No. 686,705. Patented Nov. 19, 1901.

H. H. BOWERMAN.

ENVELOP OPENER.

(Application filed Feb. 15, 1901.)

(No Model.)

Fig. 1.

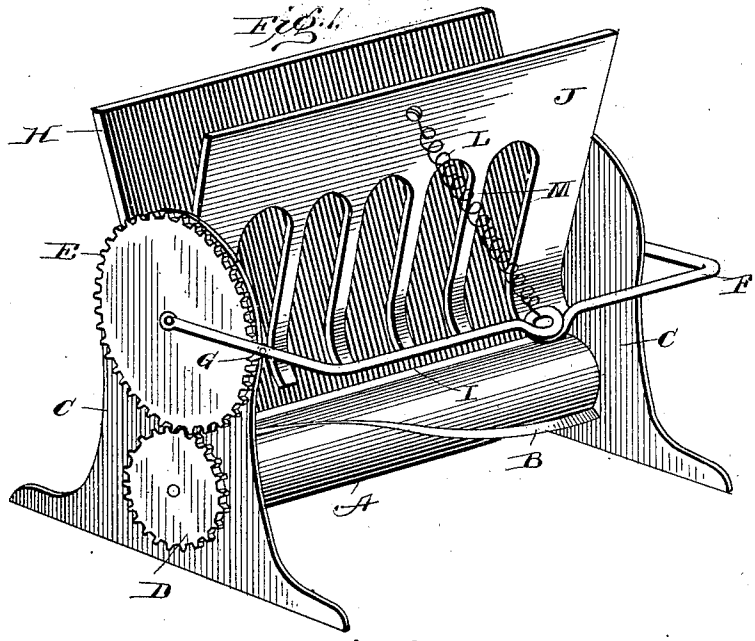
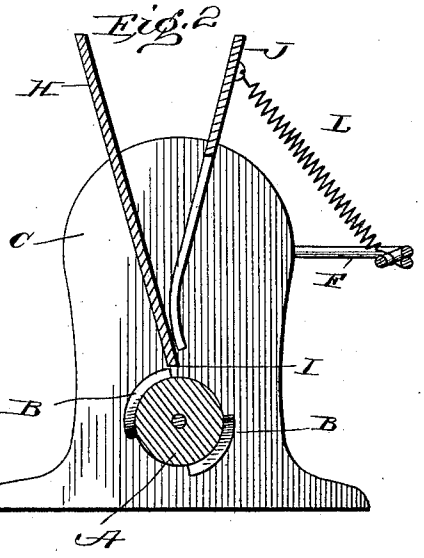


Fig. 2.



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UNITED STATES PATENT OFFICE.

HARRY H. BOWERMAN, OF LORELEY, MARYLAND.

ENVELOP-OPENER.

SPECIFICATION forming part of Letters Patent No. 686,705, dated November 19, 1901.

Application filed February 15, 1901. Serial No. 47,463. (No model.)

To all whom it may concern:

Be it known that I, HARRY H. BOWERMAN, a citizen of the United States of America, residing at Loreley, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Envelop-Openers, of which the following is a specification.

This invention relates to envelop-openers, and is more particularly designed for office use.

The object of the invention is to provide an envelop-opener which may be used upon a desk as a paper-weight, the same having embodied therein means for clipping or cutting the ends of an envelop without possible damage to the contents thereof.

With these objects in view and such others as may hereinafter appear my invention consists in the particular construction of the various parts and in the novel manner of combination and arrangement of said parts, all of which will be more fully described, and specifically pointed out in the appended claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of the invention complete. Fig. 2 is a view in side elevation.

Referring by letters to the drawings, A represents a drum having two oppositely-disposed knives B formed thereupon diagonally across its circumference. This drum is journaled between two similar brackets C and is provided with a gear D, which meshes with and is adapted to be driven by a gear E, mounted upon the side of one of the brackets. Pivoted to the respective sides of the brackets is a bifurcated handle F, having mounted thereupon a gravity-pawl G, adapted to engage the teeth upon the gear E, the object of which will be hereinafter explained. Mounted at an angle between the brackets is a flat metal plate H, the lower end of which terminates in a longitudinal cutting edge I, adapted to be engaged by the knives upon the drum. Mounted in front of the plate H and diverging from the lower end thereof is a plate J, provided with a series of spring-fingers M and connected by a spiral spring L to the handle.

Mode of operation: The letter or envelop is placed between the two plates with one end resting upon the drum and is there held in position by the spring-fingers. The handle is then pushed down, and the pawl thereupon which engages the gear E causes this gear to revolve and to drive the gear D, which makes one-half of a revolution and carries the drum with it, thus bringing one of the knives upon the drum and the longitudinal cutting edge to bear against the envelop, thereby removing the end of the same. It will be readily seen that as soon as the handle is released it will be returned to its normal position by the spiral spring and is again ready to receive the next envelop.

It will thus be seen that I provide an envelop-opener which is exceedingly cheap and simple in its construction and one that will efficiently perform all of its intended functions.

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

1. In an envelop-opener, two similar brackets, a drum journaled between the brackets, oppositely-disposed knives formed diagonally across the circumference of the drum, a plate mounted between the brackets, a cutting edge upon the lower end of the said plate, a second plate having spring-fingers mounted in front of the said first-named plate and means for operating the drum, substantially as shown and described.

2. In an envelop-opener, a drum having oppositely-disposed knives, brackets supporting said drum, a flat metal plate mounted between the said brackets, a cutting edge upon the lower end of the said plate, the said cutting edge in juxtaposition to the said knives, a second plate having spring-fingers bearing against the said first-named plate, a gear upon the said drum, a gear upon one of the brackets meshing with the gear upon the drum, a bifurcated handle pivoted to the brackets, a pawl upon the handle engaging the gear upon the bracket and a spiral spring connecting the said handle to the said plate having the spring-actuated fingers, substantially as shown and for the purpose set forth.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

HARRY H. BOWERMAN.

Witnesses:
HOWARD D. ADAMS,
J. TAYLOR BAXTER.