

[54] ENVELOPE MAILING PIECE

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[51] Int. Cl. B65d 27/10

[58] Field of Search 229/69, 73; 281/5; 282/3

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Primary Examiner—Donald F. Norton

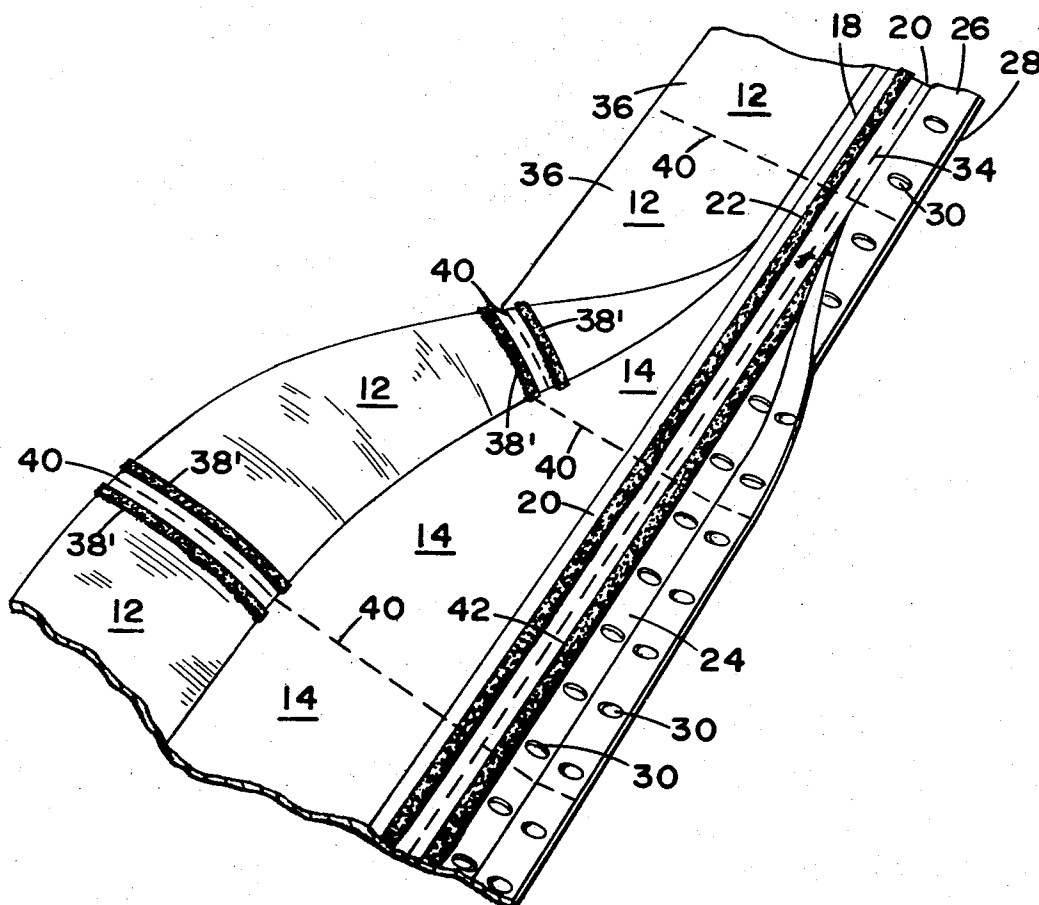
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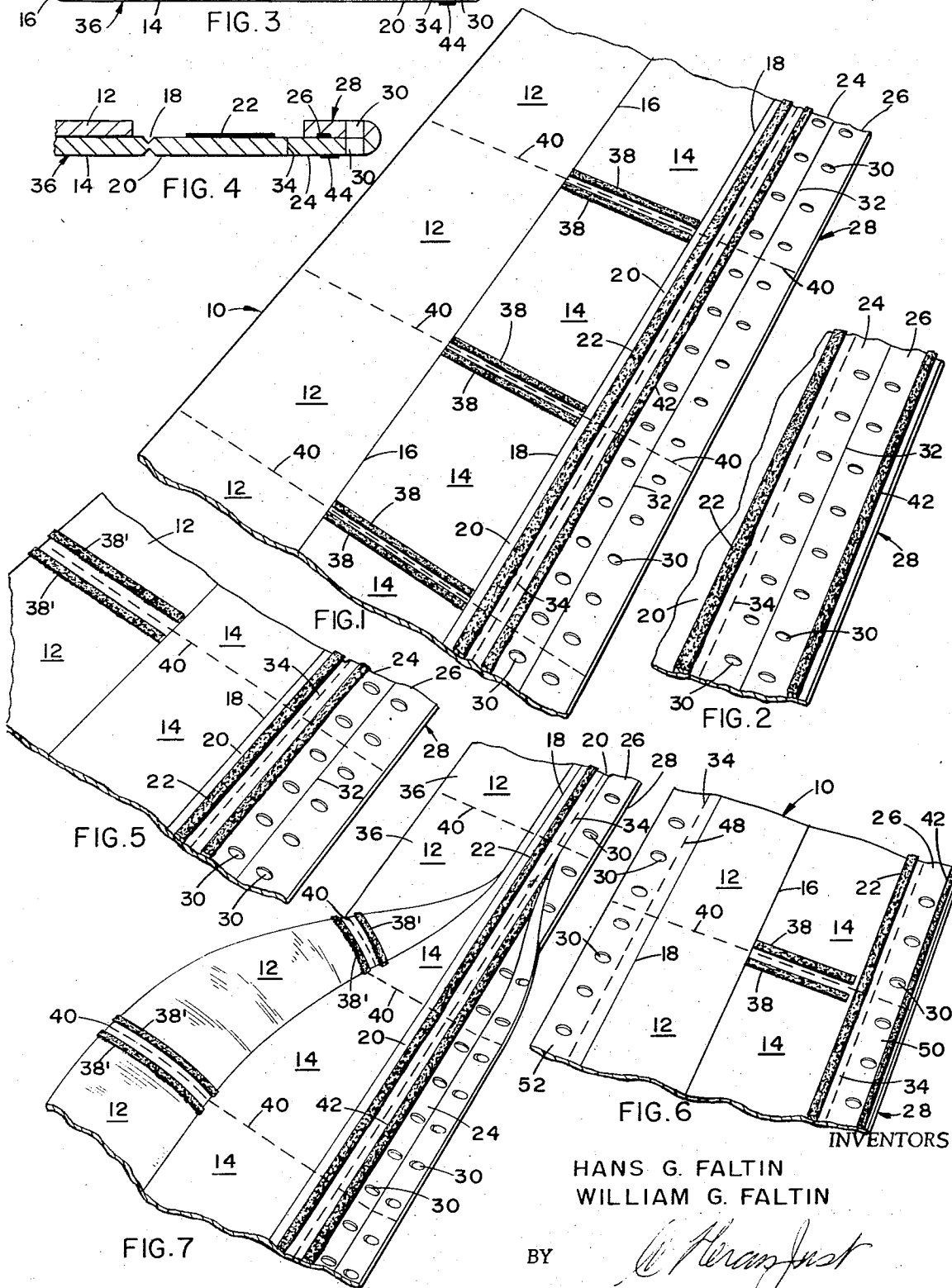
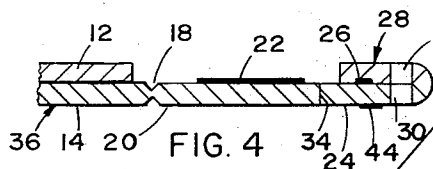
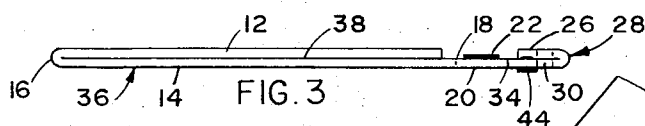
[57] **ABSTRACT**

An envelope attachable to a carrying piece or sheet such as a newspaper supplement or the like and formed from a sheet of thin foldable material such as

paper or the like, such as that from which conventional envelopes are formed, and folded upon itself to form a multi-ply unit comprising at least one pair of overlying panels permanently connected at the opposite end edges thereof to form an envelope which is connected by a row of separating means, such as perforations or the like to an attaching strip coextensive with and extending along said envelope and comprising a strip of two similar overlying narrow panels which reinforce each other and possess the dual functions of (1) receiving affixing means such as adhesive by which each multi-ply envelope and attaching strip unit is attached to such supporting carrying piece or sheet and (2) embodying feeding means such as a row of perforations or the like by which a series of said multi-ply units, which are connected separably in end-to-end relationship, may be fed at a very high rate of speed and successively separated by appropriate mechanism and affixed to such carrying pieces or sheets, such as a rapidly moving web of printed newspaper supplement or the like, by adhesive which preferably is applied to said units by said mechanism. Several different embodiments of such envelope structure and attaching strips are provided, including several forms having an additional panel connected thereto to serve as an order blank or the like.

