

March 25, 1958

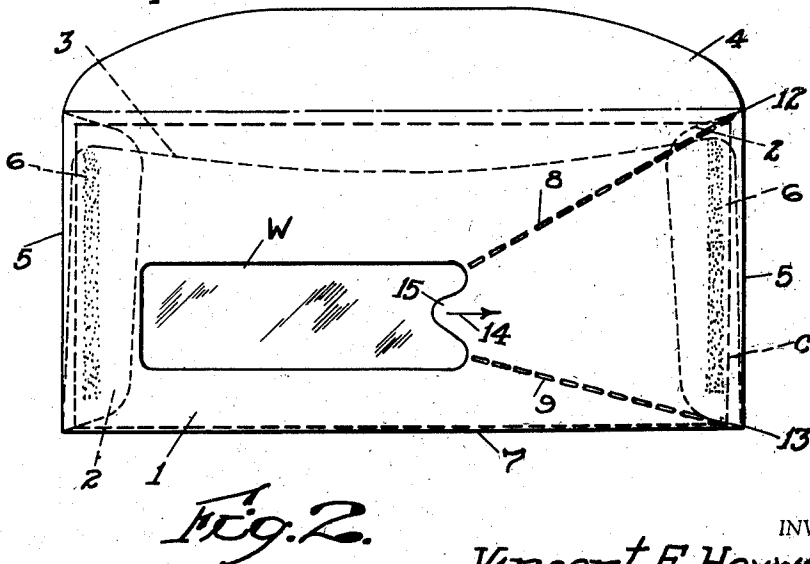
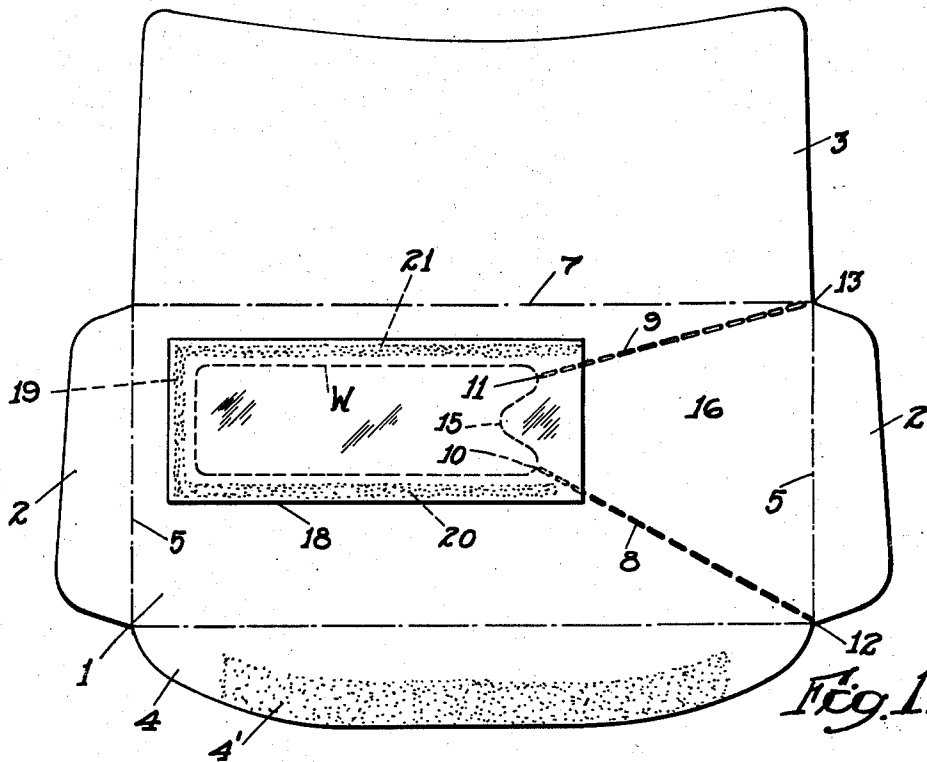
V. E. HEYWOOD

