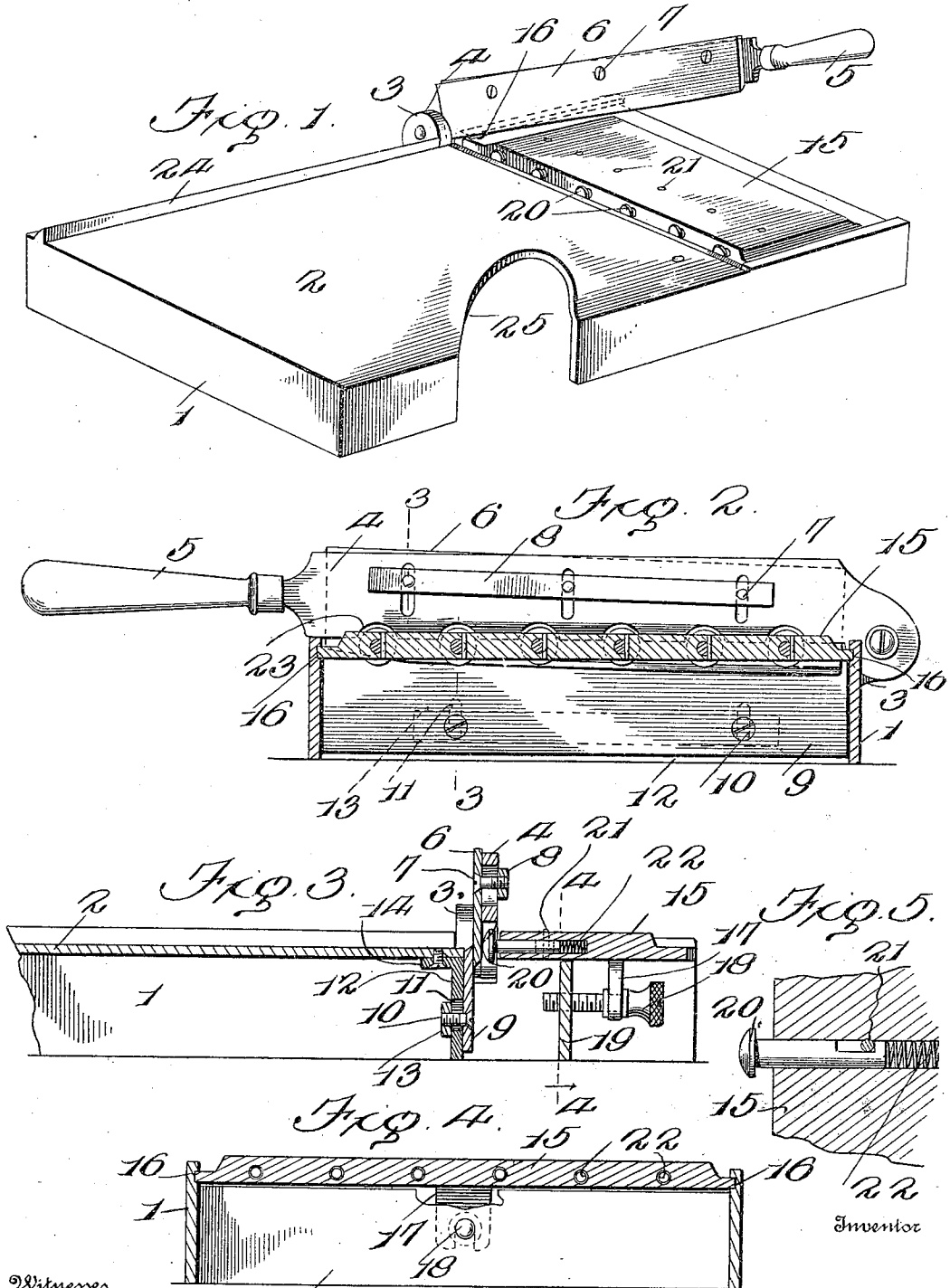


C. A. FISCHER.
 ENVELOP CUTTER.
 APPLICATION FILED APR. 16, 1909.

950,099.

Patented Feb. 22, 1910.



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ENVELOP-CUTTER.

950,099.

