

T. CRUMBLING.  
Washing-Machine.

No. 162,628.

Patented April 27, 1875.

Fig. 1.

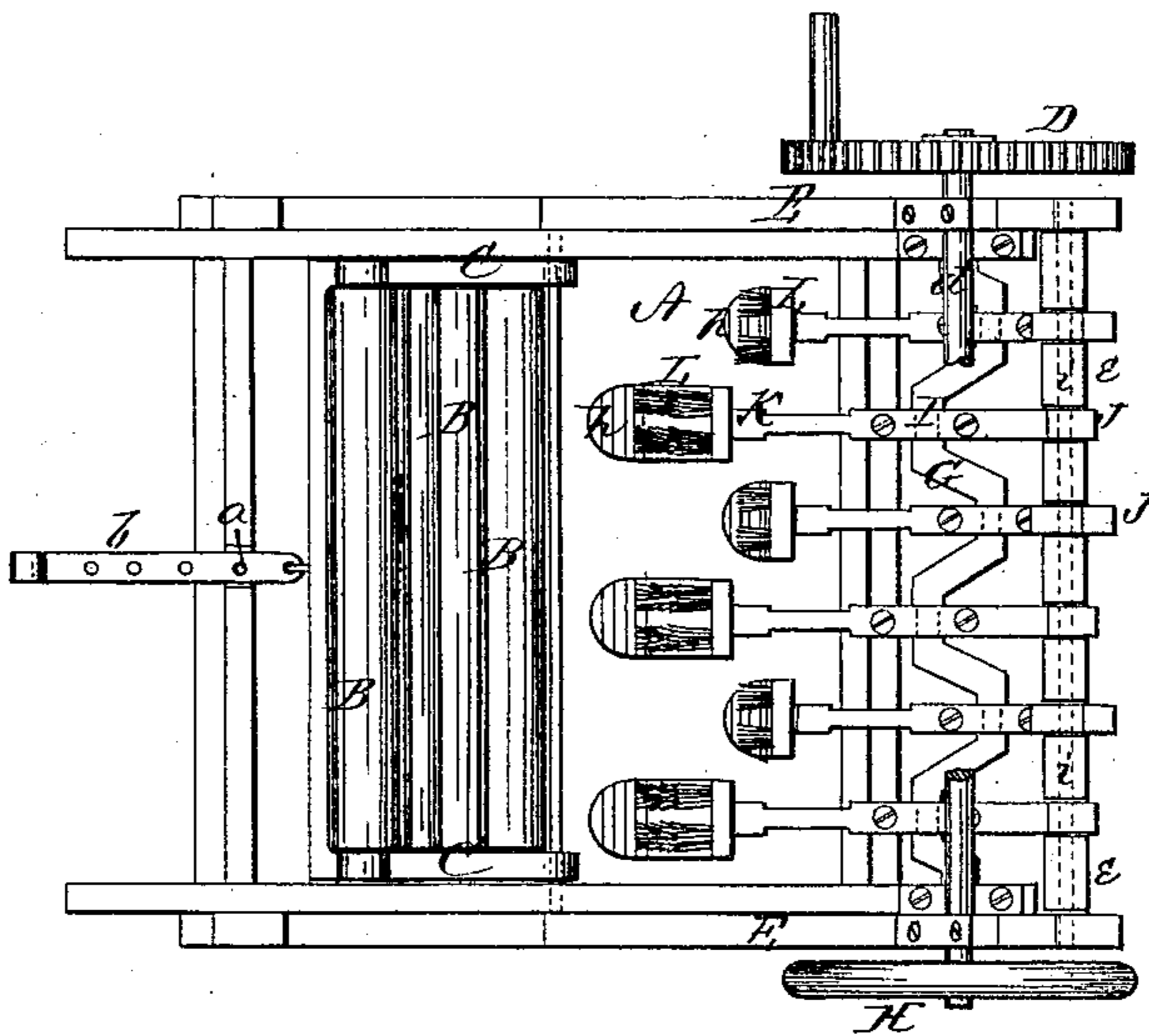
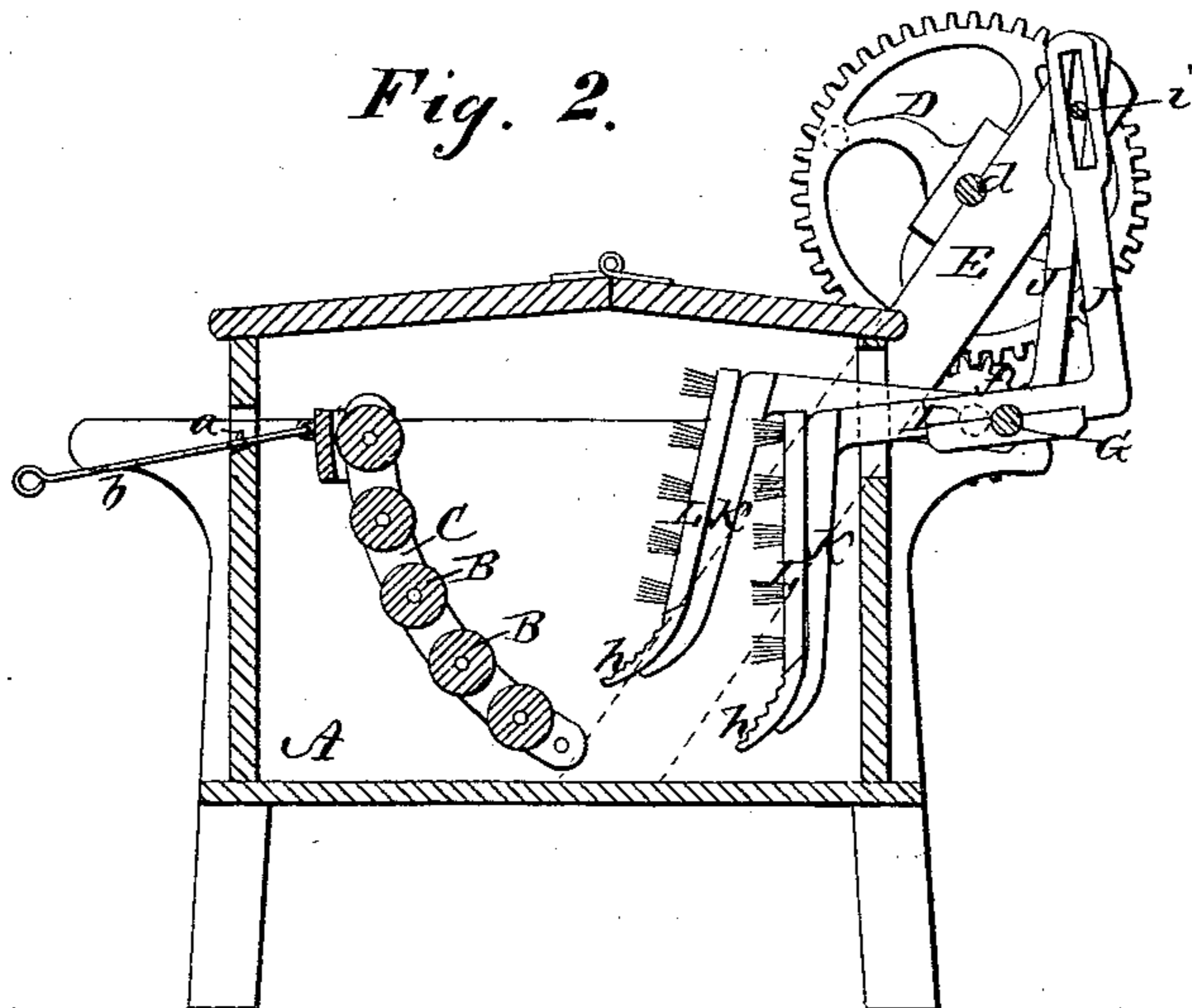


