United States Patent

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[54] **ENVELOPE WITH AUXILIARY POCKET**
1 Claim, 7 Drawing Figs.

[52] **U.S. Cl.** **229/71,** 229/72
[51] **Int. Cl.** **B65d 27/04,** B65d 27/08
[50] **Field of Search** 229/71, 72

[56] **References Cited**
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ABSTRACT: A window patch strip and a pair of auxiliary patch strips are simultaneously fed into a rotary, single blade, cutting knife which severs three patches simultaneously, the patches being transported and applied together to a gummed area on the envelope blank, the gummed area surrounding a window opening and extending laterally thereof in opposed L-shaped gum strips. The auxiliary patches are secured by the L-shaped strips and together form a pocket behind the window patch.

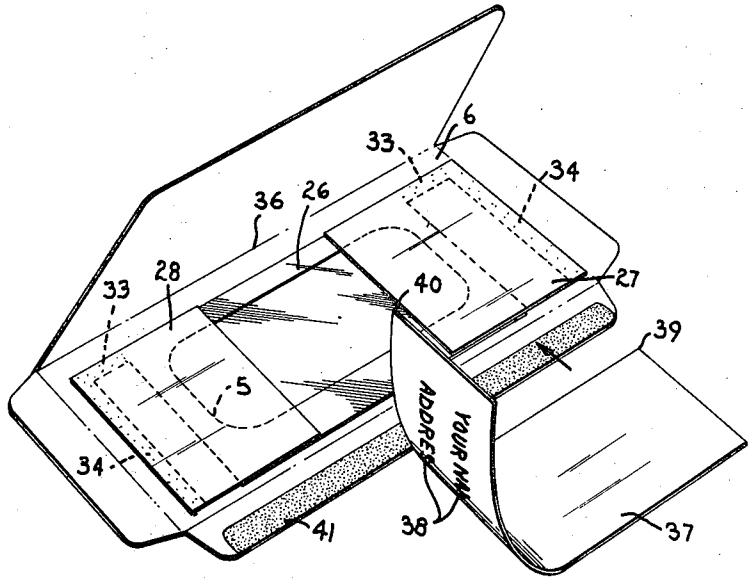

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Fig. 1.