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To all whom it may concern:

Be it known that I, CHRISTIAN A. FISCHER, a citizen of the United States, residing at Grand Forks, in the county of Grand Forks and State of North Dakota, have invented certain new and useful Improvements in Envelop-Cutters, of which the following is a specification.

This invention comprehends certain new and useful improvements in devices for clipping envelopes in order that their contents may be easily extracted, and the invention has for its primary object a simple, durable and efficient construction of envelop cutter which consists of comparatively few parts, which may be cheaply manufactured and easily assembled, and which will operate efficiently and positively to cut off a portion of the sealed envelop and not produce merely a jagged or partial cut, so that any desired number of envelopes may be easily and quickly clipped without finding after the operation has been performed that one or more in the bundle have not been properly cut. And the invention also has for its object a device of this character which embodies a yieldable and adjustable gaging means against which the end of the envelop is pressed preparatory to the shearing operation, the yieldable and adjustable gaging device not only providing means whereby any appreciable portion of the sealed envelop may be cut off, but also serving to effectually press the knife up against the cutter bar to effect a sharp shearing cut.

With these and other objects in view that will more fully appear as the description proceeds, the invention consists in certain combinations, constructions and arrangements of parts, that I shall hereinafter fully describe and claim.

For a full understanding of the invention and the merits thereof, and also to acquire a knowledge of the details of construction and the means for effecting the result reference is to be had to the following description and accompanying drawings, in which;

Figure 1 is a perspective view of my improved envelop cutter. Fig. 2 is a transverse sectional view thereof, the section being taken close to and in a plane parallel with the blade. Fig. 3 is a longitudinal sectional view, the section being taken approximately on the line 3—3 of Fig. 2. Fig. 4 is a similar view on the line 4—4 of Fig. 3, looking in the direction of the arrow, and

Fig. 5 is an enlarged detail section illustrating the specific structure of one of the gage pins.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Referring to the drawing, the numeral 1 designates the base or stand of my improved envelop cutting device, the same being of any desired shape or design, and embodying sides and a relatively elevated top, the latter forming the bed 2 of the device upon which are placed the envelopes to be cut. The base 1 is formed at its rear side with a bearing lug 3, which is apertured to receive a screw or similar device that pivotally connects to the said lug a swinging blade carrying arm 4, the said arm being mounted to swing over and upon the bed 2 in a direction at right angles to the length thereof. The arm 4 is provided at one end with a handle by which it may be manipulated, and is formed with any desired number of slots, 5. A blade 6 is provided with attaching screws inserted in the slots 5 and arranged to clamp the blade to the arm 4, the operation of the slots 5 rendering the blade susceptible to adjustment in an obvious manner. The extremities of the screws 7 attach the blade to the blade carrying arm 4 and preferably work in threaded apertures in the bar 8 which is applied to the side of the arm 4 opposite that against which the blade is placed.

Co-acting with the blade 6 is a cutter bar 9. This cutter bar 9 is mounted within the base or stand 1, and its edge is designed to project slightly above the bed 2 or lie substantially flush therewith, and in the present instance said cutter bar is provided with attaching screws 10, which pass through slots 11 in the cross bar 12, said cross bar being secured in any desired way within the base. The extremities of the screws 10 preferably work in a connecting bar 13 and the slots 11, as is manifest, provide for the adjustment of the cutter bar. The cross bar 12 is preferably detachable, which is rendered advisable in order that the cutter bar 9 may be adjusted; hence the cross bar is in the present instance shown as provided with ears 14 through which screws extend to detachably connect the bar to the lower face of the bed 2.

15 designates a casing in the form of a

slot which is mounted for longitudinal movement at one end of the bed 2, in grooves 16, that are formed in the inner face of the front and rear sides of the stand or base 1.

5 In order that the sliding casing 15 may be adjusted, I have provided it with a forked lug 17 in which an adjusting screw 18 is swiveled, the inner end of the screw working in a cross bar 19 which may be formed
10 integrally with the base 1. The casing 15 contains any desired number of gaging devices 20 that are in the form of pins with rounded heads, said pins being mounted for a longitudinal movement in the casing, such
15 movement being limited by stops 21.

