

P. A. LHERNAULT.

MACHINES FOR CLIPPING HORSES.

No. 181,692.

Patented Aug. 29, 1876.

Fig. 1.

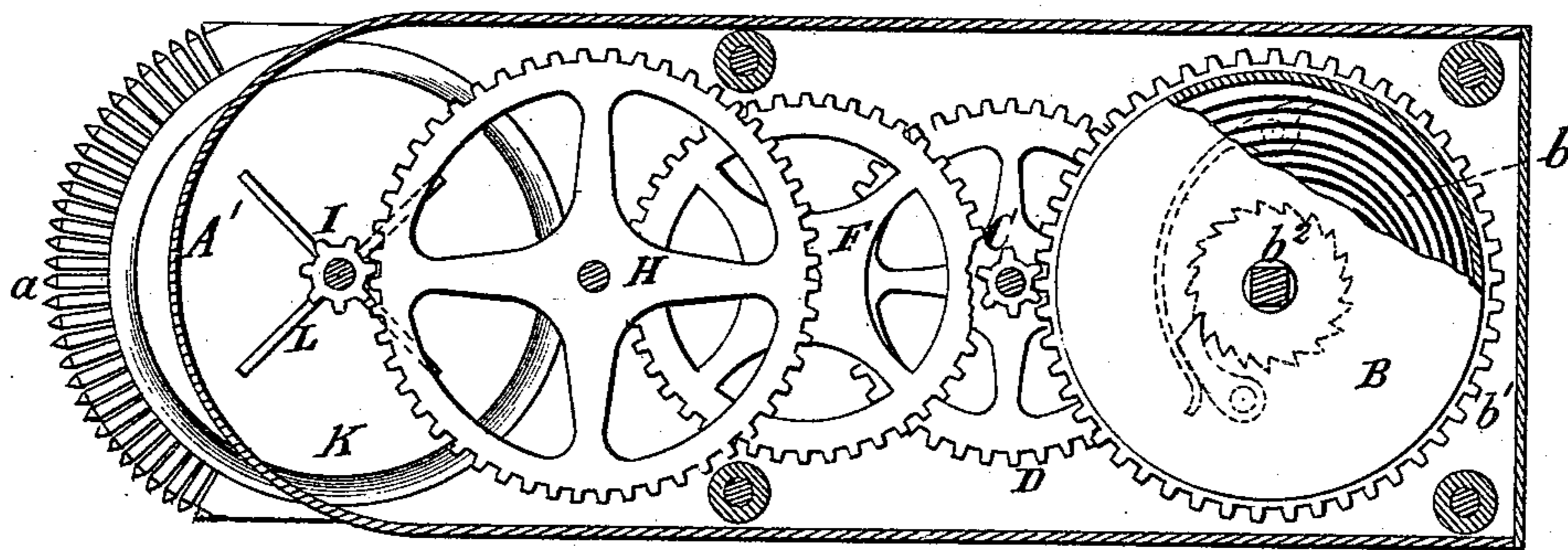


Fig. 2.

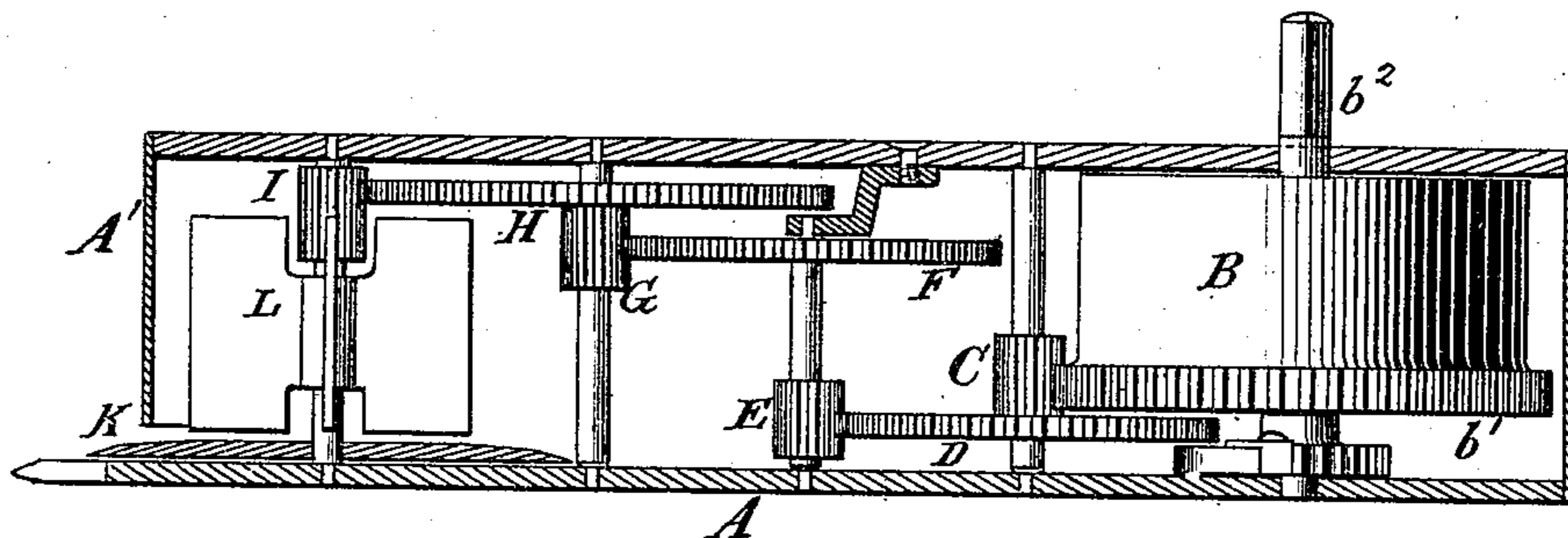
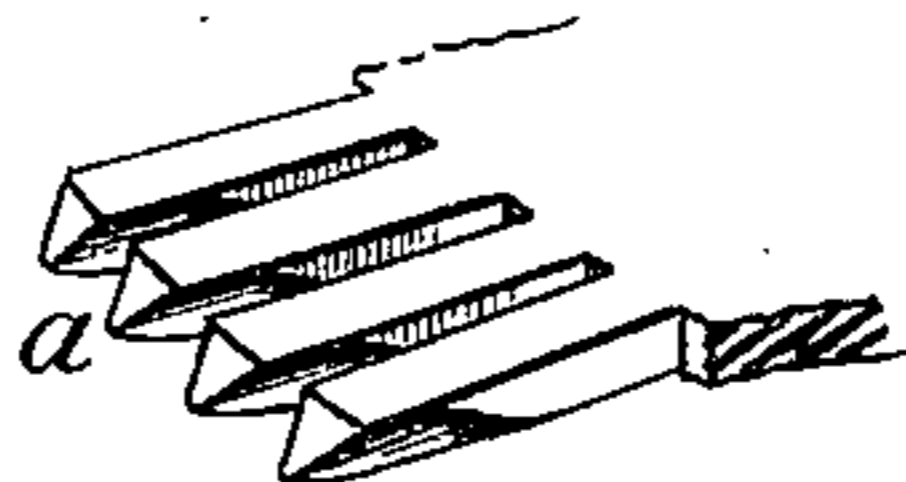