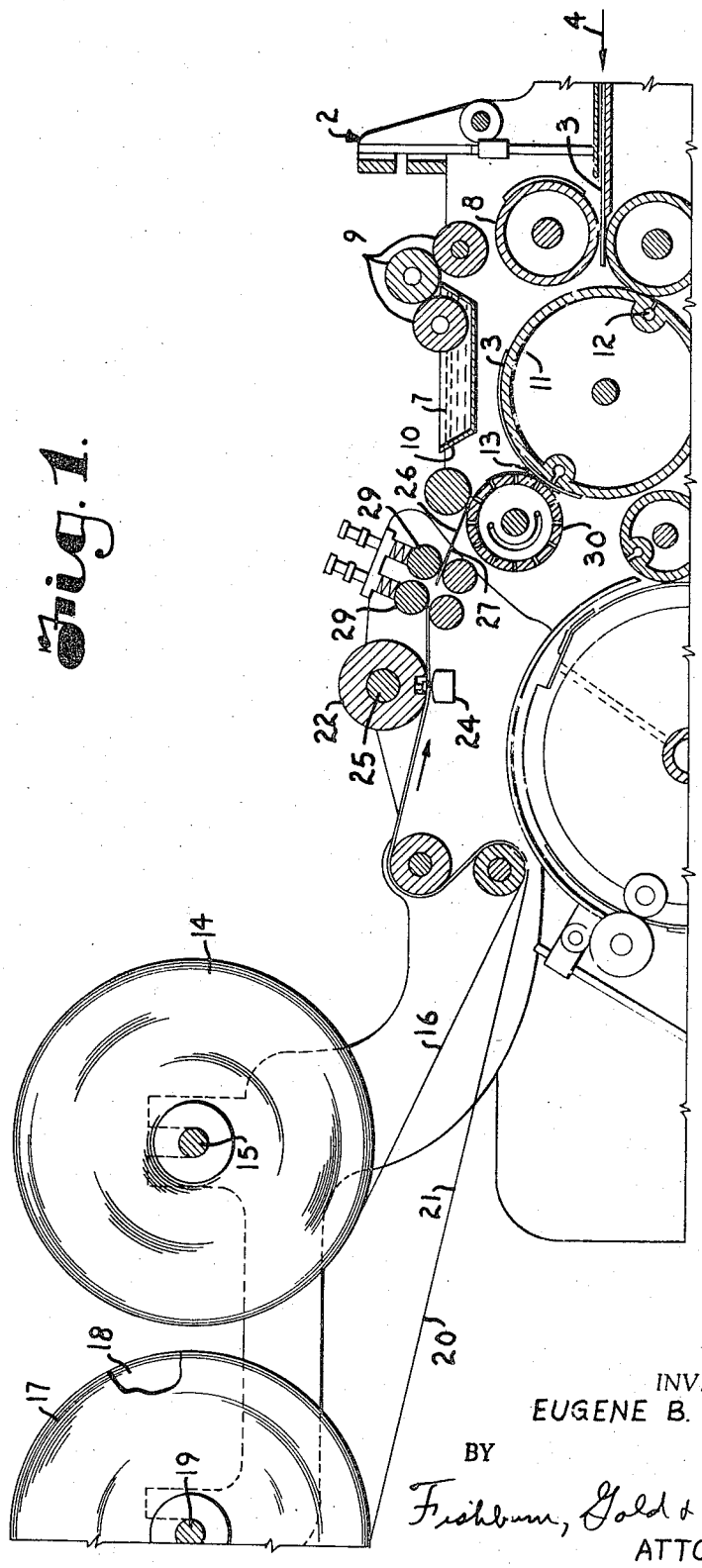

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Fig. 2.

Fig. 3.

