point. This section or part of the board is marked G on the drawing. The office of this section in moving up and down in the grooves is to allow of an open space in the pressure-board to pass the clothes through or hold them in position while rubbing. The pressure-board F is supported in the box A by the rod H, which passes transversely through the box and h' in rear of the frame. On and near the ends of the rod H are small pinions rigidly secured and working in connection with racks K, which are secured to the sides of the box, as shown. L represents one end of the rod H,

in the shape of a crank, with its end K' turned inward, and working in connection with a series of holes arranged in a curve on the side of the box, as shown. This crank L is adjusted in said holes according to the amount of clothes in the box. In adjusting this crank the pinions are moved on the rack at the same time, thus enabling the pressure-board to be easily regulated with reference to the cylinder. M represents a longitudinal bar or lever pivoted at the upper end of the frame-board. At the lower end of this rod M is a series of notches, K'', working in connection with a spring-bar, N, secured to the leg B' and transverse bar B''.

By means of this arrangement the pressure of the clothes is regulated with reference to the cylinder.

The operation of my machine is as follows: The box is supplied with water and suds of a sufficient quantity, and the clothes to be washed are placed in between the cylinder and board. The cylinder is then operated by means of a crank back and forth, or in revolutions, which carries the clothes down into the water and suds, and at the same time rubbing and cleansing. The pressure is given to the clothes by operating the lever, which is provided with a series of notches for such purpose.

When any part or parts of the clothes require an extra amount of rubbing they are clamped between the movable section and the stationary board, and rubbed as much as may be necessary in the manner above described.

Claims.

1. The combination, with the pressure-board E and frame F, of the sliding section G, provided with the adjusting spring-rack f, substantially as specified.

2. The washing-machine herein described, provided with the tub A, cylinder C, adjustable sectional pressure-board EG, curved frame F, adjustable crank L with rack and pinion and adjusting-notches, lever M, and spring-bar N, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FERDINAND L. COPPS.

Witnesses:

H. C. WORTHINGTON,
HENRY MYERHOFF.