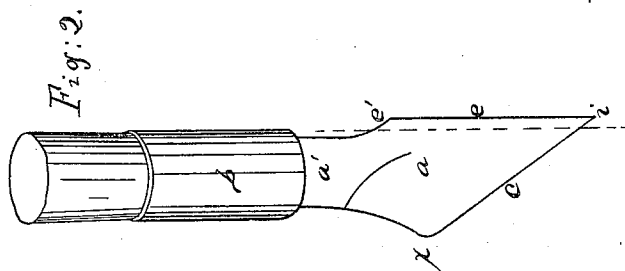
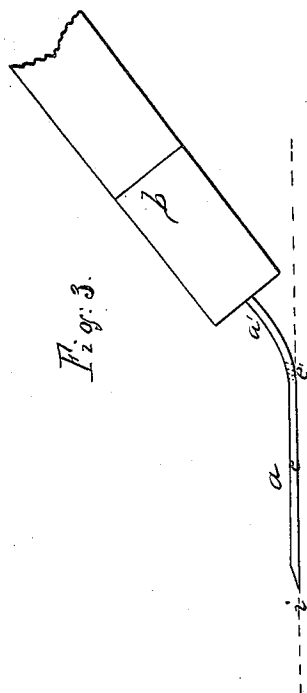
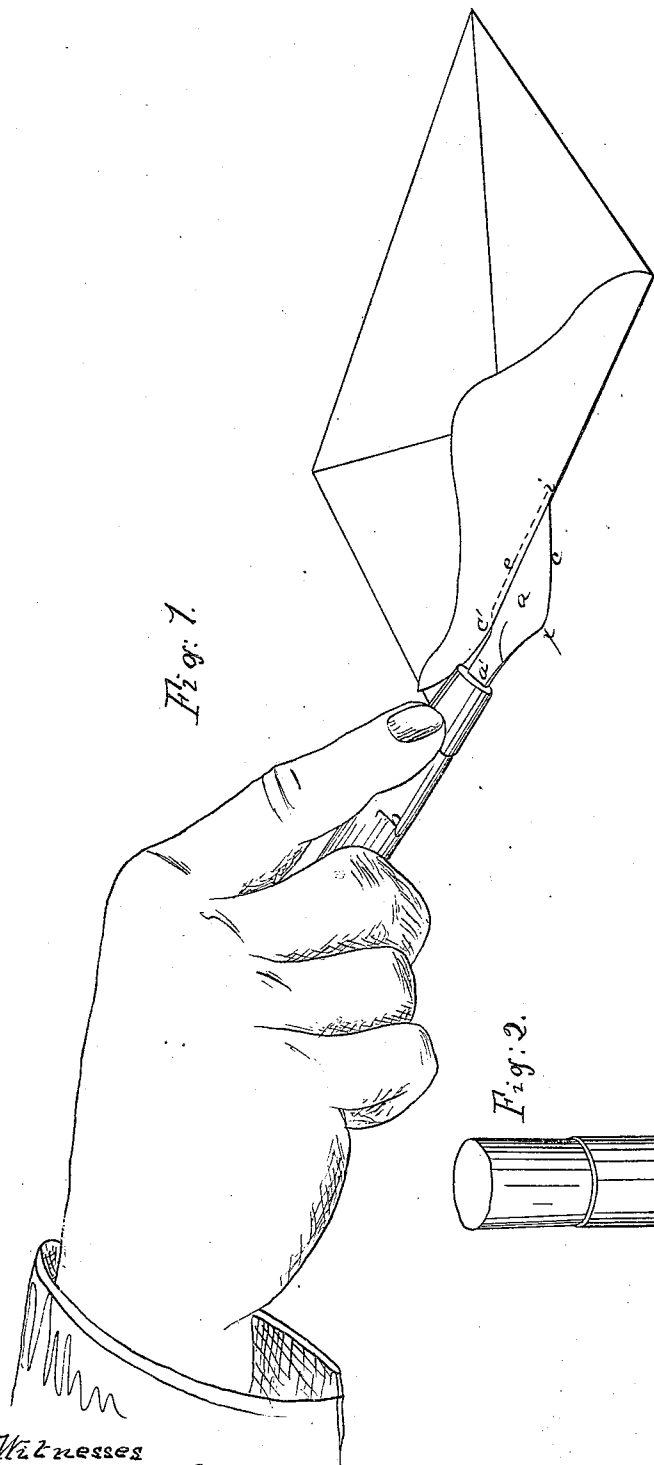


R. Johnson.
Envelope Opener.
N^o 42,777. Patented May 17, 1864.



Witnesses
R. T. Campbell.
E. Schaffer.