21 Claims, 29 Drawing Figures

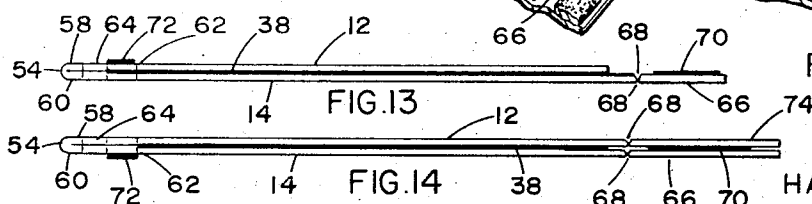
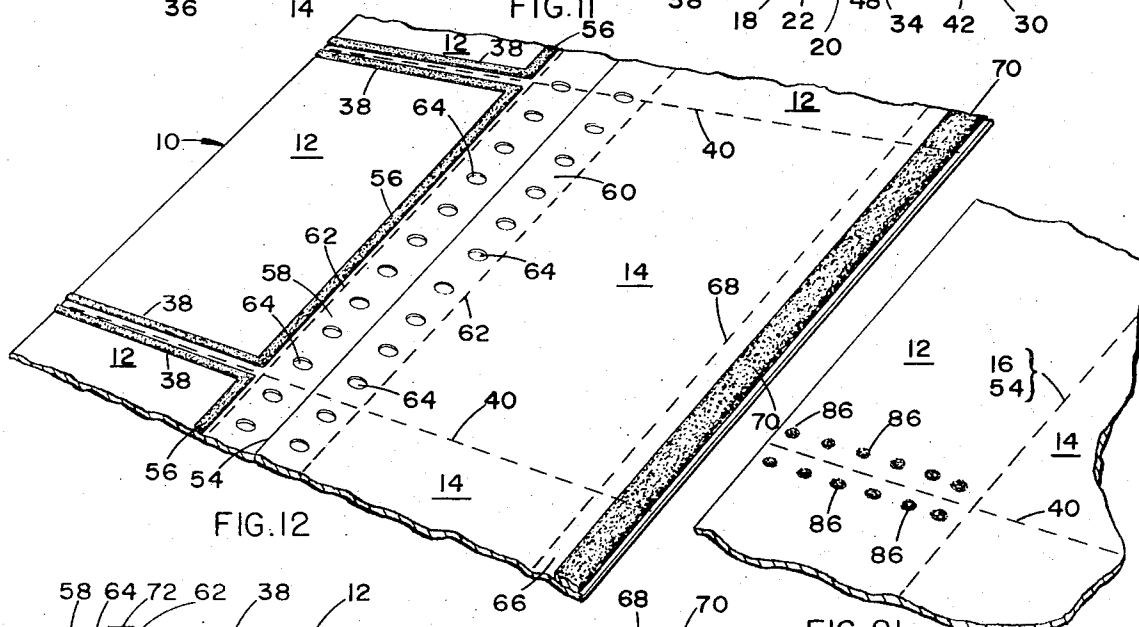
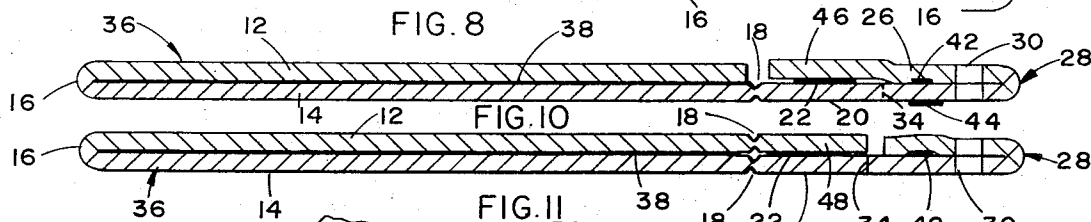
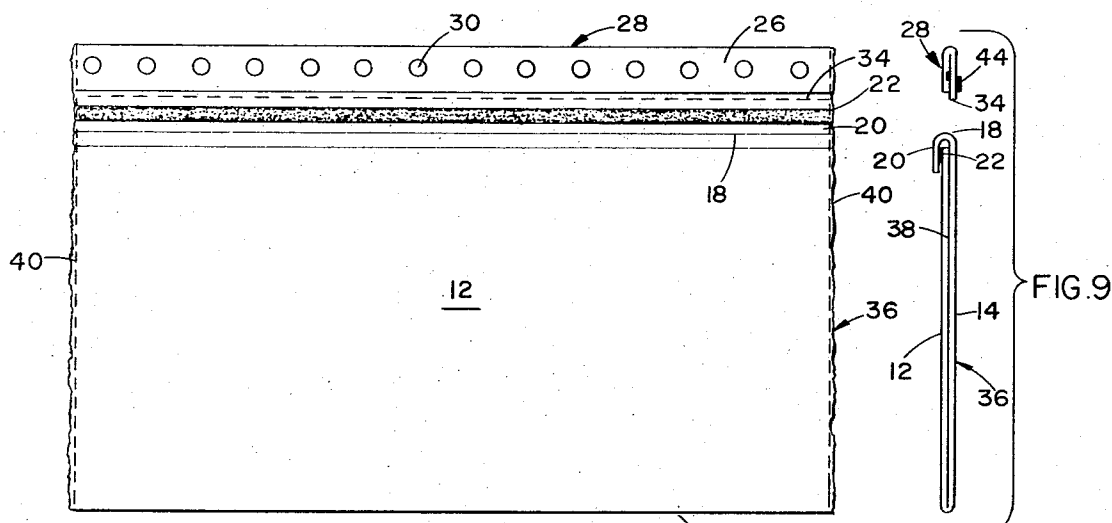




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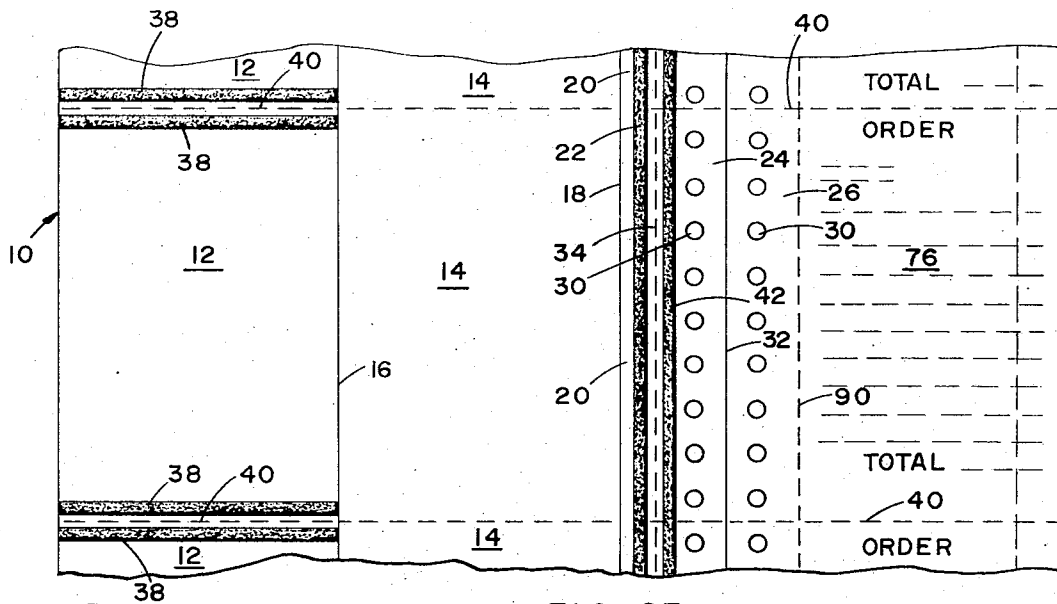


FIG. 23

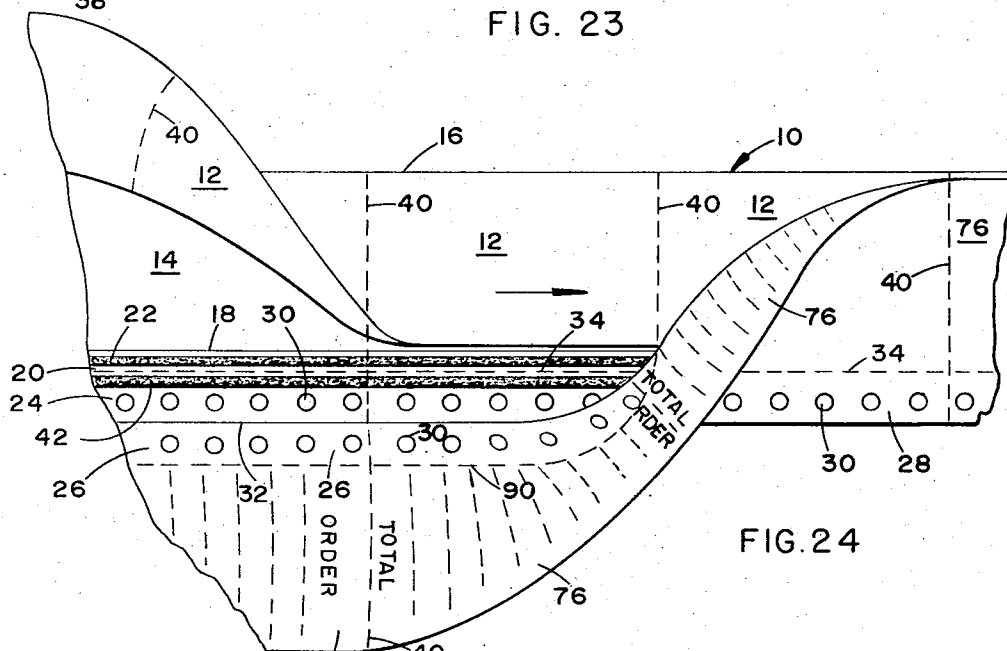


FIG. 24

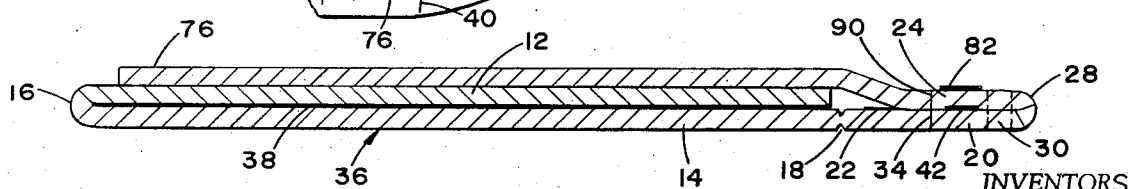


FIG. 25

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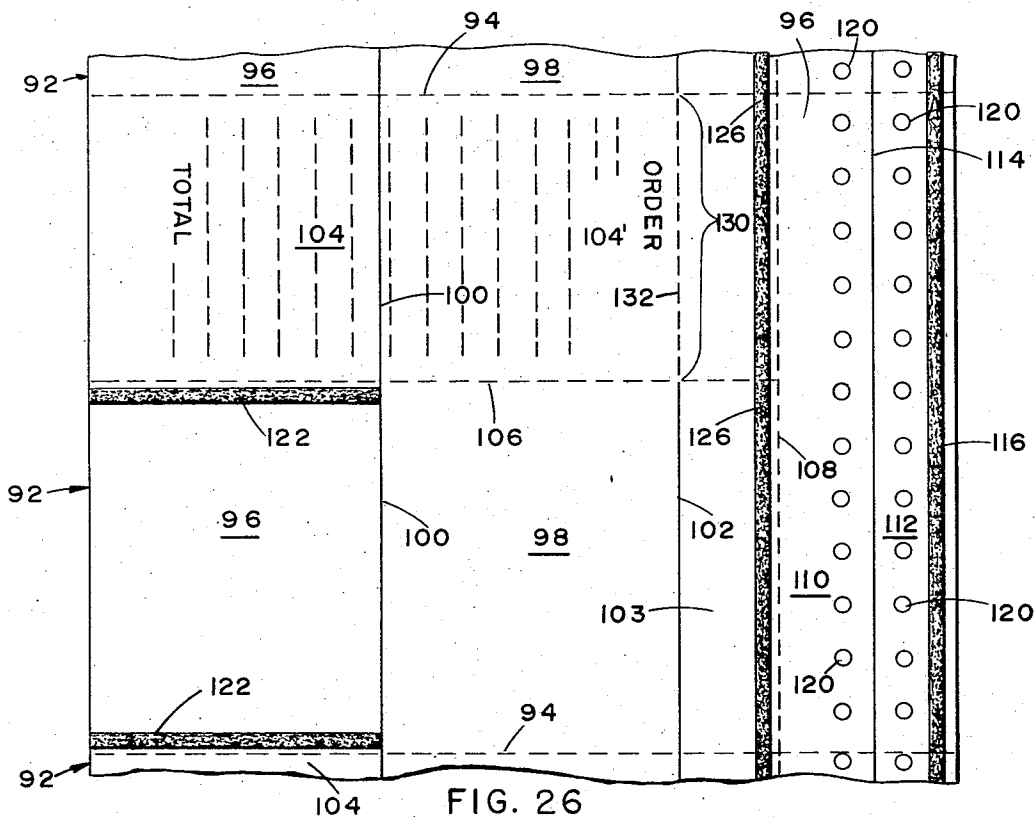


