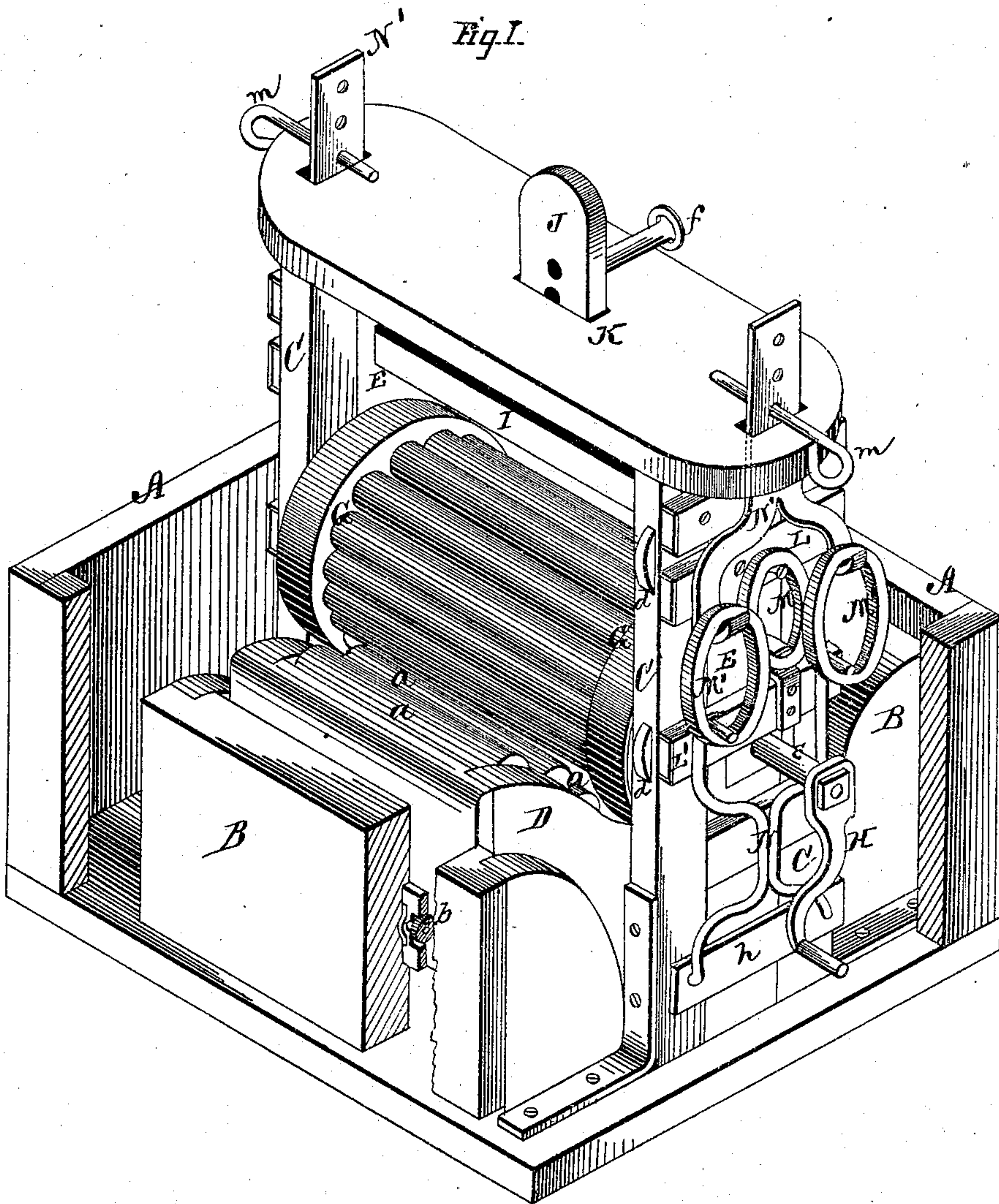


2 Sheets--Sheet 1.

J. C. BURGNER.
Washing-Machines.

No. 138,128.

Patented April 22, 1873.



Witness.

*Jas. C. Hutchinson
 C. L. Ewert*

Inventor.