Inventor
Ross Johnson
 by his Atty,
Mason, Kimball & Lawrence.

UNITED STATES PATENT OFFICE.

ROSS JOHNSON, OF URBANA, MARYLAND.

LETTER-OPENER.

Specification forming part of Letters Patent No. 42,777, dated May 17, 1864.

To all whom it may concern:

Be it known that I, ROSS JOHNSON, of Urbana, county of Frederick, State of Maryland, have invented a new and Improved Tool for Opening Letters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view illustrating the operation of my invention. Figs. 2 and 3 represent different views of the instrument with a portion of its handle broken off.

Similar letters of reference indicate corresponding parts in the three figures.

The object of my invention is to construct a simple and cheap instrument by means of which a sealed envelope can be readily opened without liability of injuring its contents, as will be hereinafter described.

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

The instrument in question consists, essentially, of a knife-blade, *a*, and a handle, *b*, to which the blade is affixed. The blade *a* is constructed by stamping or otherwise forming it out of a thin, flat piece of metal into the shape represented in Figs. 2 and 3, and then bending its narrow shank *a'*—that portion which is inserted into the end of the handle *b*—so that when the bottom of the blade rests upon a flat surface this shank will form an obtuse angle with the blade, as represented in Fig. 3, and thus the handle will be elevated in an inclined position and in such a position as to enable a person to use the instrument conveniently. All that portion of the blade *a* which performs the cutting should be flat on its bottom, the cutting-edge being obtained by beveling its upper surface, as shown in Fig. 1.

The cutting-edge *c* forms an acute angle of about forty-five degrees with the straight longitudinal blunt edge *e*, which latter edge is in a line parallel to the length of the handle *b* and continues back from the point *i* of the blade to an abruptly formed shoulder, *e'*. This shoulder *e'* is produced by narrowing the shank *a'*, and it serves a very important purpose in the operation of the instrument, as will be hereinafter explained. The narrow shank *a'* is produced by curving each edge of the blade, leaving on one edge the shoulder above described, and on the opposite edge the obtuse angle *x*, which is the termination

of the cutting-edge. Thus it will be seen that the blade *a* consists of a longitudinal straight edge, *e*, a shoulder, *e'*, a cutting-edge, *c*, which extends diagonally across the front part of the blade, and a curved shank, *a'*, which enters the handle *b*, that is made of a sufficient length to be conveniently grasped in the hand.

To use the instrument thus described, it is grasped in one hand and the sealed letter, which it is desired to open, being held down upon a plane surface by the other hand, the point *i* of the blade is introduced at any one of the corners of the envelope and the instrument pushed along the edge of the same to the opposite corner. In thus cutting open the edge of an envelope the only care to be observed is to keep the handle *b* as near as possible in a line with said edge, and the blade of the instrument will only enter the envelope a distance equal to the projection of the straight edge from the corresponding edge of the shank *a'*, as indicated by the red line in Fig. 2; or should this straight-edge *e* touch the edge of the letter contained in the envelope, the letter will serve to some extent as a guide for the blade.

By means of my letter-opener sealed envelopes can be opened very rapidly without danger of mutilating their contents, and what is also desirable, in many cases, the opened envelope will still serve as a bag or receptacle for the same letter, if it is desired to preserve it therein.

By reducing the width of the shank *a'* so as to form the shoulder *e'* only a sufficient portion of the blade of the instrument is admitted to cut the edge of the envelope, and by means of the diagonal cutting-edge *c* the liability of cutting the contents of the envelope is obviated, as the tendency of the instrument is to cut outward rather than inward.

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

A letter-opener constructed with a curved shank, *a'*, flat-bottom blade, *a*, having a blunt edge, *e*, and a diagonal cutting-edge, *c*, substantially as and for the purposes herein described.

Witness my hand in matter of my application for a patent for improvement in letter-openers.

ROSS JOHNSON.

Witnesses:

R. T. CAMPBELL,
E. SCHAFER.