FIG. 26

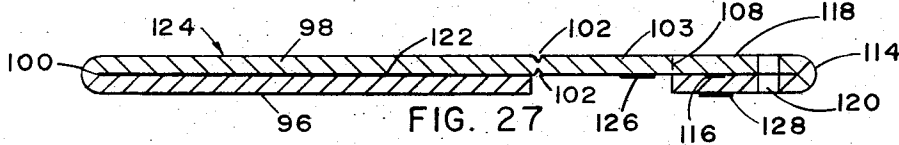


FIG. 27

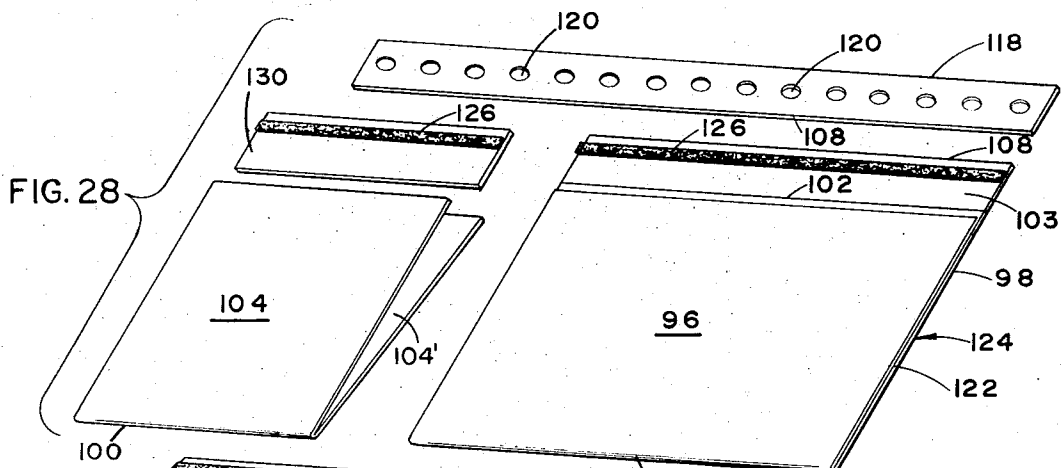


FIG. 28

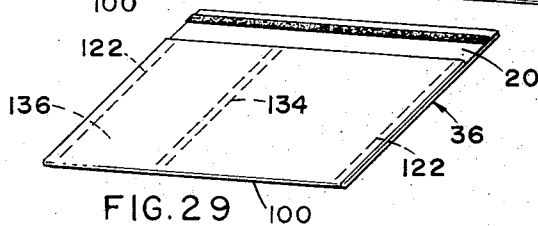


FIG. 29

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ENVELOPE MAILING PIECE

CROSS-REFERENCE TO RELATED APPLICATIONS

The various embodiments of the present invention comprise a somewhat related but different form of envelope-type mailing piece from that illustrated and claimed in co-pending application, Ser. No. 726,779, filed May 6, 1968, now U.S. Pat. No. 3,476,307, dated Nov. 4, 1969, in the names of the same coinventors as in the present application. Further, such envelope-type mailing pieces which comprise the present invention are capable of being successively fed and separated by mechanism comprising the subject matter of pending application, Ser. No. 685,122, filed Nov. 22, 1967 now U.S. Pat. No. 3,504,653, dated April 7, 1970.

BACKGROUND OF THE INVENTION

Rapid progress presently is being made in modern advertising methods relative to the use of return-type mailing pieces of various kinds. One popular form comprises a return postcard upon which the name and address of the recipient may be inscribed and mailed back to the advertiser for various purposes, one such purpose being the formation of a mailing list for the sending of additional advertising items of a direct mail type for example. Under some circumstances, single sheet types of return postcards are affixed to newspaper supplements, magazines and the like for purposes of directly soliciting orders on the basis of payment being made upon delivery or open account. One major difficulty with this type of business is that the merchandise, upon being received by the person ordering the same may not pay for it and this results in collection difficulties.

More modern forms of advertising and soliciting orders for merchandise and the like have given rise to the need for envelopes which may be affixed to certain carrying pieces such as newspaper supplements, catalogues, magazines and the like. This need has been previously responded to by way of the subject matter of said co-pending application filed by the same applicants as the instant invention and in which a single sheet of material is attached to a carrying piece by a separable attaching strip, said single sheet being foldable by the recipient of the carrying piece into an envelope and a number of different embodiments of envelopes are described and claimed in said application.

Though the subject matter of said co-pending application is useful, it has been found that in order to render a supply of single sheet flat envelope-forming pieces readily capable of being separated and advanced at a rapid rate for attachment to a correspondingly rapidly moving printed web, such as a newspaper supplement, it is essential that the sheet stock from which the envelope-forming pieces are to be formed must be similar to at least certain types of card stock which is appreciably thicker than paper, for example, from which conventional envelopes are formed. Further, there is both difficulty and resistance on the part of a certain segment of the purchasing public to fold a single ply sheet of paper-like material, and especially relatively heavy-type material, into an envelope by following appropriate instructions, as is necessary in utilizing the subject matter of the aforementioned co-pending application.

In an effort to provide a blank or panel comprising especially relatively thin and readily foldable sheet stock such as paper from which conventional types of envelopes are formed, so as to form at least two overlapping panels thereof into an envelope and provide a separable attaching strip along the edge of one panel of the envelope so as to permit the same to be affixed to a carrying sheet or piece such as a newspaper supplement, magazine or the like, it was found that paper of such conventional relatively thin type as is used to form envelopes is not readily susceptible to have at least a single thickness thereof serve as an attaching strip and particularly one that is capable of being fed by high speed feeding and separating mechanism such as that with which the present invention is contemplated to be used. The present invention overcomes such difficulty however, and the principal advantages and attributes of the same are set forth as follows.

SUMMARY OF THE INVENTION

The principal object of the present invention is to provide a mailing envelope formed in complete condition from a pair of panels folded into overlapping relationship from relatively thin sheet material, such as paper from which conventional envelopes and the like are formed, which is provided along one edge of such multi-ply envelope with an attaching strip to which an elongated arrangement of adhesive means may be applied to affix the same to such carrying piece or sheet, said attaching strip also having feed means, preferably in the form of a row of perforations engaged by pins on a feed wheel, for example, of suitable feeding and separating mechanism, said attaching strip being reinforced so as to render it capable of withstanding the rigorous conditions imposed upon it by such feeding and separating mechanism, the preferred manner of reinforcement comprising providing a plurality of plies of the material from which the envelope and feeding strip are formed and stabilizing said plurality of plies suitably to render such reinforcement effective.

It is another object of the invention to provide a number of embodiments of overlapping ply arrangements, both in regard to forming the envelope and attaching strip, and also in regard to providing various embodiments of means to seal the open edge of the envelope, including foldable sealing flaps and the use of removable adhesive to seal such envelopes in closed condition when they are to be used.

It is a further object of the invention to provide several embodiments of completely formed multi-ply envelopes and attaching strips which embody the advantages and attributes of the other objects set forth above and further, provide an additional or supplemental panel which may either be foldably or detachably connected to one edge of the envelope, for example, and serve as means to be inscribed by the user, such as in regard to placing an order with the advertiser, whereby the details of the order may be inscribed upon said additional panel and included with the envelope when mailed to the advertiser, the envelope also serving the additional desirable function of enclosing a suitable form of payment such as a check, money order, coins or the like.

Details of the foregoing objects and of the invention, as well as other objects thereof, are set forth in the following specification and illustrated in the accompanying drawings comprising a part thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary perspective view of a strip of thin, foldable material from which one embodiment of an envelope mailing piece and attaching strip may be formed in accordance with the principles of the invention.

FIG. 2 is a fragmentary perspective view of a slightly different embodiment of attaching strip from that shown in FIG. 1.

FIG. 3 is an end view of one embodiment of envelope mailing piece formed from the strip of material shown in FIGS. 1 and 2 and shown on a larger scale than in said figures.

FIG. 4 is a fragmentary, further enlarged transverse sectional view of the embodiment of mailing piece shown in FIG. 3.

FIG. 5 is a fragmentary perspective view of a still further embodiment of sealing means for one portion of the strip of material from that shown in FIG. 1.

FIG. 6 is a fragmentary perspective view of a strip of thin, foldable material adapted to be folded into another different embodiment of envelope mailing piece from that shown in the preceding figures to provide another basic embodiment of attaching strip from that shown in the preceding figure.

FIG. 7 is a fragmentary perspective view illustrating one preferred principle by which multi-ply envelope mailing pieces may be formed in accordance with the invention as applied specifically to the embodiment of strip shown in FIG. 1 in process of being folded into multi-ply condition.

FIG. 8 is a face view of a completely folded envelope mailing piece and attaching strip embodying the principles of the present invention and specifically comprising the embodiment shown in FIG. 1 in condition for attachment to a carrying piece or sheet.

FIG. 9 is an exploded end view of the embodiment of envelope mailing piece shown in FIG. 8 in which the envelope has been separated from its attaching strip and the sealing flap thereof has been folded into sealing condition upon the envelope.

FIG. 10 is a transverse sectional view on a larger scale than employed in the preceding figures and illustrating a further embodiment of attaching strip which incorporates the principles of the invention.

FIG. 11 is a view similar to FIG. 10 and showing a still further embodiment of mailing piece including the principles of the invention.