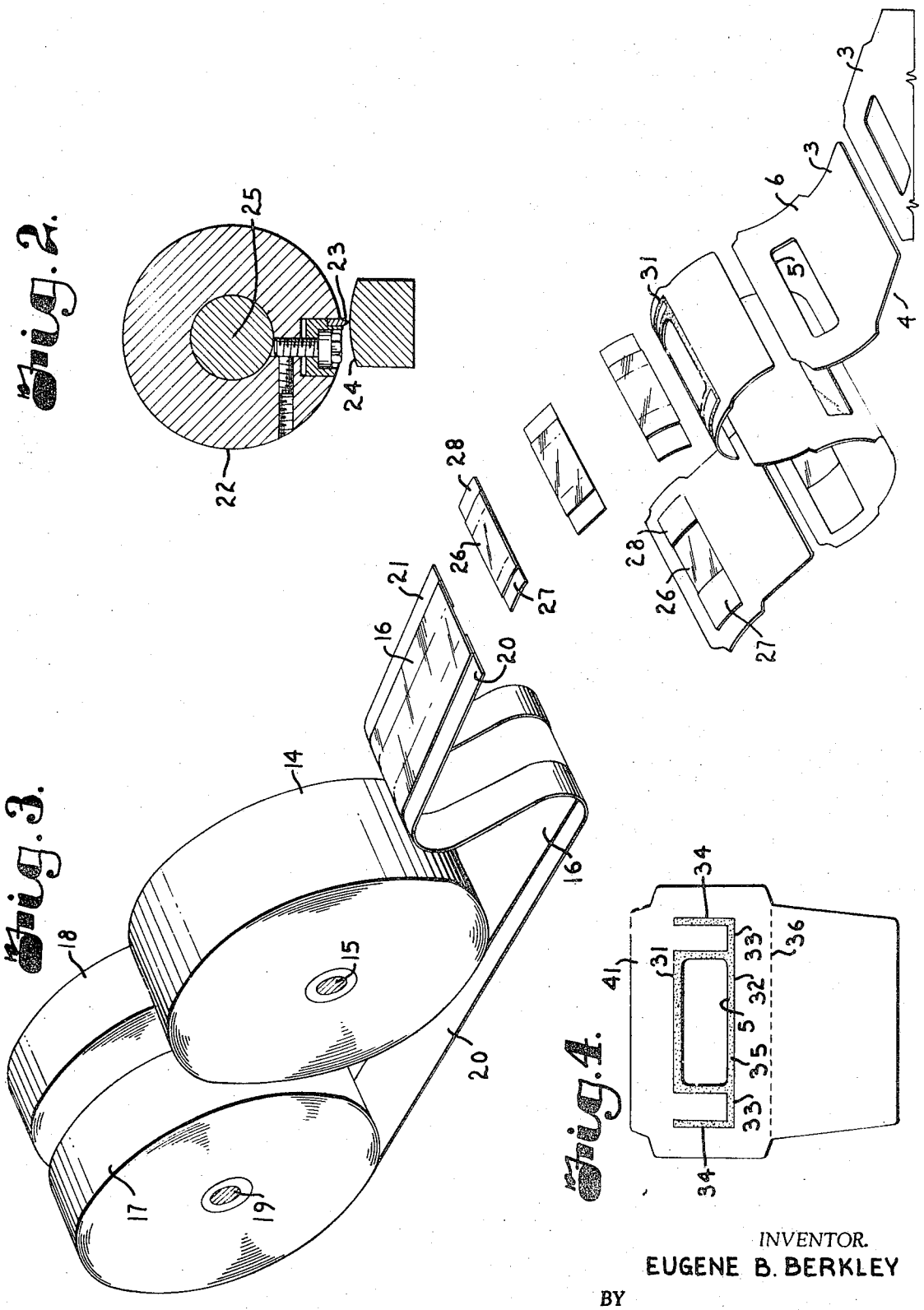

Fig. 4.

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Fig. 5.

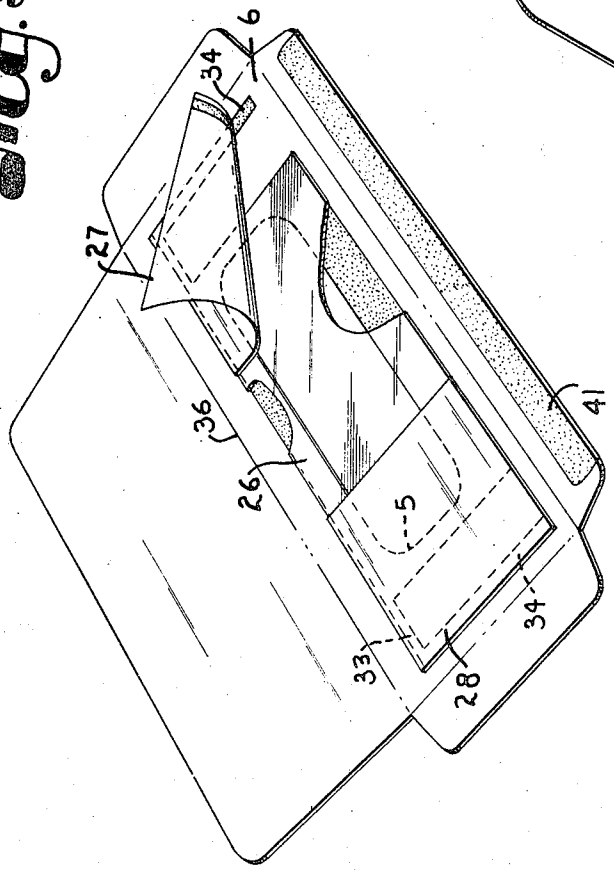


Fig. 6.

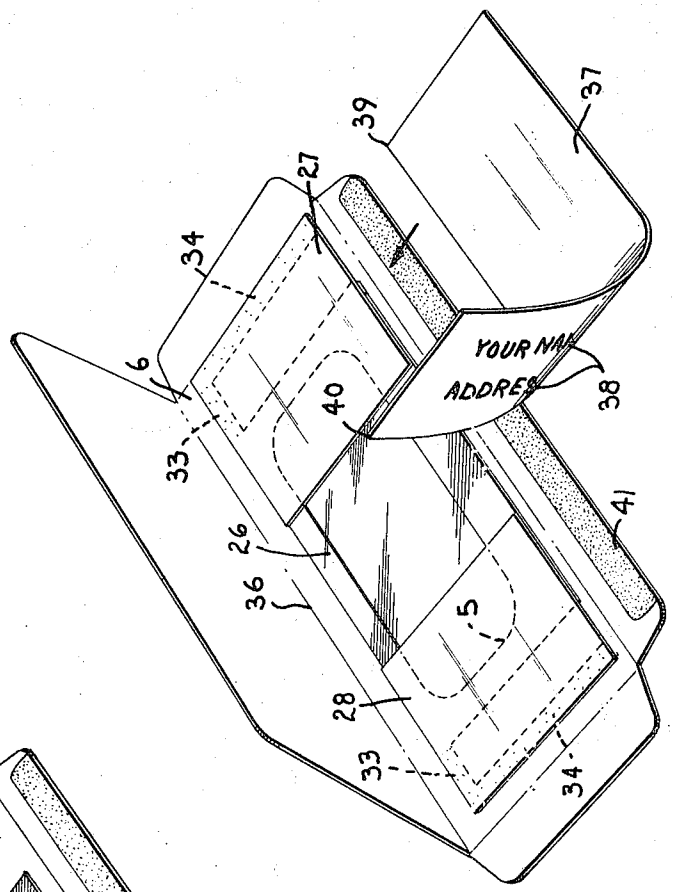
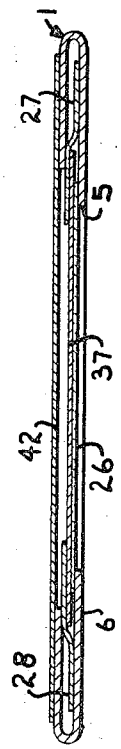