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QUICK OPENING CONSTRUCTION FOR WINDOW ENVELOPES

Filed Aug. 27, 1954

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

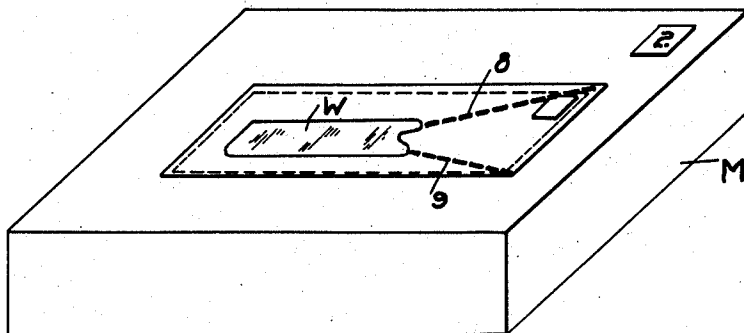


Fig. 3.

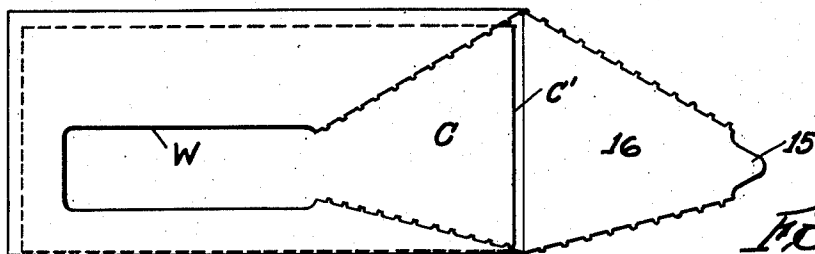


Fig. 4.

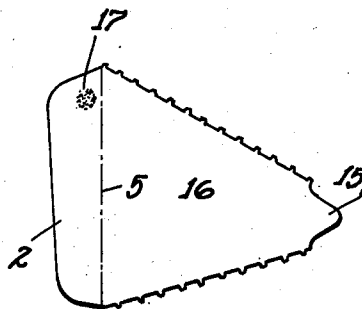
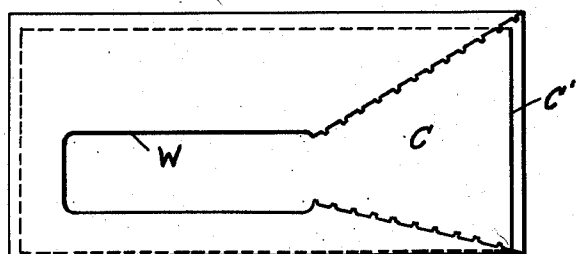


Fig. 5.

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QUICK OPENING CONSTRUCTION FOR WINDOW ENVELOPES

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3 Claims. (Cl. 229—85)

This invention relates generally to envelopes, and more particularly to a quick-opening construction for window envelopes which makes it possible to secure, even under the most difficult and unfavorable conditions, a quick and full opening up of a sealed envelope's address face, for the safe withdrawal of its contents.

For a sealed envelope's quick opening, it has long been known (see Wilson Patent No. 797,337 of 1905 and Smith Patent No. 895,053 of 1908) to provide one envelope wall with a curved slit, thereby to define a convex "ripping tongue" which is adapted, upon finger seizure and pull, to tear out the wall material along divergent lines of perforations running from the ends of the slit to the envelope's proximate corners. But such a slit-defined "ripping tongue," as stated in both of the above-mentioned patents, cannot be seized or grasped in one's fingers, unless the envelope, in said tongue's vicinity, be bent or flexed, so as to throw the tongue upwardly, out of the flat plane of the wall material. As is well known, there are numerous situations where an envelope, because of being virtually immobilized by its environment, cannot be bent or flexed in this fashion.

An example of these situations is the frequent use, either of an ordinary envelope or of a window envelope, to enclose an invoice or bill that relates specifically to merchandise (such as a book) contained in a relatively-rigid box or carton, to which said envelope, with the invoice sealed therein, is strongly and well-nigh permanently adhered, as by full area gluing of its seamed rear wall to a side of the box or carton. In this convenient and much-used mailing procedure, the consignee's name and address, as written or typed on the ordinary envelope, or as revealed on the invoice through the window or transparency of the window envelope, furnishes all postal information that is needed for a united and simultaneous delivery to the consignee of the merchandise and of the bill or invoice relating thereto.

