Nov. 4, 1969 H. G. FALTIN ET AL 3,476,307

FOLDABLE MAILING PIECE

Filed May 8, 1968 4 Sheets-Sheet 1

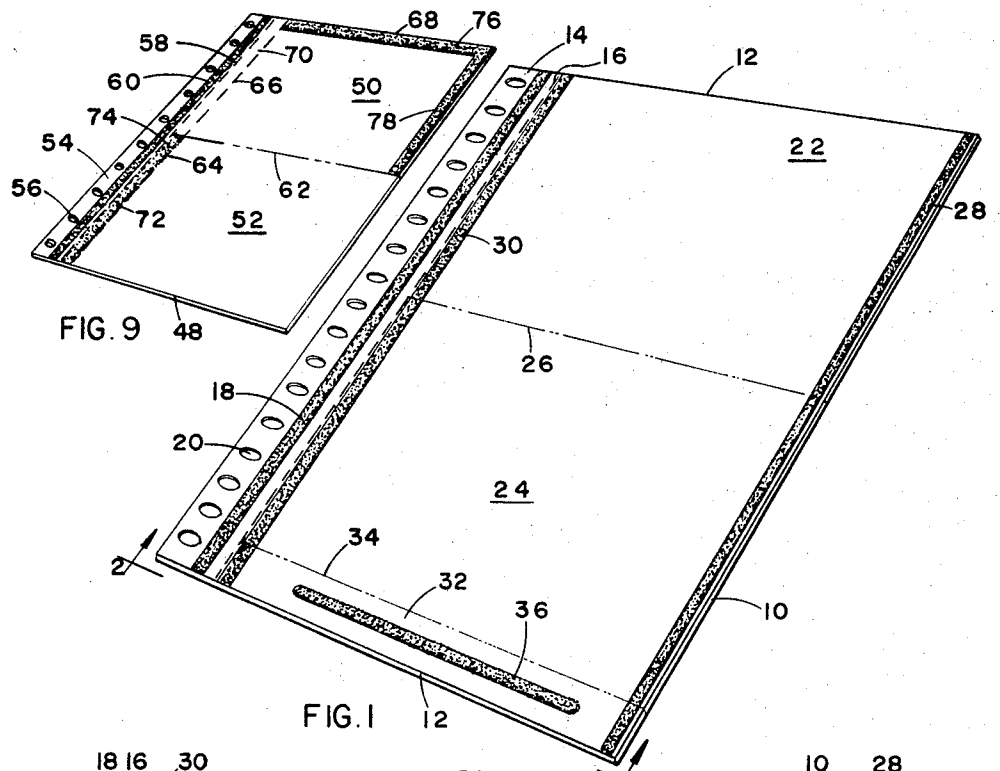

FIG. 9

FIG. 1

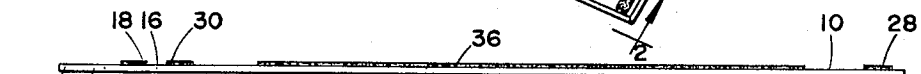

FIG. 2

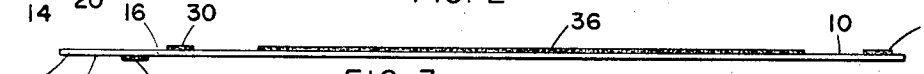

FIG. 3

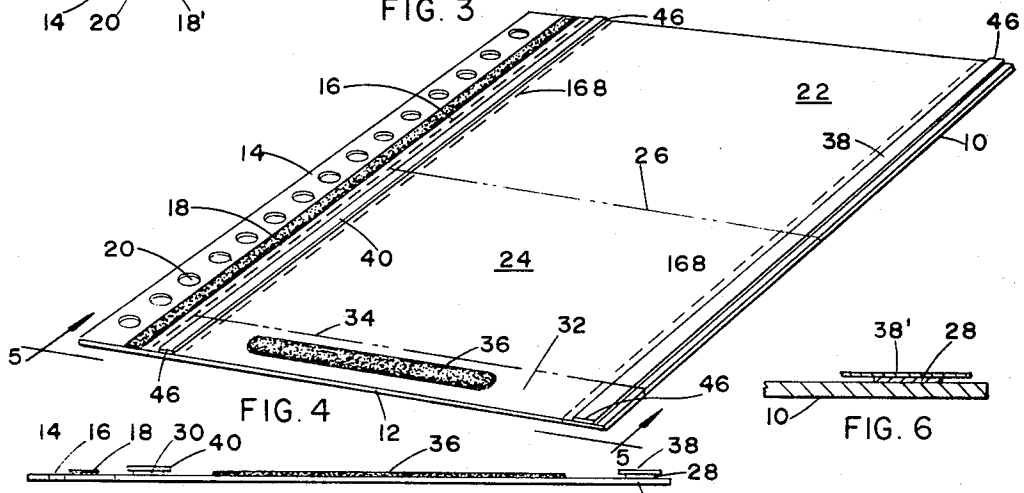

FIG. 4

FIG. 5

FIG. 6

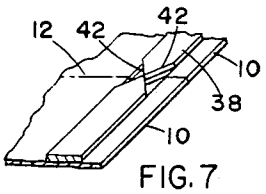

FIG. 7

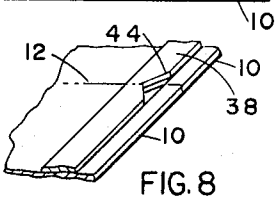

FIG. 8

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Nov. 4, 1969 H. G. FALTIN ET AL 3,476,307

