

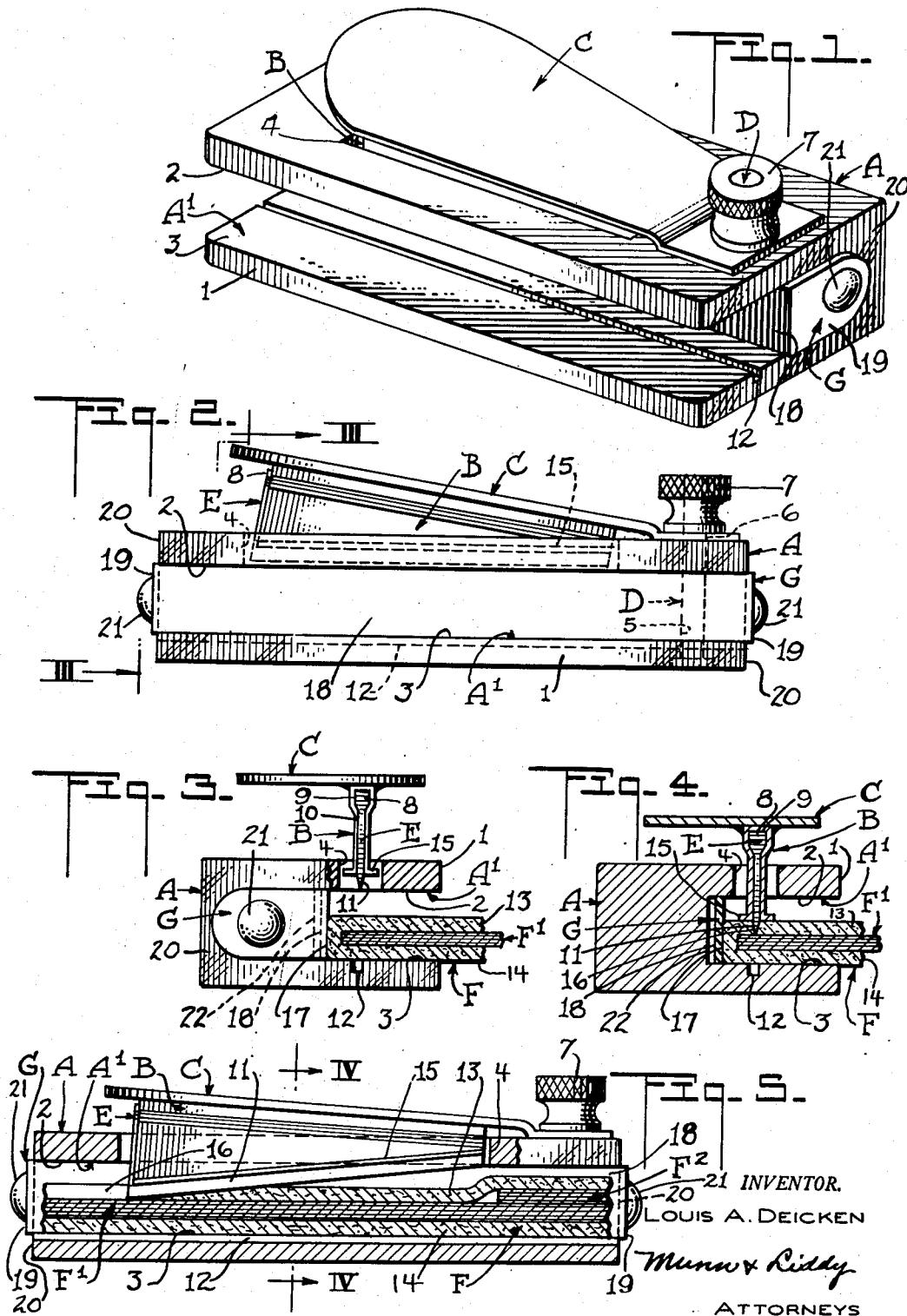
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ENVELOPE, OPENER

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ENVELOPE OPENER

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3 Claims. (Cl. 30—293)

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An object of my invention is to provide an envelope opener that is compact and in which the cutting blade is protected.

A further object of my invention is to provide an envelope opener in which only the thickness of the paper forming the envelope, is cut, novel means being provided for limiting the cutting depth of the blade.

A further object of my invention is to provide an envelope opener in which novel means is used for causing the blade to cut the envelope along a line paralleling a folded edge of the envelope, the cut being disposed the desired distance from the envelope fold.