*James C. Burgner
 per Alexander Mason*

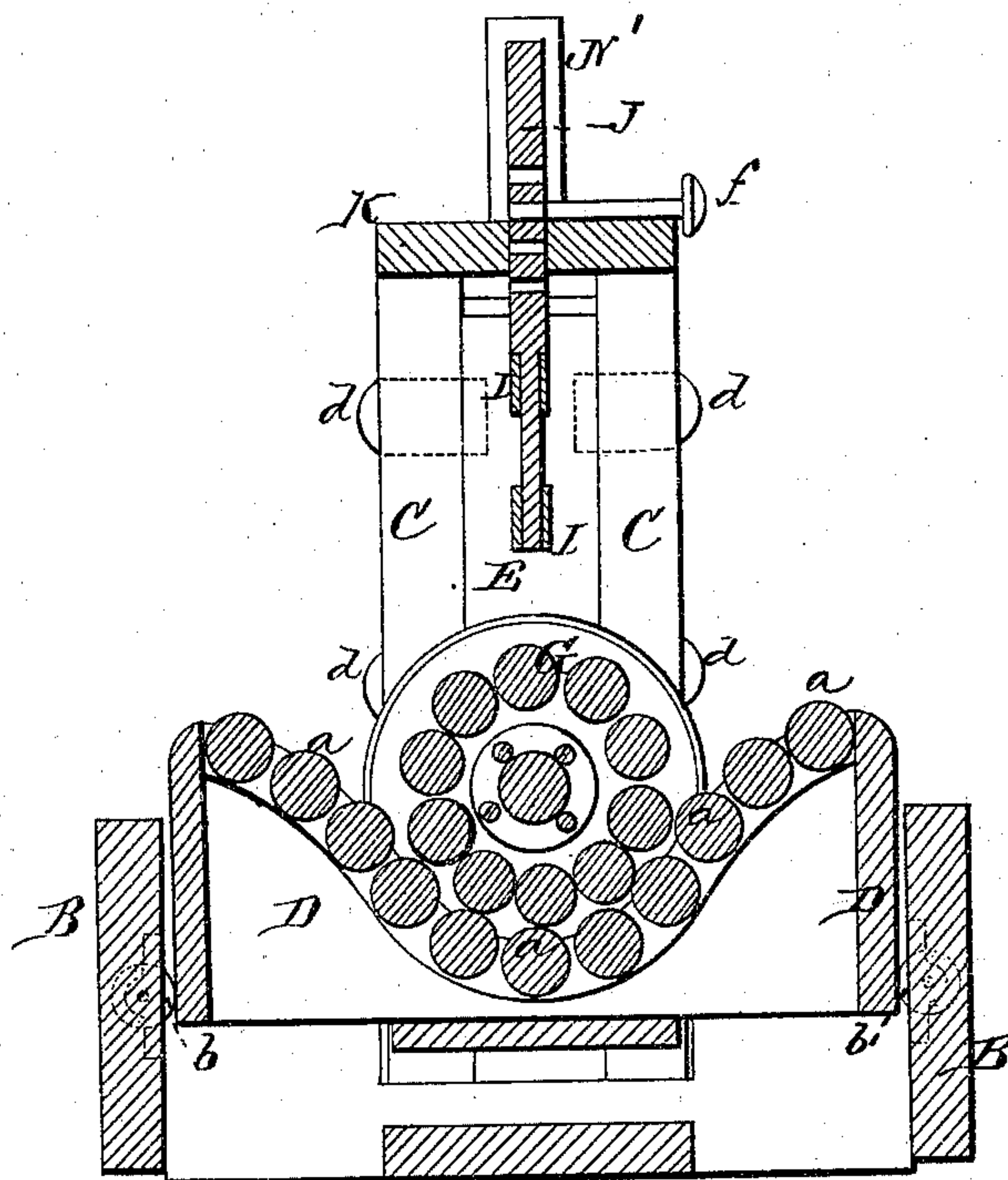
Attorneys.

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Fig. 2.



Witness:
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UNITED STATES PATENT OFFICE.

JAMES C. BURGNER, OF POPLAR CREEK, MISSISSIPPI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **138,128**, dated April 22, 1873; application filed February 27, 1873.

To all whom it may concern:

Be it known that I, JAMES C. BURGNER, of Poplar Creek, in the county of Montgomery and in the State of Mississippi, 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 drawing 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 perspective view of my washing-machine, part of the box being broken open to show the interior; and Fig. 2 is a longitudinal vertical section of the same.

A represents the water-box, of any suitable dimensions, on the bottom of which is secured a frame, B, having on each side two upright standards, C C. Within the frame B is placed a box, D, containing a series of rollers, *a a*, arranged in concave form, as shown in Fig. 2. The ends of this roller-box D bear against small guide-rollers *b b* inserted in the frame B, and countersunk in the same to guide the roller-box up and down on a perpendicular line. Between the standards C C on each side of the machine is a slide, E, confined by means of keys *d d*, which pass through the standards into vertical grooves in the edges of the slide, thus allowing the slide to move up and down freely; but preventing it from coming out from between the standards. In suitable boxes inserted in the lower ends of the slides E E rest the journals *e e* of a roller-wheel, G, and on one of said journals is secured a crank, H, for turning the wheel. The roller-wheel G is constructed simply of two circular disks with rollers between them, as shown. The two slides E E are connected by means of two bars, I I, and in the center of said bars is se-

cured a slide, J, which passes up through a mortise in the center of the cap-piece K, connecting the upper ends of the standards C C on both sides of the machine. The center slide J is perforated with several holes for the insertion of a pin, *f*, either above or below the cap-piece K, as occasion may require. On the outer side of each slide E, a suitable distance from the upper end, is a cross-bar, L, and below the same a suitable distance is another cross-bar, L', secured on the outer sides of the standards C C. On these cross-bars are suitable hooks, screws, or their equivalents, for the attachment of a rubber ring or spring, M, the action of which is to draw the roller-wheel G downward against the rollers *a* in the box D. A cross-bar in the bottom of the box D passes through between the lower ends of the standards C C, and has an iron bar, *h*, attached to each end. In this bar are hooked two arms of a four-armed hook, N, the upper two arms of which are by rubber rings or springs M' connected with a two-armed hook, N', the shank of which passes up through a mortise in the end of the cap-piece K. The shanks of the hooks N' are perforated with several holes for the passage of pins *m* to hold said hooks at any desired height, and thus regulate the tension of the springs M', the action of said springs being to draw the roller-box D upward against the roller-wheel G.

When a single spring-action is desired, either the springs M or the springs M' alone are used, making in the former case the roller-box D stationary and the roller-wheel G springing down, and in the latter case the frame of the roller-wheel G is stationary, and the roller-box D springing upward. When a double spring-action is desired, all the springs are used, causing the roller-wheel and roller-box to spring toward each other.

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

1. The box D, in combination with the roller-wheel G, hook N, springs M' M', and hook N', as and for the purpose set forth.

2. The roller-wheel G, in combination with

the spring M and M', and the roller-box D, hooks N N', and bar L, as and for the purpose set forth.

3. The frame B provided with guide-rollers b b, and used in combination with the roller-box D and hooks N N', as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of February, 1873.

JAS. COBB BURGNER.

Witnesses:

A. N. MARR,

AUGUSTA PERRIE.