However, in the practice of this mailing method, the bill or invoice frequently becomes torn, bent or otherwise damaged or mutilated, in the act of extracting it from a so-immobilized envelope. And this is always a matter of serious and costly concern to the consignor, where the so-enclosed bills or invoices are in the form of intricately punched and virtually permanent record cards which are required, on their return to the consignor, to be fed flatwise, for accounting or like purposes, through a so-called "business machine." In every such system, the patching, repair and replacement of these punched invoice cards that are returned in a torn, bent or otherwise damaged condition, has heretofore been an item of heavy and constant expense to consignors who employ these mailing and invoicing methods. For it is wholly unavailing, and sometimes even hazardous in this situation, to use envelopes, of either standard or window type, having convergent lines of tearing perforations that merge into a slit-defined "ripping tongue," after the fashion of the aforesaid Wilson and Smith patents. This is self-evident first, because such an envelope, being im-

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mobilized by its full area adhesion to the box or carton, cannot be given the bending of flexure that is always needed to deflect its ripping tongue in position for finger seizure, and second, because attempts of consignees, by use of sharp or pointed instruments, to deflect such slit-defined tongues upwardly for finger seizure, are almost certain to damage the fragile invoice cards contained in such envelopes.

By the instant invention, these shortcomings of the prior art quick-opening envelopes are effectively nullified. This is achieved by so interrelating an address window with convergent lines of tearing perforations in an envelope's wall as to provide for such perforations a ripping tongue or tab that is free to be seized in one's fingers under any and all conditions, and that needs no flexure or bending of the envelope to render it finger-seizable.

Other and further objects and advantages of my invention will be apparent from the following detailed description thereof, taken in connection with the accompanying drawings, in which:

Fig. 1 is a plan view, showing the inside surface of a blank from which the window envelope of my invention may be constructed.

Fig. 2 is a front face view of said window envelope, as fabricated from the blank of Fig. 1.

Fig. 3 is a perspective view, showing said envelope, with invoice sealed therein, in the above-described immobilized environment, i. e. glued by its seamed rear wall to a rigid carton containing the merchandise to which said invoice relates.

Fig. 4 is a front face view, similar to Fig. 2, illustrating the quick-opening operation which renders the invoice accessible for removal.

Fig. 5 is a view similar to Fig. 4, illustrating such quick-opening operation, when the envelope's gluing or seaming is of so-called "postage saver" type.

My improved envelope's blank, as shown in Fig. 1, is of conventional shape or outline; it provides a rectangular body portion 1, to serve as the envelope's front wall, a pair of opposite relatively-narrow side or end flaps 2, 2, foldable on lines 5, 5, a large back flap 3, foldable on line 7, and an opposite closure or seal flap 4, whose inside margin carries a layer of wettable sealing glue 4'. Flaps 2, 2 and 3 are folded and glued in conventional manner to provide the envelope's seamed rear wall. That is to say, the side flaps 2, 2, after being folded over on lines 5, 5, receive suitable glue imprints 6, 6 (see Fig. 2) on their exposed surfaces, following which the back flap 3 is folded over on line 7, to overlap it with and adhere it to the infolded side flaps 2, 2.

This envelope's quick-opening construction is supplied in part by two lines of tearing slits or perforations 8 and 9 in its front wall 1, that converge inwardly toward each other from the vicinity of said wall's upper and lower corners 12 and 13, respectively, at one end of the envelope. But the spaced inner ends of these convergent tear lines 8 and 9, instead of merging with the ends of a curved tongue-defining slit (as in the aforesaid Wilson and Smith patents) are arranged to intersect, at vertically spaced points 10 and 11 respectively, with the extreme inner end of an elongated window opening W, formed in said front wall 1.

Said window opening W is of the appropriate size and location to reveal address data on a rectangular enclosure C (shown by broken lines in Fig. 2) which the envelope is designed and proportioned to receive. This window opening W has conventional substantially straight boundary edges except at its inner end. There, at said window's inner end, the boundary edge, between said intersection points 10 and 11, is re-entrant, by virtue of the front wall material being extended inwardly beyond said intersection points, to form a generally convex

tab or tongue 15, that encroaches appreciably on the space bounded by the four corners of the window W.