FIG. 12 is a fragmentary perspective view of a section of a thin foldable sheet of material incorporating a still further basic embodiment of attaching strip for the invention from that illustrated in the preceding figures.

FIG. 13 is an end view of an envelope mailing piece formed from the embodiment of sheet material shown in FIG. 12 and shown on a slightly larger scale than used therein.

FIG. 14 is a view similar to FIG. 13 but showing a still further embodiment of envelope mailing piece from that shown in FIG. 13.

FIG. 15 is a plan view of a thin sheet of foldable material for forming an envelope mailing piece embodying the principles of the invention and illustrating an embodiment in which an additional panel of material is connected to one of the envelope-forming panels to serve as an order blank or the like which may be inscribed by the user.

FIG. 16 is an end view of a folded envelope mailing piece of the type shown in FIG. 15 and illustrated on a larger scale than employed therein.

FIG. 17 is a plan view of a thin sheet of foldable material for forming an envelope mailing piece embodying the principles of the invention and including an additional panel which may be inscribed and also serve as a sealing flap when the piece is folded into an envelope formation.

FIG. 18 is an end view of an envelope mailing piece formed from the blank shown in FIG. 17 and illustrated on a larger scale than employed therein.

FIG. 19 is a fragmentary, perspective view of a stack of fan-folded envelope mailing pieces representative of the various embodiments of the invention illustrated in the preceding figures and showing one manner of compactly arranging an infinite number of such mailing pieces separably connected and arranged in compact, stacked relationship in condition to be stored or fed to a feeding and separating machine.

FIG. 20 is a fragmentary, perspective view showing an infinite series of separably connected representative envelope mailing pieces embodying the principles of the invention illustrated in a coiled form of compact arrangement of such mailing pieces.

FIG. 21 is a fragmentary perspective view of a different means for connecting the ends of the envelope panels by sealing adhesive from the corresponding means shown in the preceding figures.

FIG. 22 is a fragmentary perspective view of still another arrangement of a transverse stripe of sealing adhesive for the ends of the envelope panels which may be used in lieu of the preceding embodiments thereof.

FIG. 23 is a fragmentary plan view of a blank for forming another embodiment of the types of mailing piece illustrated in FIGS. 15 and 17 but incorporating another means for attaching an order blank directly to one of the narrow strips from which the composite attaching strip is formed.

FIG. 24 is a fragmentary perspective view of a section of the blank shown in FIG. 23 in process of the two outer panels being folded into a three-ply final assembly as illustrated in FIG. 24.

FIG. 25 is a transverse sectional view, shown on a larger scale than in FIGS. 23 and 24, of the three-ply final product resulting from the folding operation shown in FIG. 24.

FIG. 26 is a fragmentary plan view of a still further embodiment of a blank for forming a mailing piece of the basic types shown in FIGS. 15 and 17 but utilizing a still different arrangement for attaching an order blank to an envelope.

FIG. 27 is an enlarged end view of a folded blank of the type shown in FIG. 26.

FIG. 28 is an exploded perspective view of all parts of a single blank of the type shown in FIGS. 26 and 27 after being separated for use.

FIG. 29 is a small exemplary perspective view of a typical envelope embodying the principles of the invention but formed with an additional pocket for specialized use.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Although a number of different embodiments of envelope mailing pieces are illustrated in the accompanying drawings, all of said embodiments are predicated

upon a common basic principle, namely, a completed multi-ply envelope formed from a single ply sheet of relatively thin paper-like material, such as that from which conventional envelopes are formed and preferably having only a single open edge capable of being sealed after insertion of matter to be mailed therein and said completed envelope being provided along one edge thereof with a combination attaching and feeding strip which also is composed of a plurality of plies primarily to reinforce and strengthen the same in order that the envelope and attaching strip may be subjected without failure or damage to the rigors imposed thereon by feeding and separating machines to which they are fed for application to carrying pieces such as printed webs of various kinds.

Further, such envelope mailing pieces preferably are severably connected in end-to-end relationship in the form of an infinite series thereof capable of being compactly stacked in fan-folded manner or rolled into a compact coil, whereby the same may be delivered to such feeding and separating machine which is capable of operating at very high speeds to separate and attach said envelope mailing pieces to such printed web at a precise location in conjunction with an ad to which, for example, the envelope mailing piece pertains.

One embodiment of envelope mailing piece incorporating the principles of the invention is illustrated in FIG. 1. Referring thereto, there is shown a strip of paper stock or the like, of uniform width and preferably of a weight, for example, from which conventional envelopes are formed. It will be understood that if desired, a number of similar webs of paper stock may be manufactured in side-by-side relationship from a sheet of much greater width in order that a multiplicity of such strips may be formed simultaneously by appropriate means and then longitudinally severed from each other for separate delivery to folding machines of suitable type, not shown, but the principles of which are explained in detail hereinafter.

The web of paper stock 10 is sufficiently wide to provide a pair of rows of severably connected envelope-forming panels 12 and 14, said rows being connected along a common fold line 16, extending longitudinally therebetween. If desired, the fold line 16 may be suitably designated by a creasing operation such as commonly employed in paper mailing items of many types. Similarly, another longitudinally extending fold line 18 extends along the opposite edges of the row of panels 14 from the fold line 16 in order to form a sealing flap 20 which is foldable in a manner to be described hereinafter along the line 18. A strip of remoistenable adhesive 22 is applied to the uppermost surface of the connected rows of sealing flaps 20, as viewed in FIG. 1.

Also provided in the web of paper stock 10 is a pair of similar, adjacent longitudinally extending narrow panels 24 and 26 which, when folded onto each other in a manner described hereinafter, comprise a multi-ply attaching strip 28 which is provided with feeding means preferably comprising a row of holes or perforations 30. The narrow panels 24 and 26 are connected along adjacent edges by a longitudinal crease or fold line 32 and said overlying, connected pair of panels 24 and 26 are severably connected to the longitudinal row of sealing flaps 20 by a line of perforations or roulette slits 34.

Referring to FIG. 7, it will be seen that the longitudinal row of envelope-forming panels 12 are folded onto the corresponding row of panels 14 by suitable mecha-

nism, which does not comprise part of the present invention, in order to form a series of multi-ply envelopes 36. Similarly, the row of narrow panels 26 is folded onto the row of narrow panels 24, all of said aforementioned folding being accomplished rapidly and automatically in said suitable mechanism, along said row of panels, uniformly and evenly, as desired, to form simultaneously a longitudinally extending connected series of multi-ply attaching strips 28 which are severably connected to a corresponding series of longitudinally extending row of multi-ply envelopes 36.

Preferably immediately prior to effecting the folding of the envelope panels and attaching strip panels, sealing adhesive of suitable type, preferably the type which dries fairly rapidly, is applied to at least one of the rows of envelope-forming panels 12 or 14, depending on which is found most desirable for certain types of applying machines and the type of material from which web 10 is formed. The present invention is adaptable to a number of different arrangements, any one of which is suitable and effective to form multi-ply envelopes which are sealed at the ends, have one edge closed by the fold line 16 for example and the opposite edge open adjacent the sealing flap 20. If desired, such envelope may be provided with several compartments by the use of one or more suitable transverse stripes of sealing adhesive to form, for example, a small compartment to receive a few coins.

Referring to the embodiment shown in FIG. 1, transversely extending stripes of sealing adhesive 38 are applied by a suitable roller or other means, somewhat resembling a printing roller for example, to the panels 14 adjacent opposite ends thereof. Either when the web of paper stock 10 is in flat condition as shown in FIG. 1 or after the envelope-forming panels and attaching strip panels respectively have been folded onto each other as shown in FIG. 7, the individual envelopes 36 and the corresponding attaching strip 28 severably connected to each are rendered separable from each other by providing preferably equally spaced transversely extending rows of separable means such as rows of perforations 40. If said perforations are provided after the folding of the several rows of panels onto each other described above, said perforations must be sufficiently deep to effectively penetrate both plies of said multi-ply units.

The adhesive stripes 38 may be applied immediately prior to the folding occurring, as illustrated in exemplary manner in FIG. 7. Even though the stripes 38 are applied to only a single row of the panels such as panels 14 as shown in FIG. 1, or if desired, to the row of panels 12 as shown in the embodiment of FIG. 5 wherein the adhesive stripes are designated 38', the opposite ends of the envelopes 36 which are formed by the folding operation shown in FIG. 7 will be permanently and effectively connected in sealed manner. After separation of the successive envelopes 36 from each other along the transverse separating means 40, such envelopes will be closed along one edge and sealed at the opposite ends while being open at the edge adjacent the sealing flaps 20.

At the time of applying the transverse stripes of sealing adhesive 38 to the envelope panels as described above, another preferably longitudinally extending stripe of sealing adhesive 42 is applied along either the panel 24, as shown in FIG. 1, or the panel 26 as shown in FIG. 2, whereby, upon the folding of the panel 26

onto the panel 24, these two narrow panels will be firmly stabilized with respect to each other, whereby the aligned feeding perforations 30 may be very rapidly engaged by pins, for example, on a feed wheel in a suitable feeding and separating mechanism without danger of the attaching strip being torn, notwithstanding the fact that it is formed only from two plies of paper stock of the gauge normally employed in forming conventional envelopes, thereby minimizing the cost of the stock and bulk of the completed envelope and attaching strip, especially when attached to a carrying piece.

By applying the stripes of sealing adhesive 38 to the envelope panels and the longitudinally extending stripe 42 to one of the narrow panels forming the multi-ply attaching strip while the adhesive is in wet condition and thereupon immediately effecting folding of the various panels upon each other as shown in exemplary manner in FIG. 7, coupled with the fact that the amount of adhesive applied is controlled so that there is no excess quantity applied to the panels, the arrangement is devoid of any messiness or bleeding of the adhesive. Effective sealing and permanent joining of the ends of the envelope panels and the longitudinally-extending narrow panels, which form the reinforced attaching strip, are effected.

The stripe of remoistenable adhesive 22 which is applied to the longitudinal row of sealing flaps 20 may be applied simultaneously at the time of applying the stripes of sealing adhesive 38 and 42, or otherwise, especially since said stripe 22 of remoistenable adhesive is applied and then is dried promptly. Thus, it does not interfere with subsequent operations and particularly when arranging the separably connected series of completed envelopes 36 in compact storage condition for shipping and otherwise, as illustrated in exemplary manner in FIGS. 19 and 20, details of which are described hereinafter.