Fig. 3.

Witnesses:
A. Ruppert.
John Eile.



P. A. Lhernault
Inventor.
by A. C. J. Eile
Att'y

UNITED STATES PATENT OFFICE.

PIERRE A. LHERNAULT, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR CLIPPING HORSES.

Specification forming part of Letters Patent No. **181,692**, dated August 29, 1876; application filed February 24, 1876.

To all whom it may concern:

Be it known that I, PIERRE AUGUSTE LHERNAULT, of New York city, county, and State, have invented a new and useful Improvement in Machines for Clipping Horses, of which the following is a specification:

This invention relates to that kind of devices for shearing or clipping horses which consist in the main of a circular revolving cutter, operating in conjunction with a comb-plate, and driven by spring-power.

My improvement consists in the use of a vane-governor, which is attached to the cutter-spindle, and serves the several purposes of securing uniformity of speed, of preventing the severed hair from entering the case and clogging the wheels, and of blowing the cut hair away, so that the operator may observe the nature of his work as he proceeds.

In the annexed drawing, Figure 1 is a horizontal section. Fig. 2 is a vertical longitudinal section. Fig. 3 is a perspective view of the comb.

Similar letters of reference indicate corresponding parts.

In the rear part of case A a hollow cylinder, B, containing a coil-spring, *b*, is placed. The bottom of this cylinder forms a wheel, *b'*, which meshes into a pinion, C, on the spindle of which is the wheel D, meshing into pinion E, and causing the wheel F on its shaft to work into pinion G. The wheel H meshes into pinion I, to the spindle of which the circular cutting-plate K and governor L are firmly secured. The upper surface of the plate K is slightly convex, and it is sharpened around its periphery. Its under and plane surface rests loosely upon the bottom plate of case A near its forward end. This end of the bottom plate is of semicircular form, and is notched, as shown. The governor L, having the form of a vane, revolves with and directly over the plate K.

The device is operated in the following manner: The coil-spring *b* in cylinder B is wound up around the shaft *b'*, and as it uncoils it will impart a swift revolving motion to the cutter-plate K and governor L through the

intermediate gearing. The hair of the horse to be clipped is caught between the teeth *a* of the comb-plate of case A, and guided to the cutting-plate K, which will cut it off with great facility and accuracy. The governor L, being resisted by the air in its revolutions, will insure uniformity of speed to the several mechanisms, and, as by its great velocity of motion a strong current of air is kept up, the severed hair will be prevented from entering the case, so that all the gearing will be preserved in perfect working order.

By referring to Fig. 2 of the drawing it will be seen that the side plate A', which incloses the case, does not touch the cutter K, but a space is left between them, so that the air can freely escape from the case and blow the hair away as soon as it is cut.

By a slight pressure on the top plate, directly over the pinion I, the operator may at any time stop the mechanism, or he can accomplish this by inserting a small rod in a hole in the forward end of the top plate.

The cutter is preferably made of steel, while the other parts may be constructed of any other suitable metal.

By the use of my device the clipping can be done with speed and precision. As the hair is blown away by the governor immediately after being cut, the gearing will remain unclogged, and the operator will be enabled to closely observe the progress and nature of his work.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a device for clipping horses, the combination, with a spring-motor, of a circular revolving cutter, and a vane-governor, for maintaining uniformity of speed, and blowing away the cut hair.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

P. A. LHERNAULT.

Witnesses:

B. E. J. EILS,
JOSEPH WULFF.