Fig. 2.



WITNESSES  
Wm. A. Skinkle,  
L. L. Everh.

INVENTOR  
Tobias Crumbling,  
per  
Alexander Mason  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

TOBIAS CRUMBLING, OF EAST PROSPECT, PENNSYLVANIA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **162,628**, dated April 27, 1875; application filed February 4, 1875.

*To all whom it may concern :*

Be it known that I, TOBIAS CRUMBLING, of East Prospect, in the county of York and in the State of Pennsylvania, have invented certain new and useful Improvements in Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making 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 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, referring to the annexed drawing, in which—

Figure 1 is a plan view of my machine, and Fig. 2 is a longitudinal vertical section of the same.

A represents a box, of any suitable dimensions, within which is an adjustable wash-board composed of a series of horizontal rollers, B B, journaled in a frame, C. This wash-board is pivoted at its lower end in the sides of the box near the bottom, and it is held at any desired inclination by means of a perforated bar, *b*, attached in the center at the upper end of the frame, and, passing through a slot in the front of the box, is held there on a pin, *a*, as shown in Fig. 2. On the sides of the box A are secured two inclined bars, E E, extending upward and backward, and in said bars, at a suitable height above the top of the box, is placed a shaft, *d*, provided at one end with a cog-wheel, D, having a suitable crank or handle for rotating the same. The cog-wheel D gears with a pinion, *f*, upon one end of a crank-shaft, G, having a fly-wheel, H, on

the other end. The shaft G is provided with a series of cranks set alternately in opposite directions, as shown in Fig. 1. On each crank of the shaft G is placed a bar, I, bent to form the upward-projecting arm J at the outer end, and the downward-projecting arm K at its inner end. The upper end of the arm J is slotted longitudinally, and through these slots passes a rod, *i*, held in the upper ends of the arms E E. On the rod, between the upper ends of the arms J J, are placed short tubes or sleeves *e e*, to keep the arms at proper distances apart. On the face of each arm K is secured a brush, L, the lower end *h* of which is curved and corrugated transversely, as shown.

By operating the cog-wheel D the brushes operate alternately, moving forward and upward, and backward and downward, and during their forward and upward movement rubbing the clothes against the rollers B B, and the curved corrugated ends *h h* turning the clothes over or keeping them in a continual rotation while being rubbed. The box A is covered by a suitable lid, P, having a hinged lid, R.

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

The combination of the box A, having the adjustable frame C, with rollers B B, crank-shaft G, bars I, with slotted arms J J, and the arms K K, with brushes L L, and the curved and corrugated ends *h h*, all constructed and operating substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 13th day of January, 1875.

TOBIAS CRUMBLING.

Witnesses :

WILLIAM L. BRAMHALL,  
C. L. EVERT.