Further to facilitate an understanding of the invention and especially the embodiments illustrated in FIGS. 1, 2, 5 and 7, attention is directed to FIGS. 3 and 4, FIG. 3 being an end view of a single severably connected envelope 36 and attaching strip 28 thereon as formed by any of the arrangements otherwise illustrated in FIGS. 1, 2, 5 and 7. Further, FIGS. 3 and 4 illustrate another feature of the invention which comprises the addition of preferably a continuous stripe of attaching adhesive 44 which may be applied either to one surface or the other of the multi-ply attaching strip 28. In FIGS. 3 and 4, stripe 44 is shown in exemplary manner attached to the surface of the multi-ply unit opposite that to which the stripe of remoistenable adhesive 22 is affixed.

The stripe 44 is employed to affix the attaching strip 28 to a carrying piece of sheet such as the aforementioned printed web of a newspaper, magazine, catalogue or the like, at a predetermined and preferably precise location on the printed web as the same is moving from or within a printing press. One convenient location in a printing establishment to attach the multi-ply units comprising the combined envelopes 36 and attaching strips 28 is where the printed web is folded but the application of such multi-ply units at said location is not to be considered restrictive.

If the composite envelopes 36 and attaching strips 28 are applied to such carrying piece or sheet by means of the attaching stripe of adhesive 44 when affixed to the surface illustrated in FIGS. 3 and 4, the stripe of

remoistenable adhesive 22 will be outermost on the web. By applying the attaching stripe of adhesive 44 to the opposite surface of the multi-ply attaching strip 28, the stripe of remoistenable adhesive 22 would then be protected by being enclosed between the printed web and the sealing flap 20 of the envelope 36.

Particularly as explained in aforementioned pending application Ser. No. 685,122, the stripe of affixing adhesive 44 preferably is of a quick-setting type such as a so-called hot-melt type which is applied to the folded and formed envelopes and attaching strips by the aforementioned feeding and separating mechanism immediately prior to the envelope and attaching strip being delivered by said mechanism to the carrying piece. By such an arrangement, only a brief instant elapses between the time the tacky stripe of adhesive is applied to the multi-ply attaching strip 28 on each envelope and the latter is practically instantly thereafter affixed to the carrying piece. When a so-called hot-melt type of adhesive is used, only a very brief interval of time is required for the same to cool and subsequently harden to thereby permanently affix the attaching strip to the carrying piece or sheet in a manner to render it capable of resisting many types of subsequent operations of the latter.

Referring to FIG. 4, which is on a substantially larger scale than employed in FIG. 3, it will be seen particularly that the fold line 18 is shown in the form of a crease in a somewhat diagrammatic manner, it being understood that any appropriate form of folding crease is suitable. Also, the rows of perforations or roulette slits 34 are shown in the form of a transverse line in FIG. 4 extending entirely through the thickness of the sheet which forms the sealing flap 20. It likewise is to be understood, however, that the same is illustrative of means which are both readily separable and nevertheless capable of operatively holding the envelope 36 upon a carrying piece or sheet until it is ready to be removed therefrom by the recipient such as when the envelope is to be used for mailing purposes. Under said circumstances, the envelope is severed along the row of separating means 34. After placing an order and remittance, or the like, within the envelope and activating the stripe of adhesive 22 on the sealing flap 20, said flap may be folded over onto the exterior surface of the panel 12 as shown in FIG. 9 to seal the envelope closed.

Referring to FIG. 10, a slightly different arrangement or embodiment of the attaching strip 28 is shown wherein, especially by comparing the same with FIG. 3, it will be seen that the narrow panel 26 of the multi-ply attaching strip 28 in FIG. 3 is substantially wider in FIG. 10 to provide an additional covering strip portion 46 which overlies and protects the remoistenable adhesive 22, whereby the stripe of attaching adhesive 44 may be applied to the attaching strip 26 as illustrated in FIG. 10 and still provide protection for the stripe of remoistenable adhesive 22, thereby eliminating any reluctance on the part of the user to activate the adhesive such as by licking it when it is desired to seal the sealing flap 20 upon the envelope panel 12.

In FIG. 11, envelope 36 shown therein is generally similar to the envelopes shown in the preceding figures except that the outer edge of the envelope-forming panel 12 is extended so as to be substantially coextensive with the sealing flap 20 for example, the extended portion 48 preferably being connected by another fold line or crease 18 to the panel 12. It also will be seen in

FIG. 11 that the transverse stripes of sealing adhesive 38 respectively at opposite ends of the envelope extend therealong from the fold line 16 toward the open end but terminate approximately at the location of the fold lines 18 in the panels 12 and 14. Thus, when it is desired to seal the envelope after severing the same from the attaching strip 28 along the line of separating means 34, either the sealing flap 20 may be folded away from the extended portion 48 of panel 12 or vice versa, thereby exposing the stripe of remoistenable adhesive 22 for activation such as by licking it. After this, the flap 20 and extended portion 48 are smoothly brought into abutting, overlying contact with each other to cause the activated adhesive 22 to completely seal the contents within the envelope 36 and thereby form an envelope of uniform thickness throughout.

Another somewhat basic embodiment of the invention, but nevertheless employing similar fundamental principles utilized in the various preceding embodiments, is illustrated in FIG. 6. Therein it will be seen that the web of paper stock 10 may be approximately the same width as that illustrated in FIG. 1, for example, but the common fold line 16 is disposed preferably exactly midway between the opposite edges of the web 10. This is in view of the fact that, specifically as illustrated, the embodiment shown in FIG. 6 is admirably adapted to form an envelope of the type, for example, shown in FIG. 11 with the exception that it does not have the particular type of attaching strip 28 shown in FIG. 11.

In FIG. 6, the envelope-forming panels 12 and 14 are generally arranged as in the embodiments of the preceding figures. Transverse stripes of sealing adhesive 38 are disposed on opposite sides of the transverse separating means 40 between the panels of adjacent envelopes. A stripe of remoistenable adhesive 22 extends along the row of envelope panels 14, for example, adjacent the row of separating perforations 34 between envelope-forming panels 14 and the narrow strip 50 comprising one ply or narrow panel of a multi-ply attaching strip. The other ply 52 is connected to the outer edge of the separably connected row of envelope-forming panels 12 by means of the separating perforations 34.

The narrow strips 50 and 52 will overlies each other perfectly when the web 10 is folded along the common fold line 16, thereby disposing the perforations 30 on each strip, which comprise the feeding means thereon, in axial alignment with each other. Also, to stabilize the composite, multi-ply attaching strip composed of the overlying strips 50 and 52, a stripe of sealing adhesive 42 preferably is applied to one of them prior to the folding of the web 10 along the line 16. Otherwise, the transverse stripes of sealing adhesive 38 and the stripe of remoistenable adhesive 22 may be applied as described above with respect to the preceding embodiments. Further, by reference to FIG. 11 with respect to FIG. 6, it will be seen that the envelope-forming panels 12 preferably are provided with a fold line 18 which delineates the extended portions 48 along the panels 12 for abutment against the remoistenable adhesive 22 when activated and sealing of the formed envelope is desired.

From the foregoing, it will be seen that the embodiment of combined envelope and attaching strip units illustrated in FIGS. 1-5, 7 and 8 through 11 embody a multi-ply attaching strip in which the two narrow panels 24 and 26 forming the same are immediately adjacent

each other and are connected by a fold line 32 along which the outermost strip is folded onto the adjacent strip to form the multi-ply attaching strip 28. In FIG. 6, a multi-ply attaching strip comprising similar narrow strips 50 and 52 which are respectively along the opposite side edges of the web 10 are brought into overlying relationship when the web is folded along its median fold line 16. Referring to FIGS. 12-14, a still further basic embodiment of multi-ply attaching strip is illustrated in which the pair of narrow strips which form the same are adjacent each other but are also connected along the longitudinal, common fold line 54 which is parallel to and intermediately between the opposite side edges of the web 10.

The embodiment of FIGS. 12-14 therefore is somewhat in contrast to the preceding embodiment in which the medial fold line of the web 10 forms one closed edge of the resulting envelopes, said edge being opposite the open edge thereof through which objects may be inserted into the envelope. Accordingly, additional means must be employed to connect the edges of the envelope-forming panels 12 and 14 opposite the open edge thereof. Referring to FIG. 12 in particular, it will be seen that such additional means is provided in the form of a longitudinally extending and preferably continuous stripe of sealing adhesive 56 which, for example, may be the same kind of adhesive as employed on the transverse stripes 38 thereof which connect the ends of the envelope-forming panels 12 and 14.

Also referring to FIG. 12, it will be seen that said embodiment of the invention includes a pair of preferably similar narrow strips 58 and 60, which respectively are connected to the longitudinally extending row of envelope-forming panels 12 and 14 by lines of severable means 62, such as rows of perforations, roulette incisions, or the like, similar to the separating means 34 illustrated in the preceding embodiments. The narrow strips 58 and 60 are each provided with transversely oriented feeding means such as holes or perforations 64 of adequate size, similar, for example, to the feeding means 30 in the preceding embodiments. Thus, when the web 10 is folded transversely along the longitudinally extending fold line 54, the holes or perforations 64 respectively formed in the strips 58 and 60 will be axially aligned perfectly and the overlying strips 58 and 60 will form a multi-ply attaching strip similar to the strip 28 in the preceding embodiments.

The stripes of sealing adhesive 56 may be applied to the web 10 at the same time as the transverse stripes of sealing adhesive 38, immediately preceding the folding of the web 10 along the median fold line 54. Also, as in regard to the preceding embodiments, the transverse rows of separating perforations 40 between adjacent envelopes which will result from the folding of the web 10 along the median fold line 54 may be applied either when the web 10 is in flat condition as shown in FIG. 12, or after the same has been folded in a manner similar to that illustrated with respect to the embodiment shown in FIG. 7.

Further, as in certain of the preceding embodiments, the type and style of envelope formed from the embodiment of the web 10 shown in FIG. 12 may assume several forms such as respectively shown in exemplary manner in FIGS. 13 and 14. In FIG. 13, it will be seen that the arrangement of the web shown in FIG. 12 results in the formation of a sealing flap 66 which is foldably connected along a crease or fold line 68 to the

connected rows of envelope-forming panels 14. Also, a preferably continuous stripe of remoistenable adhesive 70 is applied to the appropriate surface of the sealing flap 66 on each envelope so that the same may be activated such as by licking or otherwise moistening it. The sealing flap 66 is then folded along the fold line 68 and engages the activated adhesive with the outer surface of the adjacent portion of envelope-forming panel 12.

