

A. Huffer,
Washing Machine,

Patented May 26, 1857.

NY 17,377-

Fig: 1.

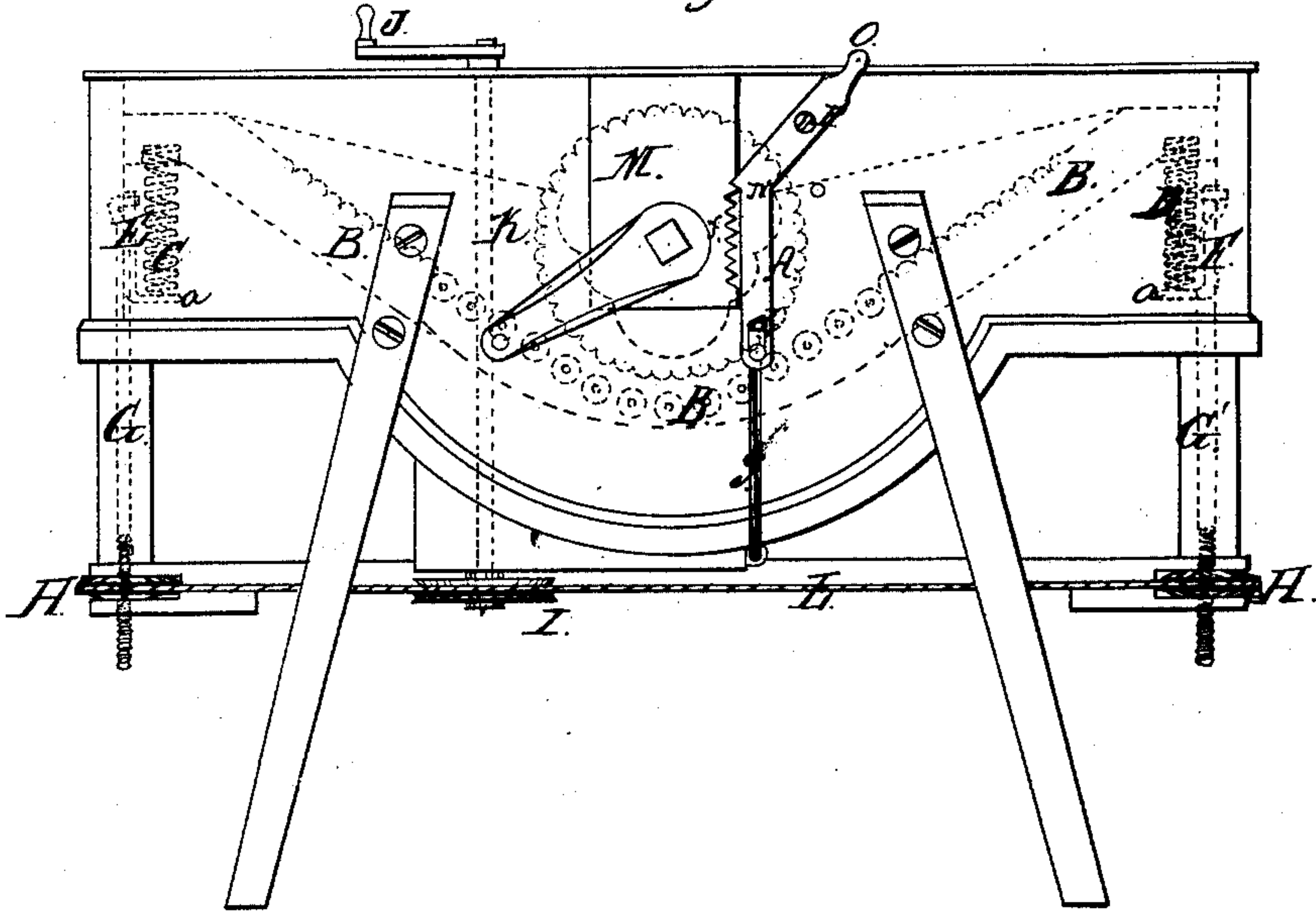
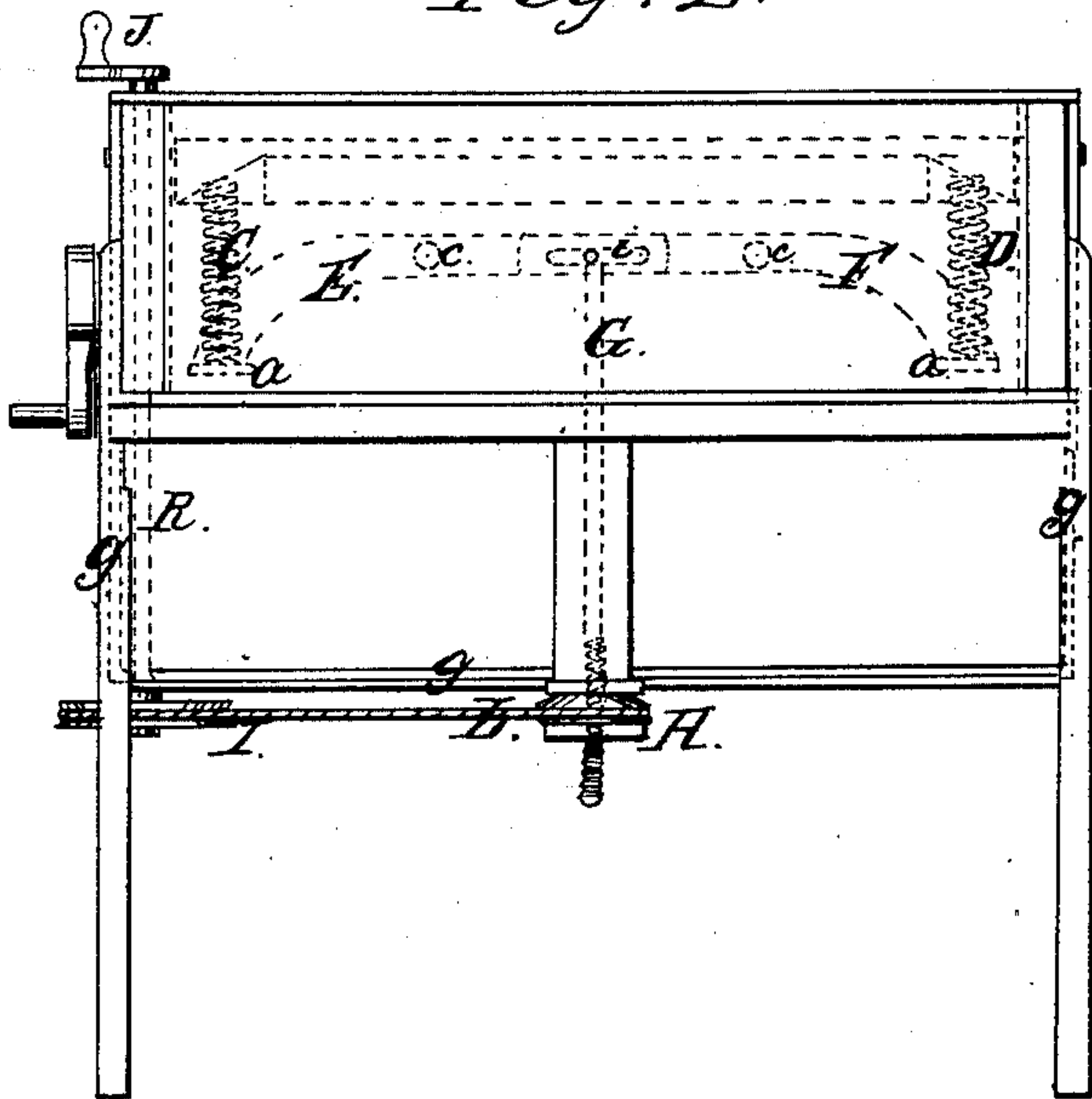