Fig. 7.



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ENVELOPE WITH AUXILIARY POCKET

This invention relates to a method for producing window envelopes with an auxiliary pocket and more particularly to a method for cutting and applying a plurality of patches to an envelope blank so as to form an auxiliary pocket for retaining an address card or the like in register with a patched window opening but without interfering with the main pocket of the envelope. This invention also relates to the auxiliary pocket window envelope produced by said method.

Difficulties are often encountered in maintaining an address located on the contents of a window envelope in register with the window. This situation in recent years has been aggravated by the use of automatically printed address cards or the like which form a separate item for insertion into the envelope with other contents. Such address cards are often cut substantially the same size as the main envelope pocket to prevent the address from moving out of window register but this is likely to be wasteful in terms of material as well as mailing weight, since the main body of such a card has no function except to maintain the much smaller address area in register. To overcome this problem, auxiliary pockets or special adhesive connections have been suggested; however, heretofore, known methods or arrangements offered in solution have proved to be impractical and/or excessively expensive.

The principal objects of the present invention are: to provide a method of making envelopes whereby an auxiliary pocket is rapidly and inexpensively provided behind a patched envelope window; to provide such a method whereby the pocket is easily formed during normal blank travel through a conventional high speed envelope machine; to provide such a method which utilizes conventional operating apparatus available on existing window envelope making machines; and to provide an auxiliary pocket window envelope which is simple in construction, easily manufactured and has very little added bulk or weight compared to similar envelopes without an auxiliary pocket.

Other objects and advantages of this invention will become apparent from the following description taken in connection with the accompanying drawings wherein are set forth by way of illustration and example certain embodiments of this invention.

FIG. 1 is a fragmentary partially schematic cross-sectional view through a typical high-speed envelope machine showing the patch applicating station adapted for the practice of this invention.

FIG. 2 is a fragmentary detailed cross-sectional view through a portion of the apparatus of FIG. 1, on an enlarged scale, showing a patch cutting rotary knife.

FIG. 3 is a schematic perspective view showing the paths taken by patch strips, patches and envelope blanks in assembling the envelope of this invention.

FIG. 4 is a plan view showing an envelope blank after patch adhesive application but before applying patches thereto.

FIG. 5 is a perspective view showing an envelope blank embodying this invention with portions of the window patch broken away and a portion of an auxiliary patch folded back to illustrate the construction of the auxiliary pocket.

FIG. 6 is a view somewhat similar to FIG. 5 but additionally showing an address card to be received in the auxiliary pocket.

FIG. 7 is a longitudinal cross-sectional view through a finished envelope embodying this invention, showing the auxiliary pocket containing an address card.

Referring to the drawings in more detail:

The reference numeral 1 (FIG. 7) generally indicates an auxiliary pocket window envelope embodying this invention. The envelope 1 may be produced on conventional envelope making machines, such as the apparatus 2 (FIG. 1) adapted to feed envelope blanks 3 at high speed along a path 4. The blanks 3 each have a window 5 (FIG. 3), in this example, opening through a front panel portion 6.

As the blanks 3 are driven through the apparatus 2, patch adhesive or gum 7 is applied thereto in a predetermined pattern by means of a suitable applicator roller 8 which transfers adhesive to the blank from a roller train 9 having a portion

thereof extending into a suitable gum box 10. The blanks 3, in this example, are then grasped by a collating roll 11 through the use of suitable vacuum ports 12 for transfer to a position 13 where patches are applied to the patch adhesive as now described.