For purposes of affixing the individual envelopes, when formed and separated, to a carrying piece or sheet, the embodiment of the invention shown in FIG. 13 may have a stripe of attaching adhesive 72 applied to the strip 58, preferably, in order that when the envelope is affixed to a carrying piece or sheet such as a printed web, the remoistenable stripe of adhesive 70 also will be adjacent said carrying piece which thereby protects the same.

Referring to FIG. 14, it will be seen that the embodiment of the envelope shown therein, in end view, is similar to that shown in FIG. 13 except that the envelope-forming panel 12 has been extended to provide an additional portion 74 which, preferably is coextensive in width with the sealing flap 66, for example, which may be connected by a folding crease 68 to the envelope-forming panels 14, or said crease may be omitted, if desired. However, either said sealing flap 66 or the extended portion 74 preferably is connected by a crease or fold line 68 to its corresponding envelope-forming panel in order that one of such elements may be foldably moved away from the other to permit activation of the stripe of re-moistenable adhesive 70. Said stripe 70 may be affixed to either one of said elements and when the same are restored to the overlying relationship as shown in FIG. 14 the envelope will be sealed closed. Under such circumstances, the transversely extending stripes of sealing adhesive 38 at opposite ends of the envelope terminate adjacent the creases or fold lines 68 in order to permit such separation of the sealing flap 66 from the extended portion 74 to permit such activation of the remoistenable adhesive.

In view of the fact that, in the embodiment shown in FIG. 14, the stripe of remoistenable adhesive 70 is protected until ready for use, it is immaterial where the stripe of attaching adhesive 72 is applied; that is, either to the exterior of the narrow strip 58 or 60. However, in FIG. 14, it has been shown applied to the narrow strip 60 but this is merely illustrative and not restrictive.

The embodiment of multi-ply envelope and attaching strip unit shown in FIGS. 12-14 readily lends itself to a further advantage offered by the present invention, several embodiments of which are illustrated respectively in FIGS. 15 and 16 and in FIGS. 17 and 18. Referring to FIGS. 15 and 16, it will be seen that the envelope-forming panel 14 is provided with an additional panel 76 which preferably is connected to one edge of panel 14 by a row of separating means such as perforations 78, whereby the additional panel 76 readily may be separated from the envelope-forming panel 14. The panel 14 between lines 62 and 78 is equal to that of panel 12 between lines 62 and 68. Thus, when the plurality of interconnected panels shown in FIG. 15 are folded into overlying relationship as illustrated in exemplary manner in FIG. 16, it will be seen that a three-ply assembly is formed in which a two-ply attaching strip 80 is separably connected by coinciding rows or

lines of severable means, such as perforations 62, to the envelope-forming panels 12 and 14.

The additional panel 76 preferably comprises a suitable blank which may be inscribed by the recipient of the envelope, such as when it is received with its carrying piece such as a Sunday newspaper supplement, magazine, or otherwise. The panel 76 preferably comprises an order blank which may be completed and then detached from the envelope along the line of separating means 78. It then may be inserted along with payment in the form of a check, money order or the like within the envelope and sealed by activating the adhesive 70 and folding the sealing flap 66 over the open edge of the envelope.

As in regard to the embodiments illustrated and described hereinabove, for purposes of attaching the three-ply embodiment of mailing piece to a carrying piece or sheet, the arrangement shown in FIG. 16 also includes a stripe of attaching adhesive 82 which preferably is similar to the stripes of adhesive 44 and 72 in the preceding embodiments, the same being affixed to the mailing piece in the same manner and preferably being of the same composition as described hereinabove with respect to said other embodiments. Further, the composite, multi-ply attaching strip 80 also is provided with a row of feeding means such as holes or perforations 84 for purposes similar to those described above with respect to the corresponding feeding means of the preceding embodiments.

In FIG. 17, the embodiment is slightly different from that shown in FIG. 15 in that the additional panel 76 preferably is foldably connected along a crease or fold line 85 to the adjacent edge of the envelope-forming panel 14. Also, the stripe of remoistenable sealing adhesive 70 is applied along one surface of the additional panel 76 adjacent the outer edge thereof for purposes of permitting the additional panel to serve as a sealing flap for the envelope.

In the initial arrangement of the multi-ply unit comprising the embodiment shown in FIG. 17, the folded arrangement or relationship of the various panels is as illustrated in FIG. 18 which comprises an end view of such assembly. It can be appreciated from this view that, following the separation of the envelope and folded additional panel 76, which comprises a sealing flap, from the multi-ply attaching strip along the lines of severable means 62, and after inscribing the order upon the additional panel 76 and placing the appropriate remittance within the envelope, the stripe of adhesive 70 is activated and the envelope is sealed closed. The completed arrangement of this can be appreciated from FIG. 18 by realizing that the separation of the envelope from the attaching strip 80 has occurred along the line 62. Also, it can be realized from FIG. 18 that a suitable stripe of affixing adhesive 86 may be applied along one surface of the multi-ply attaching strip 80 for affixing the three-ply unit to carrying pieces or sheets as in regard to the preceding embodiments but the preferred arrangement is as shown in FIG. 18 so as to prevent panel 76 from flapping outward when the unit is attached to a carrying piece. Also, in this embodiment, the stripe of remoistenable adhesive 70 is fully protected.

Referring to FIG. 21 a modification of the transverse stripes of sealing adhesive 38 is illustrated. It is to be understood that instead of having a continuous strip of sealing adhesive 38 as shown in the various embodi-

ments of the invention, a row of dots of adhesive **86** of suitable size and spacing may be employed which will be adequate to effect sealing of the opposite ends of the envelopes to be formed from the various embodiments.

Referring to FIG. 22, it also will be seen that a still further, slightly different arrangement of the end-sealing adhesive means may be utilized. In most of the embodiments, the transverse stripes of sealing adhesive **38** are shown as separate, parallel and closely arranged stripes respectively along opposite sides of the separating means comprising transverse rows of perforations **40**. By referring to FIG. 22 however, it will be seen that a single stripe of sealing adhesive **38'** of suitable width may be applied, for example, commonly to the adjacent ends of a pair of succeeding, envelope-forming panels **12**, or to panels **14** and the transverse rows of separating perforations **40** are formed preferably down the middle to the stripes **38'**, thereby simultaneously forming sealing means on both of the adjacent ends of successive envelopes.

Referring also to FIGS. 19 and 20, exemplary arrangements are illustrated of several different compact means by which the multi-ply envelope mailing pieces may be arranged for storage, shipment, and ultimate use with an appropriate feeding and separating mechanism. In FIG. 19, for example, the successive envelope mailing pieces, after being folded and adhesively sealed into multi-ply relationship in accordance with the various embodiments described hereinabove, are folded into so-called zig-zag or fanfold configuration so as to provide a compact stack **86** thereof. Similarly however, an equally compact arrangement thereof may be formed in a coil **88** as shown in exemplary manner in FIG. 20.

In addition to the embodiments of the multi-ply mailing pieces shown in FIGS. 15 and 17 respectively, both of which include an extra panel comprising an order blank attached along one edge of one of the envelope-forming panels, another type of combination envelope and order blank is illustrated in FIGS. 23-25. Essentially, this additional embodiment is predicated upon the basic type of blank illustrated in FIGS. 1-5, whereby the same reference characters are employed in FIGS. 23-25 are used in FIGS. 1-5 with respect to the elements and features which are common to the two embodiments.

Referring to FIG. 23, it will be seen that the separably connected envelope-forming panels **12** and **14** are foldable onto each other along a common fold line **16** extending longitudinally of the strip of such separably connected envelope-forming panels. Also, a sealing flap **20** is connected along the edge of each of the panels **14** by a fold line **18**. The sealing flaps **20** also have a stripe of re-moistenable adhesive **22** applied thereto. Further, the outer edge of each of the sealing flaps **20** is separably connected to one edge of the narrow panel **24** by a row of perforations or roulette slits **34** for example.

The narrow panels **24** also are foldably connected to similar narrow panels **26** along a longitudinally extending crease or fold line **32** and the opposite edge of each narrow panel **26** is separably connected to one edge of an order blank **76** by a row of perforations or roulette slits **90**. In the preferred construction, the width of the order blank panels **76** is preferably equal to that of the panels **12** and **14** which, in turn, are also substantially identical in width.

Further as in regard to the embodiments of the invention shown respectively in FIGS. 15 and 17, which, in folded end view respectively are illustrated in FIGS. 16 and 18, it is intended that in regard to the embodiment shown in FIGS. 23-25, that the row of panels **12** will be folded onto the row of panels **14** as in regard to the embodiment of the invention illustrated in FIGS. 1-5, and the process for folding the panels **12** upon the panels **14** is as illustrated in FIG. 7. The opposite ends of each of the panels **12** and **14** are adhesively secured by transverse stripes of sealing adhesive **38** as in regard to the preceding embodiment of FIGS. 1-5. It is to be understood however that a different arrangement of the stripes of sealing adhesive **38** from that shown in FIGS. 23 and 24 may be employed, such as in the arrangement shown in FIGS. 1, 21 and 22.

After the panels **12** have been folded onto the panels **14** by means of a continuous folding operation of suitable nature, the next folding operation occurs for purposes of disposing the narrow panels **26** upon the corresponding narrow panels **24** in order to form a multi-ply attaching strip **28**, such as shown in FIGS. 24 and 25. In order to stabilize the overlying narrow panels **24** and **26**, a narrow stripe of sealing adhesive **42** is employed and this preferably is applied immediately prior to the folding of the panels **26** onto the panels **24**. Incidental to folding panels **26** upon panels **24**, the order blank panels **76**, which are connected along one edge to the narrow panels **26**, also are folded onto the adjacent surface of the panels **12** which have been pre-folded onto panels **14**.

To illustrate the preferred manner of folding the aforementioned panels onto each other, attention is directed to FIG. 24. In said figure, it will be seen that the row of panels **12** are first folded onto the corresponding row of panels **14**, considering the fact that the web **10**, which is of infinite length, for example, is moving in the direction of the arrow shown in FIG. 24. Immediately following the folding of the panels **12** upon the panels **14**, the panels **76** are folded upon the adjacent outer surfaces of the panels **12**, as can be visualized from FIG. 24.

It also will be understood that either prior to the folding of the connected panels **26** and **76** upon the pre-folded panels **12**, or afterward, as desired, the narrow panels **24** and **26** are automatically punched to form matched rows of evenly spaced holes or perforations **30** which comprise feeding means for the attaching strip **28** as clearly shown in FIGS. 24 and 25, for purposes of the multi-ply envelope units being fed, by an appropriate machine of the type described hereinabove with respect to the preceding embodiments. Such feeding machine separates the three-ply folded envelope units at a very rapid rate and both feeds and guides the separated units at a controlled rate for attachment to a carrying piece such as a newspaper supplement, magazine, or the like, as in regard to the forgoing description with respect to the preceding embodiment.