A further object of my invention is to provide an envelope cutter which is simple in construction and durable and efficient for the purpose intended.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing forming a part of this application, in which:

Figure 1 is a perspective view of the device shown on an enlarged scale;

Figure 2 is a side elevation of the device shown on the same scale;

Figure 3 is an end view of the device when looking in the direction of the arrows III—III of Figure 2, part of the device being shown in section;

Figure 4 is a transverse section taken along the line IV—IV of Figure 5 and shows the device in envelope cutting position; and

Figure 5 is a view similar to Figure 2 but shows the device in envelope cutting position, and portions are shown in section in order to clarify the structure.

While I have shown only the preferred form of my invention, it should be understood that various changes or modifications may be made within the scope of the appended claims without departing from the spirit and scope of the invention.

In carrying out my invention, I provide a casing indicated generally at A and this casing may be made of any material desired, such as metal or plastic. The casing is preferably rectangular in shape and is made small enough to be held in one hand. Although I do not wish to be confined to any particular measurements, I have found that the following dimensions make a casing of a desirable size: $1\frac{3}{4}$ inches long, $\frac{7}{8}$ of an

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inch wide, and $\frac{3}{8}$ of an inch thick. The casing A has a groove A1 that is designed to receive an edge of an envelope. In Figure 3 I show how the groove A1 extends partially into the casing A from the side 1 of the casing. The groove has a top wall 2 and a bottom wall 3 when the device is held in a horizontal position. The top wall has a slot 4 formed therein that communicates with the groove A1. In Figure 2 the slot 4 is shown as extending throughout the greater part of the length of the casing.

The purpose of the slot 4 is to receive a cutting blade holder B of the shape shown in Figures 2 and 3. The holder is welded or otherwise secured to a resilient handle indicated generally at C. One end of the handle is secured to the casing A by means of a bolt D that extends through an opening 5 in the casing, see Figure 2. The handle C has an opening 6 that is aligned with the opening 5 so that the bolt D will pass therethrough. A nut 7 is threaded on the bolt and removably secures the handle to the casing. The handle is of the shape shown in Figures 1 and 2.

The blade holder B is U-shaped and it is designed to slidably receive a blade E, see Figure 3. The blade has a T-shaped head 8 that is removably received in the T-shaped portion 9 of a guide slot 10 that is formed by the sides of the blade holder. Figure 2 illustrates the length of the holder B and the blade E extends throughout the length of the blade holder B. When the resilient handle C is in normal or raised position, the lower end of the blade holder B as well as the cutting edge 11 of the blade will be received in the slot 4, as shown in Figure 2. This construction makes the device foolproof so far as the blade being able to cut a person's hand or any other portion of the body is concerned. The bottom wall 3 of the groove A1 is provided with a recess 12 that extends throughout the length of the device and this recess is designed to receive the cutting edge 11 of the blade when the resilient handle C is fully depressed. The recess is deep enough to prevent the cutting edge of the blade from contacting any portion of the bottom wall 3 and therefore the cutting edge cannot be dulled by coming into contact with any portion of the casing.

One of the novel features of the invention is the depth gauge which is formed as a part of the blade holder and limits the cutting edge 11 of the blade to cut through one thickness of the paper forming the envelope that is to be opened. In Figures 3 and 4, I show an envelope F on a large

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scale and this envelope has an upper side 13 and a lower side 14, the lower side resting upon the bottom wall 3. The contents of the envelope is indicated at F1.

When the resilient handle C is depressed from the position shown in Figure 3 into that shown in Figure 4, the blade holder B will be moved down upon the top side 13 of the envelope. The holder has outwardly extending flanges or guards 15 at its lower edges and these are adapted to ride upon the outer surface of the envelope side 13. The cutting edge 11 of the blade extends below the flanges 15 a distance which is sufficient for the blade to cut through a distance equal to only the thickness of the side 13. Figure 4 shows the edge 11 actually penetrating the side 13, but not extending into the contents F1 of the envelope.

Referring to Figure 5, I have illustrated how the envelope contents F1 may have a double thickness, such as at F2. If the envelope F shown in Figure 5 is moved to the left with respect to the casing A, and the resilient handle C is maintained in a depressed position, the outwardly extending flanges 15 will ride along the outer surface of the side 13 of the envelope and when the double thickness F2 of the envelope contents is encountered, the flanges or guards 15 will move the cutting blade so that it will ride clear of the double thickness envelope contents F2, and do no damage thereto. Figure 5 does illustrate the blade E as actually making a cut 16 in the envelope side 13 for opening the envelope.