FOLDABLE MAILING PIECE

Filed May 3, 1968 4 Sheets-Sheet 2

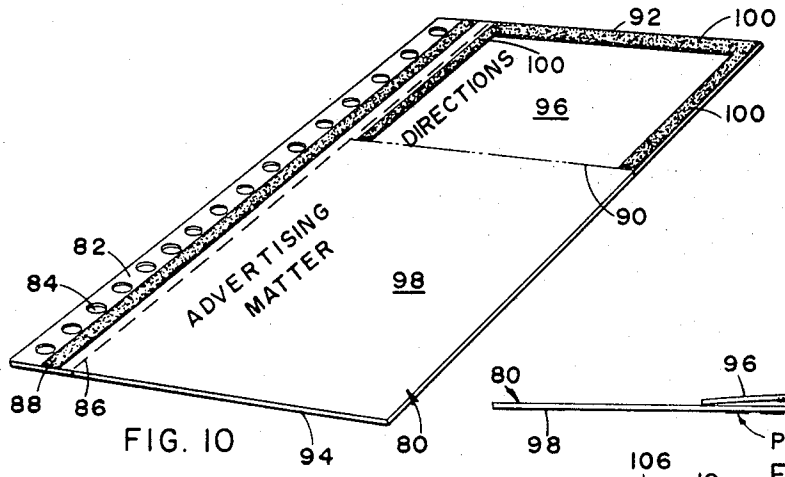

FIG. 10

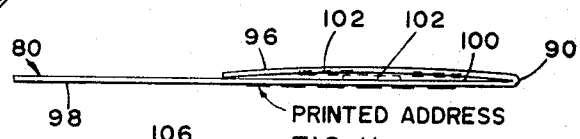

FIG. 11

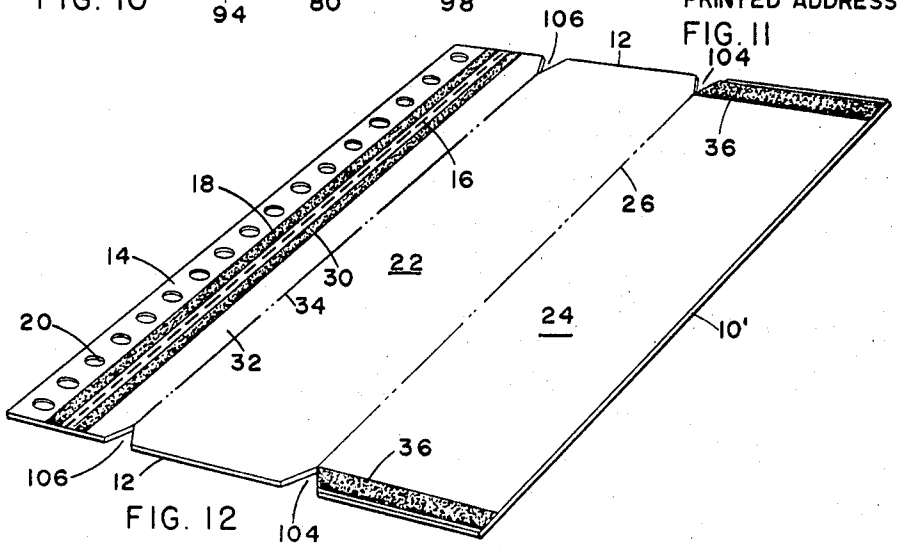

FIG. 12

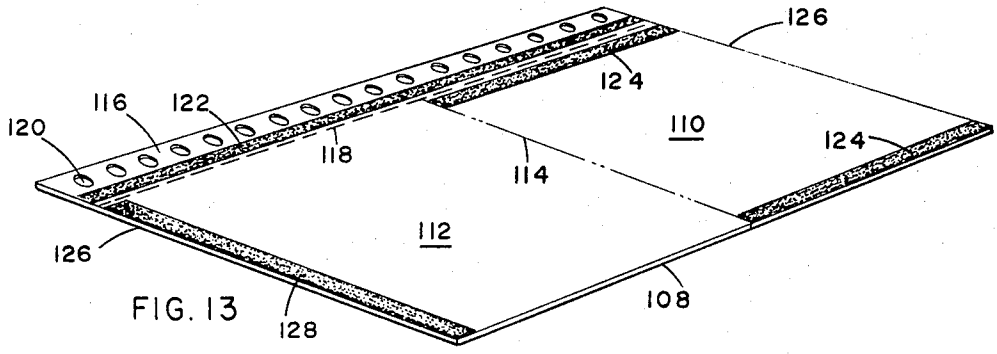

FIG. 13

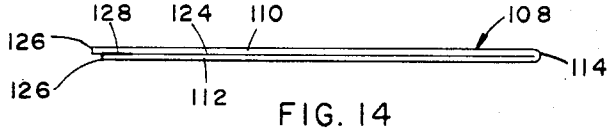

FIG. 14

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FOLDABLE MAILING PIECE

Filed May 6, 1968 4 Sheets-Sheet 3

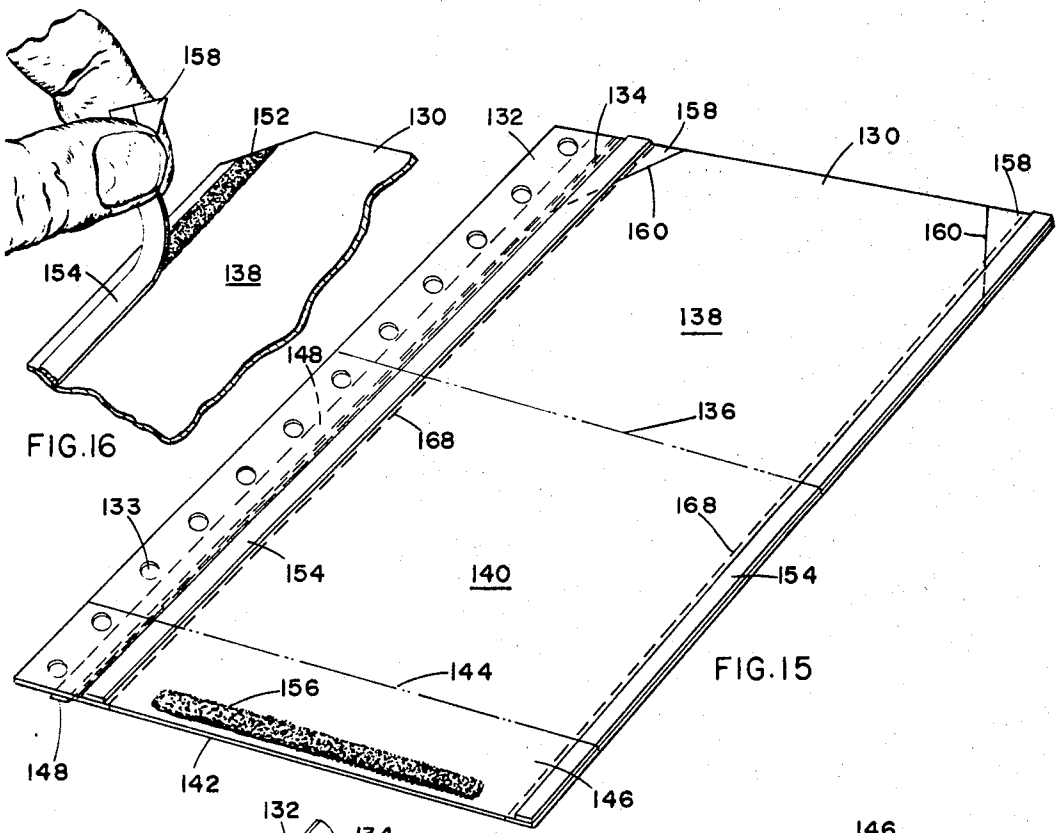

FIG.16

FIG.15

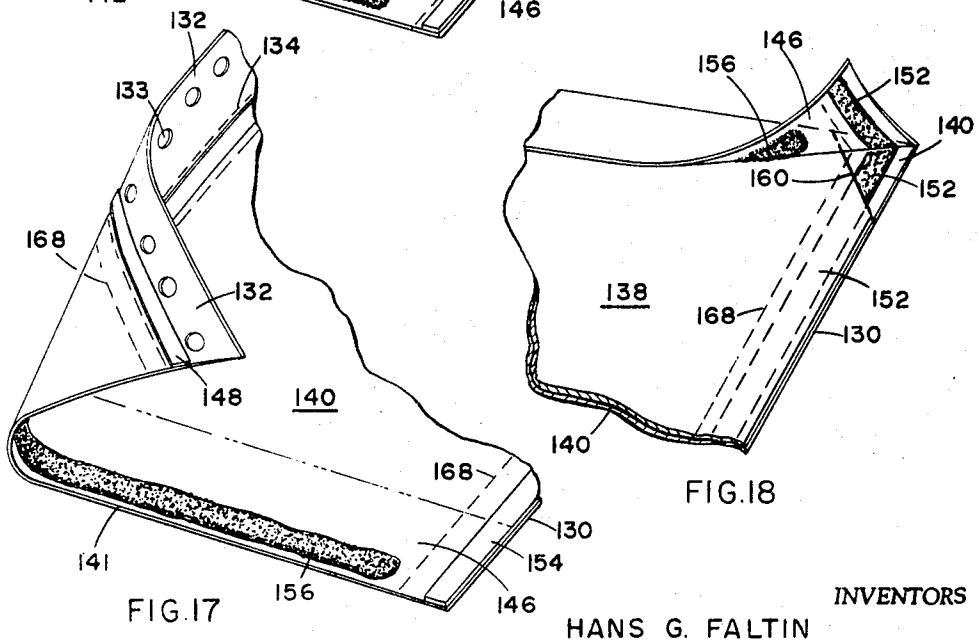

FIG.17

FIG.18

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FOLDABLE MAILING PIECE

Filed May 6, 1968 4 Sheets-Sheet 4

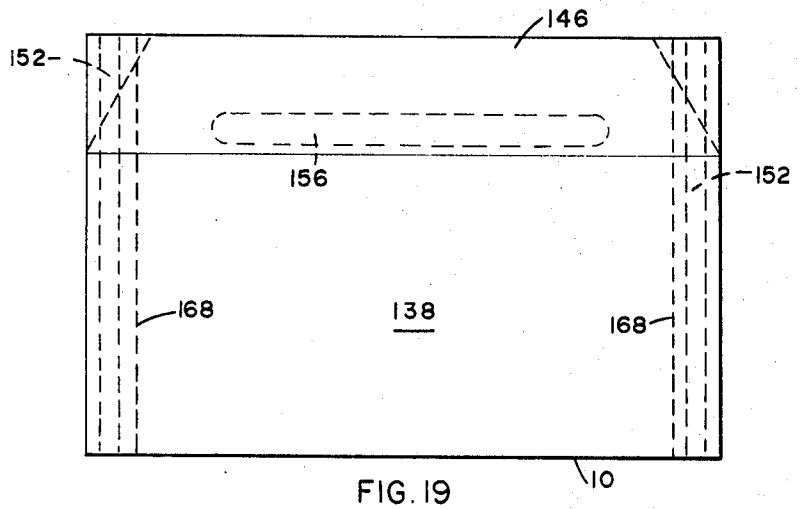

FIG. 19

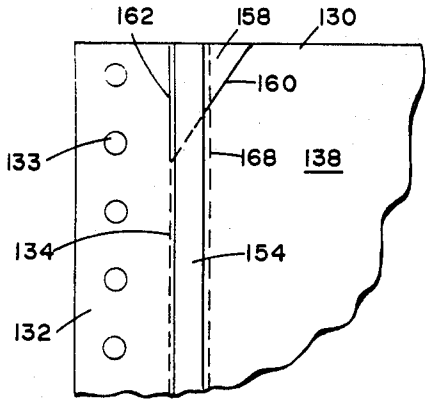