The three-ply folded envelope units resulting from the continuous web **10**, shown in FIG. 23, being folded into the configuration shown in FIG. 25 by means of the procedure illustrated somewhat diagrammatically in FIG. 24, are attached to one surface of a carrying piece, such as the aforementioned newspaper sheet or supplement, magazine, or the like by means of a stripe of attaching adhesive **82**. Said adhesive preferably is applied to the outer surface of the narrow panel **24** of

the composite attaching strip 28, by suitable means, not illustrated, which is incorporated in the aforementioned feeding and attaching machine. Further, the adhesive preferably is of the very quick-setting type, such as one of a commercial variety known as hot-melt adhesive which has highly adequate adhering qualities which extend for a very brief interval of time but nevertheless sufficient to render the adhesive capable of firmly securing the three-ply, flat folded envelope, attaching strip and order blank unit to a specific location upon a carrying piece of any of the types referred to hereinabove.

It readily can be appreciated from FIG. 25 that when the stripe of attaching adhesive 82 is located as illustrated in said figure, the three-ply unit will be attached against one surface of the carrying piece with the order blank panel 76 disposed in immediate, flat engagement with said supporting surface, whereby said order blank will be protected against flapping. Also the remoistenable adhesive stripe 22 on sealing flap 20 will be protected until ready for use. Further, the relatively stiff nature of the multi-ply envelope unit comprising overlying panels 12 and 14 which are adhered at their ends by stripes of sealing adhesive 38, will afford a stable type of structure capable of resisting outward flapping from the carrying piece more readily than the single thickness of the order panel 76 for example.

One of the principal advantages of the composite type of mailing piece illustrated in FIGS. 23-25 over the preceding embodiments respectively illustrated in FIGS. 15, 16 and FIGS. 17, 18 resides in the fact that in said preceding embodiments, stripes of sealing adhesive 56 are required in order to connect the edges of the panels 12 and 14 which will form the bottom of the envelope which is opposite the open edge thereof. In the embodiment of FIGS. 23-25 however, it will be seen that the bottom edge of the envelope is formed by the crease or fold line 16 which connects the panels 12 and 14 of each envelope unit.

When the recipient of the mailing piece to which one of the embodiment of envelope and order blank unit illustrated in FIGS. 23-25 desires to avail himself of the envelope and order blank, it is only necessary to separate the envelope 36, comprising overlying panels 12 and 14, and the order blank which underlies the envelope, from the attaching strip 28 along the separating means comprising the aligned rows of perforations or roulette slits 34 and 90. This can be facilitated by folding the envelope and order blank along said rows of perforations by bending the same outwardly from the surface of the carrying piece to which the multi-ply unit is attached by means of the stripe of adhesive 82. The rows of perforations 34 and 90 are readily separable and the attaching strip 28 remains connected to the carrying piece. Said recipient then holds in his hand an envelope and an order blank which are separate from each other even though in overlying relationship.

Upon inscribing an order upon the order blank 76, the same may be folded and placed together with suitable remittance, for example, within the open edge of the envelope adjacent the crease or fold line 18, followed by moistening, for example, the remoistenable stripe of adhesive 22 and then folding the sealing flap 20 onto the outer surface of panel 12 of the envelope which completely seals the contents of the envelope therein.

Further in addition to the embodiments of the multi-ply mailing pieces shown in FIGS. 15, 17 and 23 and described hereinabove in the specification, still another type of combination envelope and order blank, embodying the principles of the present invention, is illustrated in FIGS. 26-28. Similarly to the embodiment shown in FIGS. 23-25, the additional embodiment shown in FIGS. 26-28 is predicated preferably upon the basic type of blank illustrated in FIGS. 1-5, in that the two narrow panels, when folded upon themselves constitute a multi-ply attaching strip which is separably connected along one edge of the flap by which the envelope is sealed.

Without restriction thereto, one use to which the further embodiment of mailing piece may be adapted without requiring that the piece be of undue length, is that the envelope portion of the mailing piece may be of so-called mini-size, of which the length is of the order of approximately $4\frac{1}{4}$ inches, and the width is approximately $3\frac{1}{2}$ inches. This is substantially the smallest size that the U.S. Post Office Department will accept for mailing purposes. Accordingly, by making each individual blank, for example, of the order of about 7 inches in length, considered in the longitudinal direction of the web of stock from which the blanks are formed, such a mini-size envelope may be provided and an order blank of readily usable size also may be detachably connected to one end of the envelope portion of the blank.

Referring to FIG. 26 specifically, an individual mailing piece blank 92 is shown connected by rows of separable perforations for roulette slits 94 to fragmentarily illustrated portions of adjoining mailing piece blanks 92. As described hereinabove in regard to the preceding embodiments of the invention, the individual blanks may be arranged in compact form, such as those illustrated in exemplary manner in FIGS. 19 and 20. Especially when arranged in fan-folded configuration as shown in FIG. 19, the separably connected blanks 92 may be folded upon each other along the rows of perforations 94.

The blanks 92 each comprise envelope-forming panels 96 and 98 which preferably are of similar size. In forming the envelope, the panels 96 are folded onto the panels 98 along a longitudinally extending fold line 100. Parallel to the fold line 100 is an additional fold line 102 by which the sealing flap 103 is foldably connected to the edge of envelope panel 98 opposite the fold line 100.

Connected to one end of the envelope-forming panels 96 and 98 is an order blank comprising panels 104 and 104' which is detachably connected to the adjacent ends of envelope-forming panels 96 and 98 by a transverse row of perforations or roulette slits 106. Said row of perforations 106 extends between the outer longitudinal edge of each of the blanks 92 and additional separating means comprising a further row of perforations or roulette slits 108, which is parallel to the fold lines 100 and 102. One edge of narrow panel 110 is separably connected to the sealing flap 103 by said row of perforations 108. An additional narrow panel 112 is foldably connected to narrow panel 110 by another fold line 114 which is parallel to the row of perforations 108. When narrow panel 112 is folded onto narrow panel 110, and particularly when it is stabilized thereon by the application of a narrow stripe of sealing adhesive

116, a multi-ply attaching strip 118 is provided as clearly shown in FIG. 27.

As in regard to the preceding embodiments, the narrow panels 110 and 112 of attaching strip 118 are provided with feeding means comprising evenly spaced holes or perforations 120 which are axially aligned with each other when the narrow panels are folded onto each other. Said feeding means is for use in conjunction with feeding the completed blanks successively to carrying pieces such as newspaper supplements, magazines, or the like, as described hereinabove in regard to the preceding embodiments.

It also will be understood that the connected envelope-forming panels 96 will be folded onto the envelope-forming panels 98 by means similar to those described above and illustrated diagrammatically for example in Fig. 7. Similarly, the narrow panels 112 are folded onto corresponding narrow panels 110 by the same means. Before such folding occurs however, either the envelope-forming panels 96 or 98 are provided with narrow stripes, or rows of dots, of sealing adhesive 122, respectively adjacent opposite ends of said panels and by which the ends of the envelope 124 are sealed permanently. By providing the fold line 100, it will be seen that the envelope is closed along one edge and at opposite ends, leaving the edge of the envelope adjacent the sealing flap 103 open for the insertion, for example, of order blank 104 after the same has been suitably inscribed. Appropriate remittance such as a check, money order or the like, likewise may be enclosed within the envelope 124 and then the sealing flap 103 is folded over onto the panel 96. Remoistenable adhesive 126, preferably in the form of a continuous stripe, but without restriction thereto, is applied to the appropriate surface of sealing flap 103 and when said adhesive is moistened or otherwise activated, the flap 103 then may be sealed firmly against the outer surface of panel 96, as can be visualized best from FIG. 27.

After the continuous row of mailing pieces have been formed by folding of the panels 96 onto panels 98 and the corresponding folding of narrow panels 112 onto narrow panels 110, the so-called completed forms are in condition to be attached to a supporting piece such as a printed web of some type described in detail above with regard to the preceding embodiments. To accomplish this, either a continuous stripe, or a row of closely spaced dots, of activatable adhesive 128 is applied to one surface of the attaching strip 118. Preferably, it is that surface which is illustrated in FIG. 27 in order that when the mailing piece is attached to a supporting piece, the remoistenable adhesive 126 will be disposed adjacent the supporting piece and thus be protected against contact by the atmosphere or otherwise and thereby be in clean condition when it is desired to seal the envelope to which it is attached, especially by moistening the adhesive with saliva.

In view of the fact that the envelope-forming panels 96 are folded onto the corresponding envelope-forming panels 98, and particularly since the order blanks 104 are of a width similar to the connected envelope-forming panels 96 and 98, as clearly shown in FIG. 26, the fold line 100 extends continuously through the envelope forming panels and the order blanks 104. Thus, the order blanks 104, when connected to a supporting piece for example, will be folded. However, this is no detriment and actually serves to maintain the order

blank in clean condition, especially the surface upon which an order is to be inscribed for example. Simply by separating the order blank 104 from the envelope along the row of perforations 106, the folded order blank 104 may be unfolded for purposes of completing the order.

Also, in the preferred construction of the blank 92, there is a small waste panel 130 of sheet material which is similar in width to the sealing flaps 103 and actually extends between successive sealing flaps 103. The length of said waste panels is determined by the rows of separating means comprising perforations 94 and 106. Also, the waste panel 130 preferably is separably connected to one end of the order blank 104 by a row of perforations or roulette slits 132 which extends completely between the rows of perforations 94 and 106, as clearly shown in FIG. 26. It also will be seen from FIG. 26 that the stripe of remoistenable adhesive 126 also extends along one edge of the waste panel 130 but this is solely for convenience rather than having to interrupt the application of a continuous stripe of remoistenable adhesive 126. The actual material wasted is infinitesimal in value. Especially by referring to FIG. 28, it can be seen that the envelope 124 and the order blank 104 constitute the major items resulting from the folding of the various panels of the blank 92 into completed and usable condition. The attaching strip 118 and waste panel 130 are the only expendable items but of these, the attaching strip 118 is essential, especially to attach the mailing piece to a supporting sheet of suitable type.

In regard to the embodiment of the invention described immediately above, it is to be understood that although reference has been made to the envelope actually being of mini-type, the invention is not to be restricted to such size due to the fact that by making the blank 92 of larger size, the envelope 124 actually may be of normal correspondence size and, for example, having a length of the order of 5 or 6 inches without departing from the spirit of the invention.