Since the window opening is much wider than this tongue 15, the latter's entire free edge is appreciably spaced, in all directions, from all front wall material in the same plane as said tab or tongue. Therefore, said tab 15, being of single thickness flexible material, can always be readily picked up by its free edge, in one's fingers, to initiate, by a pull on said tab in the arrow direction 14, a gradually-widening rupture or tearing out of the front wall material along the two lines of slits 3 and 9. Thus it is that when my improved window envelope, with an invoice card or other addressed enclosure C sealed therein, is glued down by its seamed rear wall (see Fig. 3) to a rigid merchandise box or carton M, the free tab or tongue 15, being wholly unaffected by this immobilization of the envelope, can just as readily be finger-seized, for the envelope opening operation, as when the envelope is wholly unattached. This result stems from the tab being extended, as shown, into the window space, so that the latter gives finger access, in and just below the plane of the front wall material, to all portions of said tab's free edge; in this arrangement, said free tab is still an integral part of the generally triangular area 16 of front wall material that is progressively displaced by the above-described opening action, whose culmination, as shown in Fig. 4, exposes and makes accessible for finger seizure one entire side edge C' of the envelope's enclosed invoice card C. Thereupon the latter can readily be seized and freely drawn out endwise from the envelope pocket, across the so-displaced section 16, without any risk of tearing, bending or otherwise mutilating said invoice card C.

Fig. 5 depicts, for the above-described opening action, a superior result that accrues when my envelope is of the so-called "postage saver" type. In that case, the right-hand side flap 2 of Figs. 1 and 2, instead of having with back flap 3 a permanent full length adhesive connection 6, is united to said back flap only by a small adhesive spot connection 17, which, for postal inspection purposes, is easily rupturable, to allow said flap 2 to be pulled out. Accordingly, when my improved envelope is constructed with this "postage saver" feature, the effect of the above-described opening action is not only to release along tear lines 8 and 9 the triangular section 16, but also to break the latter's nominal adhesive connection 17 with the rest of the envelope. In short, said triangular section 16 along with its adjacent connected side flap 2, becomes completely removed from the rest of the envelope by said pulling action, as shown in Fig. 5.

If desired, the window W of my improved envelope may be equipped with the customary interior transparent patch or panel, of glassine, cellophane or the like. As shown on the envelope blank of Fig. 1, such a patch or panel 18 makes, with the top and bottom edges of window W, and also with one end thereof, the usual narrow marginal overlap required for the lines of adhesive 19, 20 and 21 by which said patch is held in place. Along said window's inner end, and also beneath the re-entrant tab 15, no line of patch adhesive can be provided, be-

cause this would adhere the patch to the displaceable front wall section 16 of my envelope. However, the patch 18, at this inner end of window W, is given a materially extended marginal overlap, which allows its top and bottom adhesive lines 20, 21 to extend well past the window's inner end, as shown in Fig. 1, thus to anchor the patch securely in the vicinity of the inner end of window W.

I claim:

1. In an envelope construction of the class described, a rectangular front wall, side and back flaps integral therewith and folded and glued in overlapping relation to provide a seamed rear wall in opposition to said front wall, and a seal flap to close the pocket between said walls, said front wall having an elongated window opening, to reveal address data on an enclosure received by said pocket, and said front wall, from the vicinity of two of its adjacent corners, being provided with two inwardly convergent lines of tearing perforations which intersect, at spaced apart points, the proximate inner boundary edge of said window opening, said inner boundary edge, between said intersection points, being re-entrant upon the space between said opening's inner and outer ends, to provide in said window space, a generally convex single-thickness free tab of front wall material, appreciably narrower than said window opening, the said points of intersection of the two lines of perforations with said window opening being on opposite sides of said tab and at the base thereof, whereby said tab is accessible, without flexure of the envelope, for finger seizure and pull, to obtain the rupture and tearing out of the front wall material along said two lines of perforations.

2. An envelope construction as claimed by claim 1, which includes an elongated transparent patch applied to the inside surface of the front wall in overlapping relation to the side and end edges of its window opening, said patch being adhesively connected to the front wall along all such edges of said window opening except that end edge which is intersected by said two lines of tearing perforations.

3. An envelope construction as claimed by claim 1, wherein the side flap which underlies the front wall's lines of tearing perforations has only a nominal spot glue connection to the back flap, whereby finger pull on said tab to rupture said connection obtains removal from the envelope of said side flap, along with the front wall material between said lines of tearing perforations.

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