FIG. 20

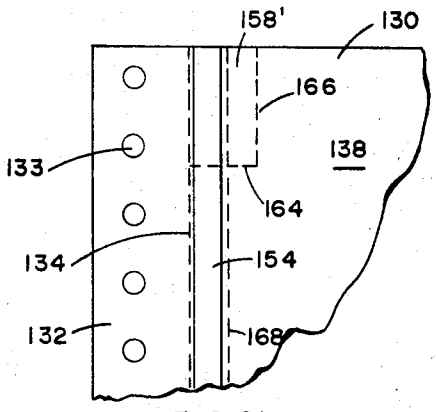

FIG. 21

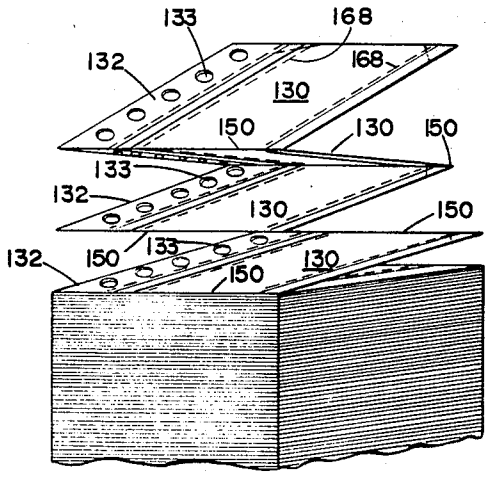

FIG. 22

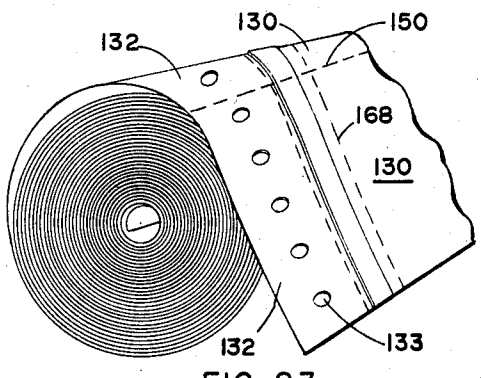

FIG. 23

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United States Patent Office 3,476,307 Patented Nov. 4, 1969

3,476,307

FOLDABLE MAILING PIECE

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Filed May 6, 1968, Ser. No. 726,779
Int. Cl. B65d 27/10, 27/16
U.S. Cl. 229—69 17 Claims

ABSTRACT OF THE DISCLOSURE

A strip of separably connected similar flat sheets of material suitable for forming a mailing piece when folded to form overlying panels connected adhesively at the free edges thereof, each of said flat sheets having a mounting strip separably connected along one edge and arranged to be attached by a stripe of adhesive to suitable supporting means such as a sheet or web comprising a printed product or the like, each flat sheet when disconnected from its mounting strip being foldable upon itself and preferably having a fold line, such as a crease or other equivalent means, extending between opposite side edges intermediately of the opposite ends thereof to define a pair of panels foldable along said fold line into said overlying relationship, one of said panels also having a closing flap foldably connected to it by another suitable fold line and suitable sealing means such as a stripe of adhesive on said flap to effect final sealing of the mailing piece, narrow covering strips of sheet material which may also be provided so as to lightly adhere to said stripes of adhesive on said panels, especially when of the pressure-sensitive type to protect the same until ready to be folded into an enclosing type mailing piece, and removal tabs being provided on one end of each covering strip, if desired, to facilitate removal of said strips.

CROSS-REFERENCE TO RELATED APPLICATIONS

The strip of separably connected flat sheet mailing pieces comprising the present invention are adapted to be fed by, separated from each other, and applied to a moving printed web or the like by a machine such as the type comprising the subject matter of pending patent application Ser. No. 685,122, filed Nov. 22, 1967.

