

(No Model.)

J. ROPES.
ENVELOPE OPENER.

No. 497,133.

Patented May 9, 1893.

Fig 1

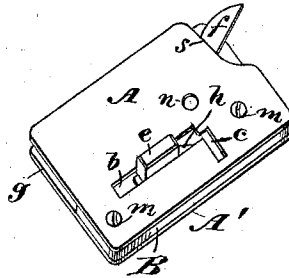


Fig 2

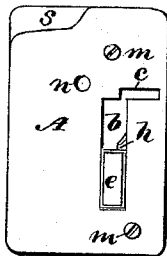


Fig 3

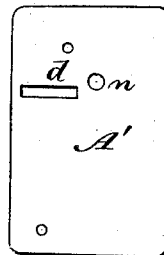


Fig 4

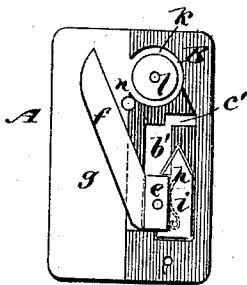


Fig 5

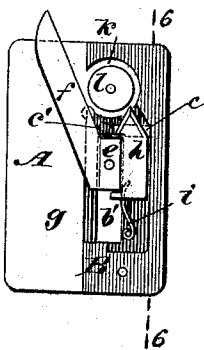


Fig 6

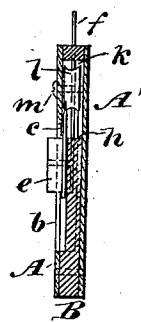
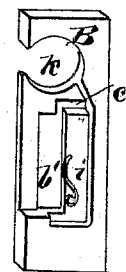


Fig 7



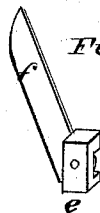
WITNESSES:

Paul Jobst
L. Sedgwick

Fig 8



Fig 9



INVENTOR:

J. Ropes
BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JULIUS ROPES, OF ISHPEMING, MICHIGAN.

ENVELOPE-OPENER.

SPECIFICATION forming part of Letters Patent No. 497,133, dated May 9, 1893.

Application filed June 7, 1892. Serial No. 435,806. (No model.)

To all whom it may concern:

Be it known that I, JULIUS ROPES, of Ishpeming, in the county of Marquette and State of Michigan, have invented a new and improved Book and Envelope Cutter or Opener, of which the following is a full, clear, and exact description.

The invention consists in a novel device, and in certain constructions and combinations of its parts, substantially as hereinafter described and more particularly pointed out in the claims, for cutting the leaves of magazines, books and periodicals that are left folded in binding or supplied with their leaves uncut, also for opening letter and other envelopes, and for cutting any folded paper or, if desired, different textile fabrics. The device however, is more especially intended for cutting the leaves of books and the like and for opening envelopes and will here be more particularly described accordingly. It will be found a great convenience in offices and countinghouses and by the reading public generally. Applied to the cutting of leaves of books and the like, it will be always at hand and ready for use, and will do its work neatly and quickly, leaving the edges of the leaves straighter and cleaner cut than is usual with the ordinary devices employed for such purpose, and envelopes will be neatly and quickly opened by it. The device too can be made light, compact and, if desired, ornamental, so that it can be carried about the person and can readily be taken apart to sharpen the blades which it carries, and which are usually two in number, to wit, a straight angularly arranged blade and an approximately diamond shaped one.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a perspective view of my newly invented device as seen from its face side, with the blades in cutting position. Fig. 2 is a geometrical face view of the same, with the blades drawn back or closed. Fig. 3 is a back view of the device with its blades in their last named position. Fig. 4 is a view of the device with the back plate removed and the knives or blades drawn in or back. Fig. 5 is a similar view with the blades pro-

jected forward or in cutting position. Fig. 6 is a longitudinal section of the device, upon the line 6—6 in Fig. 5; and Figs. 7, 8 and 9 views in perspective of certain details of the device as hereinafter described.

A is a front plate and A' a back plate. These plates are held apart by a frame piece B arranged lengthwise between them and extending throughout a large portion of their width. This forms the case of the device, made of metal or other suitable material. Said plates are of like approximately parallelogrammic shape and size and the front plate A is provided with a right angled slot *b c* through it in front of the frame piece B and the one or longer arm *b* of which is in direction of what here constitutes the length of said plate, while its shorter arm *c* is in direction of the width of said plate and to one side thereof. The back plate A' has a transverse slot *d* in line with and over or opposite the arm *c* of the slot *b c* in the front plate.