Referring to FIG. 29, there is illustrated in exemplary manner an envelope resulting from any of the blanks or mailing pieces described hereinabove. The sealing flap 20 is connected to one edge of the envelope 36 for example. Also, the opposite ends of the envelope 36 are permanently connected by transverse stripes of sealing adhesive 122. In addition however, a further stripe of sealing adhesive 134 may be applied between the envelope-forming panels, inwardly from one end thereof, to provide a coin-receiving pocket 136.

We claim:

1. A multi-ply unit adapted to be attached to a carrying piece or sheet, said unit being formed from a single sheet of thin material folded upon itself to form the same and said multi-ply unit comprising at least one pair of panels flatly abutting each other, means permanently connecting the edges of the opposite ends of said panels together, a row of separating means extending longitudinally along at least one of said panels in parallel relation to said fold and spaced inwardly from one outer edge of said folded multi-ply unit a distance substantially less than the full width thereof, thereby to define an envelope comprising two flatly abutting panels connected along one longitudinal edge and at the ends and an attaching and feeding strip comprising narrow panels flatly abutting each other and detachably connected to said envelope along one edge thereof by said row of separating means, said envelope being open

along one edge to receive items to be enclosed therein, and adhesive of a type adapted to be activated when the envelope is to be sealed closed applied to one of the panels forming said envelope adjacent said open edge thereof, said attaching and feeding strip being adapted to receive affixing means on one surface thereof incident to being fed to a carrying piece or sheet and by which affixing means said multi-ply unit may be attached to a carrying piece or sheet.

2. The multi-ply unit according to claim 1 in which said attaching and feeding strip is provided with feeding means extending longitudinally thereof adjacent one edge.

3. The multi-ply unit according to claim 2 in which said feeding means comprise a series of perforations spaced even distances apart along said attaching and feeding strip and extending commonly in axial alignment through both panels of said strip.

4. The multi-ply unit according to claim 1 further including sealing adhesive extending along and between said two panels comprising said attaching and feeding strip to reinforce the same.

5. The multi-ply unit according to claim 1 in which said panels which comprise an envelope being provided with panel extensions detachably connected to one end of said panels and comprising a blank adapted to be detached from said envelope, said attaching and feeding strip being coextensive in length with said overlying panels and panel extensions prior to the same being separated.

6. A plurality of multi-ply units connected separably in end-to-end relationship to provide a row of an infinite number thereof, each of said units being formed from a single sheet and including at least one pair of panels connected by a fold along a longitudinal line into flatly abutting relationship, means permanently connecting the edges of the opposite ends of said panels together adjacent the separable connections between the ends of adjacent multi-ply units a row of separating means extending along at least one of said panels in parallel relationship to the fold by which said panels of said multi-ply units are connected together, said row of separating means being spaced inwardly from one outer edge of said multi-ply units a distance substantially less than the full width thereof, thereby to define an envelope comprising two panels in flatly abutting relationship and an adjacent attaching and feeding strip of two narrow panels also in flatly abutting relationship and detachably connected to said envelope along one edge thereof by said row of separating means, said envelope being open along one edge to receive items to be enclosed therein, and adhesive of a type adapted to be activated when the envelope is to be sealed closed applied to one of the panels forming said envelope adjacent said open edge thereof, said attaching and feeding strips of said units being adapted to receive affixing means on one surface thereof by which said multi-ply units may each be attached to a carrying piece or sheet and said separably connected row of multi-ply envelopes being arranged in compact overlying relationship with respect to each other for compact storage.

7. A multi-ply unit adapted to be attached to a carrying piece or sheet, said unit being formed from a single sheet of material folded upon itself to form said multi-ply unit comprising a pair of flatly abutting panels, means permanently connecting the edges of the oppo-

site ends of said panels together to form an envelope open along one edge, and an attaching and feeding strip extending longitudinally along and secured to at least one of said panels along said open edge of said envelope by readily severable means, said attaching and feeding strip being formed from the same sheet of material as said envelope and comprising a narrow panel folded upon itself to form a multi-ply strip so as to be equal in thickness to said multi-ply envelope and adapted to receive on one outer surface thereof affixing material by which said detachably connected envelope and multi-ply attaching and feeding strip may be secured to a carrying piece or sheet.

8. The multi-ply unit according to claim 7 in which one of said pairs of panels includes a foldable sealing flap disposed between said attaching and feeding strip and the envelope panel to which it is foldably connected.

9. The multi-ply unit according to claim 8 further including remoistenable adhesive applied to and extending along one surface of said sealing flap which is adapted to abut and adhere to the outer surface of the other envelope panel from that to which said sealing flap is foldably connected and in which one ply of said multi-ply attaching strip is wider than the other ply and adapted to overlie and protect said remoistenable adhesive until the open edge of said envelope is to be sealed such as for mailing.

10. The multi-ply unit according to claim 7 in which sealing adhesive is applied longitudinally between the overlying plies of said attaching strip to reinforce the same.

11. The multi-ply unit according to claim 7 in which the means permanently connecting the edges of the opposite ends of said panels together to form an envelope comprises a strip of sealing adhesive extending from the edges of said panel connected by said fold of said sheet of material toward the open edge of said envelope but terminating a predetermined distance from the open edge of said envelope to form a pair of sealable strips of similar width flatly abutting each other, and remoistenable adhesive extending along the inner surface of one of said overlying sealable strips.

12. A multi-ply unit adapted to be attached to a carrying piece or sheet formed from a single sheet of thin material folded along a fold line upon itself to form a multi-ply unit comprising a pair of flatly abutting panels, means permanently connecting the edges of the opposite ends of said panels together, rows of separating means extending respectively along said panels in parallelism with said fold and spaced a limited distance therefrom to define respectively on opposite sides thereof a relatively narrow multi-ply feeding and attaching strip and an envelope of a pair of flatly abutting panels, said strip being defined by said fold line and rows of separating means, securing means parallel to and adjacent said rows of separating means permanently connecting said envelope panels along one edge and the opposite edges of said panels being separable to provide an open edge to receive items within the envelope, and sealing adhesive of a type to be activated when the envelope is to be sealed closed applied to said opposite edge of one of said envelope panels to seal said opposite edges closed, said attaching and feeding strip being adapted to receive affixing means on one surface thereof by which said detachably connected en-

velope and attaching and feeding strip may be secured to a carrying piece or sheet.

13. The multi-ply unit according to claim 12 in which the outer edge of one of said envelope panels defining said open edge extends a predetermined distance beyond the corresponding edge of the other envelope panel, said extending portion of said one envelope panel comprising a foldable sealing flap arranged to be folded over the exterior surface of the adjacent edge of said other envelope panel.

14. The multi-ply unit according to claim 12 in which said means permanently connecting the edges of the opposite ends of said panels together comprises sealing adhesive extending transversely from said securing means adjacent said row of separating means toward the open edge of said envelope but terminating a predetermined distance from said open edge of the envelope to define sealing panels of similar width flatly abutting each other and extending along said open edge of the envelope, and remoistenable adhesive extending along the inner surface of one of said sealing panels and adapted to be moistened to adhere to the other sealing panel and seal said envelope closed when such sealing is desired.

15. The multi-ply unit according to claim 12 further including an additional panel connected along one edge to the outer edge of one of said overlying envelope panels and comprising a sheet adapted to be inscribed for use in connection with said envelope.

16. The multi-ply unit according to claim 15 in which said additional panel is detachably connected to said outer edge of said one envelope panel and adapted to be separated therefrom and be enclosed within said envelope after being inscribed.

17. A multi-ply unit adapted to be attached to a carrying piece or sheet, said unit being formed from a sheet of thin material folded upon itself to form said multi-ply unit which comprises a pair of flatly abutting panels, means permanently connecting the edges of the opposite ends of said panels together, rows of separating means extending along said abutting panels in parallelism with said fold and spaced a limited distance therefrom to define respectively on opposite sides thereof a relatively narrow multi-ply attaching and feeding strip and an envelope of flatly abutting panels, said strip being defined by said fold and row of separating means, securing means parallel to and adjacent said row of separating means permanently connecting said envelope panels along one edge and the opposite edges of said panels being separable to provide an open edge to receive items within the envelope, and an additional panel substantially of similar size to one of said envelope panels foldably connected to the outer edge of one of said envelope panels adjacent said open edge of said envelope and adapted to be folded across said open edge of said envelope to close the same and overlies the other envelope panel from that to which it is foldably

connected, and remoistenable adhesive applied to one surface of said additional panel adjacent the outer edge thereof and adapted to be activated and contact said opposite envelope panel from that to which said additional panel is foldably connected in order to seal the envelope in closed condition, said additional panel being adapted to be inscribed in connection with the use of said envelope.

18. An assembly of series-connected separable envelopes comprising an elongated web of sheet material folded onto itself and having at least two plies including a lower ply and at least one upper ply connected to one side edge of said lower ply along a longitudinally extending fold line and overlying an associated portion of said lower ply, said lower ply having a longitudinally disposed marginal portion transversely extending beyond the free side edge of said one upper ply, means connecting said one upper ply and said lower ply in face-to-face relation along longitudinally spaced transversely extending lines of attachment to form a succession of envelopes each having a pocket including a mouth open at one side thereof and partially defined by said free side edge, a longitudinally spaced series of lines of weakening extending transversely of said plies, each of said envelopes being connected to an adjacent one of said envelopes along one of said transversely extending lines of weakening, at least one generally longitudinally extending line of weakening disposed on said marginal portion transversely spaced from said free side edge and separating a connecting strip from the remainder of said marginal portion, one longitudinally extending line of adhesive disposed on said marginal portion between said line of weakening and said free side edge, another longitudinally extending line of adhesive disposed on said connecting strip, and another upper ply connected to the other side edge of said lower ply along another longitudinally extending fold line, said one line of weakening and said other side edge defining the transverse extent of said connecting strip, at least a portion of said other ply overlying said connecting strip and attached in face-to-face relation thereto by said other line of adhesive, said other ply portion forming a part of said connecting strip.

19. An assembly of series-connected separable envelopes as set forth in claim 18 wherein said connecting strip includes a succession of longitudinally spaced configurations for operative engagement with a strip-feed device.

20. An assembly of series-connected envelopes as set forth in claim 18 wherein said other line of adhesive is transversely spaced from said one line of adhesive.

21. An assembly of series-connected envelopes as set forth in claim 18 wherein said lines of attachment comprise lines of adhesive extending generally between said fold line and said free side edge.

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