BACKGROUND OF THE INVENTION

Modern advertising media are progressively making rapid expansion in the use of return-type mailing pieces of various types. Many of these types comprise simply a return postcard comprising a single sheet of material upon which the reader applies his name and address and mails the same to an advertiser, usually by postage-paid business reply mail means. By means of such returned mailing pieces, advertisers assemble mailing lists of prospective purchasers to whom they mail advertising brochures and the like. Much of this type of advertising previously has been done on a direct mail basis.

With the advent and popularity in recent years of magazine sections inserted in daily and Sunday papers, frequently referred to as Sunday supplements and the like, extensive use of advertising is employed in said supplements with the result that quite recently, mechanism have been devised for delivering what is known as inserts and outserts, comprising single sheet advertising reply cards to precise locations on printed webs which, when folded, form said supplements.

Such advertising reply cards are fixed by adhesive at said predetermined locations upon said printed webs. While this form of reply to printed advertisements in said periodicals and publications is useful and desirable, more recent advances in advertising have found it convenient to

provide means by which response by readers to ads in the periodical or supplement might be of such form that payment for articles advertised might be enclosed and remitted to the advertiser prior to sending the advertised item to the recipient. It has been found that this is a more satisfactory way of conducting business than by mailing merchandise either on a c.o.d. basis or on a conventional order basis wherein payment is remitted following receipt of the merchandise.

Certain types of envelopes constructed so as to be attached to catalog pages and the like have been devised heretofore, but, in general, said envelopes usually have been formed from a pair of laminated sheets of paper or the like or other equally bulky or complex arrangements. Such envelopes which comprises a double thickness of paper, when affixed to a printed web and folded into publications, unduly increase the thickness thereof and also increase the possibility of tearing, jamming and other malfunctioning of the folding mechanism occurring relative to the printed web.

SUMMARY OF THE INVENTION

It is the principal object of the present invention to provide a flat sheet of readily foldable material suitable for forming a mailing piece comprising at least a pair of panels of said material which may be folded along a weakening line or the like across said piece into overlying relationship and one of said panels, if desired, also having a closing flap foldably connected thereto. Stripes of adhesive extend along the same surface of said sheet respectively adjacent the edges thereof on at least one of said panels and a mounting strip by which the sheet is secured to a supporting piece is secured detachably along one edge of said sheet.

When said stripes of adhesive are of the tacky pressure-sensitive type and the piece is in flat, unfolded condition, said stripes are preferably covered by narrow strips of protective sheet material which lightly adhere thereto, and means to aid removal of the strips preferably are provided on one end of each covering strip. One form of means to aid removal thereof comprises a tab which is manually engageable to quickly and effectively remove the covering strips from the stripes of adhesive to expose the adhesive and thereby render the same available to effect sealing of at least the ends of said folded sheet into an enclosing type mailing piece which may be completely closed and sealed either by folding a closing flap onto the panel opposite that to which it is foldably connected or by other sealing means described hereinafter.

It is another object of the invention to arrange a detachably connected series of said flat sheets into a strip of indefinite length and capable of being arranged in compact manner for use in which said sheets are disposed in closely overlying relationship, either in fan-folded manner or in rolled condition for delivery to a machine capable of separating said sheets successively from said strip thereof for attachment to suitable carrying means such as a printed web of a publication or the like, said sheets being readily detachable from said strip by means of similar transverse rows of weakening means such as perforations or the like.

It is a further object of the invention to provide said aforementioned removal tabs in the form of corners respectively disposed at one end of each flat sheet and adjacent opposite side edges thereof, said corners preferably being of similar geometric configurations of any appropriate shape, such as triangular, and the like, the same being affixed to said covering strip and at least partially severed from said panel of said sheet to facilitate the quick and accurate detachment thereof from said sheet incident to removing the covering strips from said stripes of adhesive.

Still another object of the invention is to provide said mounting strip along one side edge of each flat sheet which is separably connected thereto by a row of perforations or the like, and said mounting strip being attachable to a supporting or carrying piece such as a printed web of a publication or the like, by a stripe of adhesive either pre-applied or applied in tacky condition at the time the pieces are fed from a connected strip thereof by a suitable mechanism.

A still further object of the invention is to provide a row of separating means such as perforations along one or both side edges of said flat sheet mailing piece closely adjacent but inward from said stripes of adhesive along opposite edges thereof, whereby the completely closed mailing piece formed from said flat sheet, when folded and sealed, may have one or both ends or even a third edge strip thereof readily removed therefrom by the addressee to expose the contents thereof.