Fig: 2.



UNITED STATES PATENT OFFICE.

ABRAHAM HUFFER, OF HAGERSTOWN, MARYLAND.

WASHING-MACHINE.

Specification of Letters Patent No. 17,377, dated May 26, 1857.

To all whom it may concern:

Be it known that I, ABRAHAM HUFFER, of Hagerstown, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the manner of adjusting the roller concave and fluted cylinder at a distance apart, to suit different kinds of clothing, and preserving the proper parallel between said cylinder and concave, the convenience of which will be hereafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1, is a side elevation showing the interior work of the machine, in dotted lines. Fig. 2, is an end view also, showing a part of the interior in dotted lines.

Similar characters refer to like parts in the several figures.

A, dotted lines, Fig. 1, denotes the cylinder. B, the roller concave, which is supported at either corner by spiral springs C, C, D, D. Said springs rest upon platforms *a*, said platforms being formed by bending the lower extremity of levers E, E, F, F, to a right angle, thus substantially suspending the concave upon springs C, C, D, D, and levers E, E, F, F.

It may be seen by examining Fig. 2 that levers E, F, lap and that their ends are provided with slots *i* in which the upper end of upright rod G, works, the same being bent to a right angle as seen in Fig. 1, the lower end of said rod, G, is provided with a thread which works in a stationary pulley tap H. One of these rods and taps are stationed at either end of the machine, so that both ends of the concave are elevated at one and the same time by the aid of other devices which will be hereafter described.

Levers E, E, F, F, are pivoted or have

their fulcrum at *c, c*, and by being acted upon by rod G, the concave is elevated or depressed at the will of the operator.

I is a pulley which is connected with crank J by means of shaft K.

L is a cord or band which passes around pulley taps H, H, and pulley I. Now by operating crank J, motion is communicated to pulley taps H, H, simultaneously and at precisely the same velocity. Hence it may be readily seen each corner of the concave is elevated or depressed precisely alike, thus always keeping the cylinder and roller concave parallel to each other, and preserving the proper angle or pitch of the feed board. By this arrangement the elevation or depression of the concave is effected with facility, ease, and accuracy by simply operating crank J as described.

The operation of my invention is as follows: While washing, the cylinder is secured at its lowest point, as seen in dotted lines in Fig. 1, and the concave is adjusted to suit the articles to be washed, by means of pulley I, pulley taps H H, rods G G, levers E F, and crank J as described. The whole operation of adjusting the concave being performed by simply operating crank J, as before described.

The novelty of this invention consists chiefly in the convenience and accuracy of its operation and the general dependence of the devices claimed upon each other.

Having thus fully described the construction and operation of my improvement, what I claim as my invention, and desire to secure by Letters Patent, is:

The arrangement of slotted levers, E and F, upright, G, springs (C) and (D), connected and operated upon by pulley taps (H) (H) pulley (I), cord (L), shaft (K) and crank (J) in the manner described, for the purpose of facilitating the parallel adjustment of concave (B) as set forth.

ABRAHAM HUFFER.

Witnesses:

JOHN S. HOLLINGSHEAD,
O. C. WELLSON.