A roll of suitably transparent or translucent envelope window patch material 14 is rotatably mounted on an axle 15 for paying out a patch strip 16 toward the applying position 13. The patch strip 16 is a suitable width whereby patches cut from the end thereof may cover the entire window 5 and extend therebeyond in both directions for adhesive anchoring to the inside surface of the panel 6.

Supported in a similar manner and, in this example, behind the roll 14, are a pair of auxiliary patch material rolls 17 and 18 on an axle 19. The rolls 17 and 18 are positioned whereby auxiliary patch material strips 20 and 21 respectively extend laterally beyond the side edges of the window patch strip 16, as best illustrated in FIG. 3. The patch material strips 16, 20 and 21 are guided together in the same plane to a suitable cutter mechanism, in this example, a rotary knife 22 having a single radially projecting knife blade 23 which engages an anvil 24 upon rotation about an axis 25. The blade 23 is adapted, for each cycle of operation, to produce a single transverse cut across the three patch material strips 16, 20 and 21 whereby the strips simultaneously produce three patches respectively designated 26, 27 and 28, all of substantially equal height. The patches 26, 27 and 28 are transported together (FIG. 3) by suitable transfer rollers 29 (FIG. 1) from which they are grasped by a vacuum applicator roller 30 which applies them, simultaneously, onto a blank 3 driven into proper receiving position by the collating roll 11.

The patch adhesive or gum pattern applied to the blanks is designated 31 (FIG. 4) and, in this example, comprises a central rectangular area 32 substantially framing the window opening 5 and opposed gum strip "L" pairs 33 and 34 positioned at each side of the central area 32. The respective gum strips 33 form extensions laterally of the central area 32 from an edge 35 of the central area 32 closest and parallel to the rear panel fold line 36. The strips 34 extend at right angles from the outermost ends of the strips 33 and project away from the fold line 36, terminating at approximately the same height as the central area 32. Thus, the pattern 31 appears to take the form of a central frame for the window 5 with a pair of laterally projecting opposed or bracketing gum strip "L" figures on each side thereof.

Upon application of the patches 26, 27 and 28 to the blank, the central or window patch 26 contacts the central area 32 and normally completely covers this area in the usual manner. The central patch 26, however, does not extend substantially beyond the sides of the central area 32 and thus leaves the respective gum strips 33 and 34 uncovered and able to contact the respective auxiliary patches 27 and 28. The auxiliary patches are thereby secured to the panel 6 along adjacent right angle edges where the auxiliary patches extend laterally beyond the central patch 26. Thus, the three patches are simultaneously formed with a single cutting operation and simultaneously applied to the traveling blank.

The blanks 3, with the patches secured thereto in the manner described, then complete their travel through the apparatus 2 where known conventional operations are performed thereon to produce the finished envelope.

In using the envelope, an address card or the like designated 37 may be inserted between the patches 27 and 28 and behind the window patch 26 so that the address 38 appears through the window opening 5. The corners 39 and 40 of the card are retained at the respective junctions of the gum strips 33 and 34 and when the seal flap 41 is closed, the card 37 is prevented from shifting whereby the printed address 38 is positively maintained in the window opening. The main pocket 42 of the envelope is available to receive contents in the usual form and manner without interference with or dependence upon the address card 37.

It is to be understood that although one form of this invention has been illustrated and described, it is not to be limited specifically thereto; for example, the gum strip pairs **33** and **34** could take the form of adhesive spots, the pair of auxiliary patches could take the form of a single patch extending laterally beyond the side edges of the window patch, and/or the auxiliary patches need not actually overlap the window patch.

I claim:

1. An envelope having a panel with a window opening therethrough and adapted for containing an addressed enclosure of smaller size than said envelope in registry with said window opening, said envelope comprising:

a. a window patch covering said window and adhesively secured to said panel around said window opening; and

b. a pair of spaced-apart auxiliary patches of substantially the same height as said window patch and projecting laterally beyond respective side edges of said window patch, said auxiliary patches being secured to said panel laterally of said side edges by adhesive members positioned to form an enclosure receiving pocket between said panel and said auxiliary patch, at least a portion of said window patch being located between said auxiliary patches.