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 of the same.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of one relatively simple embodiment of flat sheet mailing piece embodying the principles of the invention.

FIG. 2 is a slightly enlarged end elevation of the mailing piece shown in FIG. 1 as seen on the line **2—2** of FIG. 1.

FIG. 3 is a view similar to FIG. 2 but showing a slightly modified embodiment of the arrangement of an attaching stripe of adhesive on the mounting strip attached to said piece.

FIG. 4 is a view similar to FIG. 1 but showing still another embodiment of mailing piece construction employing the principles of the invention.

FIG. 5 is an end view of the mailing piece embodiment shown in FIG. 4 as seen on the line **5—5** thereof.

FIG. 6 is a fragmentary end view, on a larger scale than employed in FIG. 5, and showing a modified version thereof to provide engageable means to facilitate removal of adhesive protective strips of the type generally shown in FIG. 4.

FIGS. 7 and 8 respectively are fragmentary perspective views of two different embodiments of weakening means for the adhesive protecting strips of the type shown in FIG. 4 and employed in coincidence with the severable ends of the individual mailing pieces when arranged in continuous strip form.

FIG. 9 is a perspective view of still another embodiment of flat sheet mailing piece employing the principles of the invention.

FIG. 10 is a perspective view of a still further embodiment of flat sheet mailing piece employing the principles of the present invention and adapted particularly to serve as a money-return type of mailing piece.

FIG. 11 is an enlarged side elevation of the mailing piece shown in FIG. 10 when separated from its mounting strip and arranged in folded, enclosing position.

FIG. 12 is a perspective view of a still further embodiment of flat sheet mailing piece utilizing particularly a different embodiment of fold line indicating means from the embodiments thereof shown in the preceding figures.

FIG. 13 is a perspective view of a still further embodiment of flat sheet mailing piece employing the principles of the present invention and especially a different arrangement of sealing adhesive means from those shown in the preceding embodiments.

FIG. 14 is a side elevation of the mailing piece shown in FIG. 13 when folded into sealed and mailing condition.

FIG. 15 is a perspective view of another exemplary embodiment of mailing piece provided with another form of protective strip removal means.

FIG. 16 is a fragmentary perspective view illustrating a removal tab and one end of a covering strip such as shown in FIG. 15 in process of being removed from a stripe of adhesive along one side edge of the mailing piece to expose said adhesive for sealing operations.

FIG. 17 is a fragmentary perspective view of the lower end portion of the mailing piece shown in FIG. 15 and illustrating the left-hand corner thereof turned over to illustrate an area on the mounting strip thereon arranged to have attaching adhesive applied thereto for connection of the mailing piece to a supporting or carrying piece.

FIG. 18 is a fragmentary perspective view of one corner of a folded mailing piece formed from the sheet shown in FIGS. 15–17 and illustrating, in partially turned up manner, adhesive means exposed for self-engagement at the opposite ends of the closing flap to secure the same in sealed condition with respect to the completely folded mailing piece.

FIG. 19 is a plan view of a folded mailing piece formed from the flat sheet shown in FIG. 15, as viewed from the rear surface thereof, and illustrating the closing flap in sealed condition.

FIG. 20 is a framentary, enlarged view of one corner of the flat sheet mailing piece illustrated in FIG. 15 and showing one embodiment of removal tab connected to one end of a covering strip for the stripes of adhesive.

FIG. 21 is a fragmentary view similar to FIG. 20 but illustrating another embodiment of removal tab.

FIG. 22 is a perspective, fragmentary view showing one embodiment of compact storage and feeding arrangement for a connected strip of said flat sheet mailing pieces shown in the preceding figures, in position for feeding the same to a suitable machine to separate and affix such individual flat sheets to carrying means such as a printed web of a publication.

FIG. 23 is another embodiment of compact arrangement of a strip of such connected flat sheet mailing pieces arranged in roll or coiled form from which the individual flat sheets may successively be removed for attachment to a carrying piece.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention primarily is concerned with the production of an individual mailing piece formed from a single sheet of suitable material, such as any of a number of different types of paper products. In general, it is desirable that the material at least be capable of a sheet thereof readily being folded into two or more overlapping panels or flaps and then readily being sealed in such configuration so as to comprise what generally might be referred to as a mailing envelope.