Springs 22 are mounted within the casing 15 and tend to press the gaging devices 20 toward the cutter bar 9, the under side of the heads of the gaging devices, (preferably
20 somewhat rounded as shown) lying in a plane parallel to that of the cutter bar and more or less in the path of the edge of the knife or blade 6. These gaging devices serve a two-fold purpose, namely, they constitute a brace against which the end of
25 the envelop is pressed preparatory to bringing the blade down on the end, to clip off the same, and at the same time, as is evident, they press upon the outer face of the blade
30 6 as it is swung down and thereby exert a tension on the blade against the cutter bar so that an effective shearing cut is made. The blade supporting arm 4 is preferably formed with recesses 23 to provide clear-
35 ances for the heads of the gaging devices 20 when the blade is swung down and over the bed 2. By adjusting the gaging devices in or out by means of the slidable casing 15, the size of the cut may be varied.

40 The base 1 is provided at the rear side of the bed 2 with a rib or ledge 24 against which the envelop or envelops may be pressed, and the bed is preferably formed with a recess 25, through which the thumb
45 of the operator may be passed, so as to more conveniently and easily hold the envelops as they are being sheared.

From the foregoing description in connection with the accompanying drawings, the operation of my improved envelop cutter is obvious. In the preferred use of the device, the operator will place the envelops on the bed 2, with their upper edges resting against the ledge 24, with one end against
55 the gaging devices 20, all of the fingers of his hand preferably resting upon the envelops while the thumb engages the lower edges of the envelops, and enters more or less into the recess 25, according to the size
60 of the envelops being cut. A downward movement of the blade 6 will then obviously clip off a preferably very small portion of the envelops in succession, at one end, and their contents may then be easily extracted.
65 As above noted, it is only necessary to ma-

nipulate the adjusting screw 18 so as to slide the casing in or out, in order to increase or decrease the size of the portion clipped off.

Having thus described the invention, what is claimed as new is;

1. An envelop cutter comprising a base, yieldable and rounded gaging devices carried by the base and designed to form an end stop for the envelop, a cutter bar mounted in the base, and a blade mounted on said
75 base and coacting with the cutter bar and arranged to be moved across and into engagement with the gaging devices in its movement toward the cutter bar.

2. An envelop cutter, comprising a base, 80 a blade adapted to be moved over said base and yieldable gaging devices provided with rounded heads said gaging devices being carried by the base and designed to form an end stop for the envelop underneath the
85 blade.

3. A device of the character described, comprising a base, a blade adapted to move across the base, a movable casing mounted in the base, means for adjusting said casing
90 in the base, and yieldable gaging devices carried by the base and positioned underneath the blade.

4. A device of the character described, comprising a base, a blade adapted to move
95 across the base, and yieldable gaging devices mounted in the base and arranged to press upon the blade.

5. A device of the character described, comprising a base, a cutter bar mounted in
100 the base, a blade connected to the base and arranged to be moved across the same into engagement with the cutter bar, and a series of spring pressed headed pins mounted in the base, the heads of said pins extending in
105 a plane parallel to the plane of the cutter bar, said pins being mounted underneath the blade.

6. A device of the character described, comprising a base, a casing mounted in the
110 base, the base being formed at front and rear with grooves in which the ends of the casing are mounted for a slidable movement, spring pressed pins mounted in said casing, means for limiting the movement of said pins, a
115 cutter bar mounted in the base, and a blade connected to said base and co-acting with said cutter bar and arranged to be moved into engagement with said pins.

7. A device of the character described, 120 comprising a base, provided with a bed, said bed being provided at its rear side with a ledge, and at its front side with a recess, a cutter bar secured in said base, and a blade connected to said base and co-acting with
125 said cutter bar.

8. A device of the character described, comprising a base, a cutter bar mounted in
130 said base, a casing slidably mounted in said base, contiguous to said cutter bar, the cas-

ing being provided with a forked lug, a
cross bar secured in the base, an adjusting
screw swiveled in said lug and working in
said cross bar, yielding gaging devices car-
ried by said casing, and a blade connected
with said base and co-acting with said cutter
bar.

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

CHRISTIAN A. FISCHER. [L. s.]

Witnesses:

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