The frame piece B, which is of a facially slotted and recessed construction, mainly carries or has arranged within it the working parts of the device, and has a right angled slot *b'*, *c'*, corresponding with the slot *b, c*, in the front plate A and in the same plane therewith. These working parts consist in part of a cutter carrying block *e* adapted to slide longitudinally within the arm *b'* of the slot *b', c'*, of the frame piece and through the arm *b* of the slot *b, c* in the front plate A. This cutter block has secured to it a removable straight knife or blade *f*, arranged when the cutter block *e* is in place, to project lengthwise angularly within the open space *g* not closed by the frame piece B and toward the forward ends of the plates A A', so that said knife, when the block *e* is slid back and when the knife is not required to be used, may be inclosed under cover of said plates, or when the block *e* is slid forward and said knife is required to be put into cutting position, projects angularly through between and in front of the forward ends of the plates A, A'. This knife *f* has combined with it an approximately diamond pointed or shaped second knife or blade *h*, the body of which is notched to engage with the end of the block *e* on its side farthest removed from the knife *f*. Said second blade *h* operates when the block *e* is projected forward

to cross the path of the arms c, c' of the slots b, c and b', c' , in the frame piece B, and front plate A, and the slot d in the back plate A'. A spring i in the recessed frame piece B serves to give frictional pressure to the block e , to prevent the slipping or too easy working of said block and of its cutting blades f and h back and forth, when throwing said plates into or out of cutting position and to hold the knives closed or shut up within the case. Furthermore the frame piece B has an opening k made through it in or near its forward end and opening through its inside edge, within which is arranged a peripherally grooved roller l that projects through said opening.

To cut the leaves of "uncut" books and the like, each folded or uncut sheet in succession is entered between the plates A, A' from the forward ends of the latter on the side of the device which is opposite the frame piece B, so that said sheet or folded leaf will be in line, on its edge with the inner edge of said frame-piece and with the protruding grooved periphery of the roller l , which serves to guide and steady the run of the device over or along the folded leaf or sheet as it is used to cut or divide the sheet by applying for instance, the thumb to the back end of the cutter head e to project the knife f through the forward end of the device, the forefinger on the front end of the case and the middle finger to the back end thereof, and running the device along the folded edge of the sheet to cut or open it as required. The front plate A of the case is cut away at its advance corner, as shown at s , to enable the blade f to be seen and to facilitate its entry within the folded edge to be divided.

To open envelopes, one corner of the envelope at the flap is entered through the transverse slot d in the back plate A and through the arms c, c' of the slots b, c, b', c' , and the cutter head e pressed forward to make the diamond shaped cutter h clip or cut off said corner of the envelope, after which the device is applied by projecting the blade f into the opening thus made in the envelope, and running the device along the edge of the envelope to be opened, as hereinbefore described for cutting the folded or closed edges of the leaves of books and the like.

The plates A, A', frame-piece B, roller l and the several working parts are held together or in place by two small screws m, m , which on being taken out provide for the dismemberment of the device and extraction of the removable knives or blades f, h , when necessary to sharpen them.

A passageway or hole n is made through the device in proximity to the roller l , to form a clearance for any paper or other matter col-

lecting within it about the roller or other parts, and which if not self-clearing may readily be picked out so as to prevent any clogging of the roller or other parts.

The device it will be observed, is not only a cutter of the folded paper or material it is applied to, but also forms and operates as a grooved guide for the folded edge being cut or opened by it.

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

1. A device for cutting or opening the leaves of books or the like, envelopes and other folded matter, consisting of a metallic or other case constructed with a passageway between its opposite sides or faces, adapted to receive within and through it and to guide or steady the folded edge of the material to be cut, and of a knife or blade arranged within said passageway and adapted to enter within the folded edge of the material to be cut said knife being movable to project its point beyond the case or withdraw it within the same, substantially as specified.

2. In an envelope-opening device of the character described, the combination, with the case constructed to form a grooved guide within and through it, for the folded portion of the material to be cut, and having a transverse slot or opening through it, of a clipping knife or blade adapted to be projected across said slot or opening for severing the corner of the envelope, and a knife or blade arranged within the grooved and guiding portion of the case, and adapted to enter the severed corner of the envelope and within its folded edge to be cut or opened, essentially as set forth.

3. In a device of the character described, the combination, with the front plate A, having a right angled slot b, c , through it, the frame piece B, having a similar slot b', c' , and the back plate A', having a transverse slot d , of the sliding cutter-carrying block e , with its attached knives or blades f and h , arranged for operation essentially as and for the purposes herein set forth.

4. In a device of the character described, for cutting or opening folded edges of different material, the combination, with the case operating as a grooved guide for the folded portion of the material to be cut, and provided with an angularly-arranged cutting blade f , of the grooved roller l , adapted to receive the folded edge of the material to be cut within it, substantially as specified.

JULIUS ROPES.

Witnesses:

H. O. YOUNG,
T. W. DURHAM.