I also provide novel means for determining how far the cut 16 in the envelope will be disposed from the folded edge 17 of the envelope, see Figure 4. A U-shaped gauge member indicated generally at G has a side 18 that is coextensive with the length of the casing A. The gauge G also has made ends 19 that are bent at right angles to the side 18 and are designed to frictionally engage with the end walls 20 of the casing. The ends 19 of the gauge have projections 21 that permit the fingers of the operator to grip them for slidably adjusting the side 18 of the gauge toward or away from the inner side 22 of the groove A1 so as to determine the position the folded edge 17 of the envelope will occupy with respect to the cutting edge 11 of the blade. It will be seen from this that the gauge G can be adjusted for moving the folded edge 17 of the envelope nearer or further away from the cutting edge 11 of the blade. In Figure 4 the adjustment is such that the cut 16 in the envelope will parallel the folded edge 17 and be positioned close to the envelope contents F1. It is possible to position the gauge so that the cutting edge 11 of the blade will open the envelope along the fold 17.

The blade holder B has greater height at its outer end than at its inner end, see Figure 5. The blade E has a shape somewhat the same as the blade holder. The purpose of this shape is to cause the cutting edge 11 of the blade to be entirely received within the confines of the slot 4 when the resilient handle C is in normal position. Figure 2 shows the handle C extending upwardly at an angle with respect to the casing A and this is its normal position.

When the resilient handle C is manually depressed as shown in Figure 5 in order to bring the cutting edge 11 of the blade against the envelope side 13, the cutting edge will extend at an angle with respect to the plane of the side 13 of the envelope and this will result in the more

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ready cutting of the envelope as it is moved along the groove A1.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood.

Before using the device the gauge G is adjusted to the position desired. The device is then held in the hand, preferably in a position where the thumb will rest on the resilient handle C and the tips of the next three fingers of the same hand will rest against the under side of the casing. The envelope is held in the other hand and the folded edge 17 thereof is moved along the groove A1 after the thumb has pressed the resilient handle for forcing the blade into cutting action with the envelope. The folded edge of the envelope contacts the side 18 of the gauge G. Relative movement between the envelope and the device will cause the blade to travel parallel to the folded edge 17 of the envelope and to make the cut 16 in the envelope. The guard 15 determines the depth of the cut and therefore the contents F1 cannot be damaged. This is true even though the contents is of double thickness for a portion of the length of the envelope as shown at F2 in Figure 5. The cut 16 will extend from end to end of the envelope.

The device is so constructed that the cutting edge is protected, and the device is made so small that it can be readily carried in the pocket of the person using it. The cutting blade E can be renewed from time to time. The rest of the device will function over a long period of time.

I claim:

1. An envelope opener comprising: a casing adapted to be held in one hand, and having a longitudinally-extending groove along one side designed to slidably receive an edge of an envelope that is to be opened; a resilient handle for holding a blade; the handle being carried by the casing; a blade removably carried by the handle; said handle being manually movable for extending the blade into the groove for cutting along an edge of the envelope that is moved in the groove, whereby the envelope will be opened; the resilient handle, when released, moving the blade away from the envelope; and a gauge mounted in the groove, and being adjustably secured to the casing for determining the distance between the edge of the envelope and the cut made by the blade.

2. In an envelope opener of the character described: a casing having a longitudinally-extending groove in one side thereof, and a slot in a top of the casing communicating with the groove; a resilient handle having one end thereof anchored to the top of the casing, and extending upwardly at an angle so that its other end is free and is normally spaced above the casing top; a blade operatively connected to the handle for up and down movement with and by the handle; the blade having a straight sharp edge disposed for cutting an edge portion of an envelope or the like inserted into the groove, when the handle is depressed and the casing is drawn along the envelope for moving the sharp blade edge through the envelope for cutting purposes; the resilient handle having sufficient elastic power to return to a normal raised position wherein the sharp edge of the blade will be retracted into the confines of the slot walls and parallel the top of the casing when the manual depressing force on the handle is removed to thereby protect this edge of

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the blade and leave the groove unobstructed by the blade; the length of the sharp edge of the blade being substantially coextensive with the slot in the top of the casing.

3. In an envelope opener: a casing having a groove extending along one side; a gauge having a portion extending throughout the length of the groove and against which an edge of an envelope is adapted to be slidably pressed; a blade movable into the groove for making a cut in the envelope paralleling the envelope edge that is being moved along the groove; and means for adjusting the gauge with respect to the blade for dis-

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posing the envelope edge the desired distance from the blade when the envelope contacts the gauge; whereby the cut in the envelope is made the desired distance from the edge of the envelope.

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