Inasmuch as mailing pieces of this type are adapted to be employed in many fields of advertising, as well as order soliciting and for making payments therefor, it should be apparent that the principles of the invention should be capable of lending themselves to being incorporated in a number of different embodiments of structural arrangements. Such arrangements, however, in general, include similar basic characteristics whereby, even though a rather substantial number of different specifically illustrated constructions are shown in the drawings, there nevertheless is a substantially basic inventive theme employed commonly in each of them.

One of the relatively simple embodiments of the invention is illustrated in FIGS. 1 and 2 and comprises a mailing piece **10** formed from a sheet of suitable material of the type generally referred to above and particularly a paper product, although it is conceivable that certain forms of plastic, cloth or metal foil are suitable under certain circumstances for such purposes.

In accordance with the general preferred overall principles of the invention, a number of the individual mailing pieces **10**, which are all of uniform size and structural detail, are connected in end-to-end relationship

along severable lines **12** shown at opposite ends of the piece **10** and extending between the opposite side edges thereof. Such lines **12**, for example, may comprise lines of perforations, rouletting, or the like. Preferably, such severable connecting means as are used along the lines **12** should be of the type that can be severed quickly and cleanly by a bursting or jerking action which may be imposed upon the leading end of a strip of such connected pieces **10** by an appropriate machine such as of the type illustrated in the aforementioned co-pending application Ser. No. 685,122.

Extending along one side edge of the piece **10** is a mounting or attaching strip **14** which is connected to, but readily separable from, the piece **10** by a weakened means such as a longitudinally extending row of perforations **16** or the like. For purposes of attaching the piece **10** and its strip **14** to appropriate carrying or supporting means, such as a page of a magazine, newspaper supplement, or the like, a longitudinal stripe of mounting adhesive **18** is applied to one surface of the strip **14**, between the outer edge thereof and the row of perforations **16**. Said stripe of mounting adhesive very conveniently might be applied incident to a connected strip of a plurality of the pieces **10** being fed to a printing web or the like for attachment to predetermined locations thereon by a machine of the type shown and described in said aforementioned co-pending application.

The stripe of adhesive **18**, for example, may comprise a so-called hot melt type of adhesive which remains fluid and tacky for a short interval of time after being melted and applied to the strip **14**, for example, by said aforementioned machine. The tacky properties of the adhesive are readily capable of remaining in adhering condition while the piece **10** is being fed to a printed sheet or other form of carrying piece and then rapidly hardens in a manner to firmly secure the attaching strip **14** and the mailing piece connected thereto to such supporting piece or web.

The strip **14** also serves an important additional function by being provided with feeding means by which a continuous strip of connected pieces **10** is positively fed at a predetermined rate of speed, for example, such as by a machine of the type shown and described in said aforementioned pending application. To accomplish this, a row of feeding perforations **20** which are punched holes, of appropriate uniform spacing and diameter, are provided continuously along the strip **14** such as shown in exemplary manner in FIG. 1. Such perforations may be engaged by the pins of a pin-type feed wheel on said aforementioned machine and thereby assure such positive feeding movement.

One very common type of use which may be made of the mailing piece **10** is to form an envelope therefrom for many purposes, among the more important of which will be the writing or typing an order upon one or both of the panels **22** and **24** which preferably are at least of the same width and are connected for folding along a suitable fold line **26**. As will be described hereinafter in greater detail, the fold line **26** may be actually indicated and the folding function facilitated by making said line in the form of a crease or a series of suitably spaced perforations. This is not essential, however, because other forms of indicating and facilitating means may be employed. After the necessary data and information has been applied to one of said panels as indicated, the same are then folded upon each other, along the fold line **26**, for example, and thereby form a pair of overlying panels.

To facilitate the sealing of the overlying ends of said panels into a suitable enclosing type envelope or the like, stripes of sealing adhesive **28** and **30** are applied suitably along the opposite side edges of the piece **10**. As will be described hereinafter in regard to additional embodiments, it actually is only essential that the stripes **28** and **30** extend along the opposite side edges of a single panel, depending upon the type of adhesive employed. By way of one suitable embodiment, such sealing adhesive may comprise a moistenable type such as may be licked with saliva, or a wetting roller of appropriate type may be employed. Assuming that such moistenable type of adhesive is used, then it is only necessary that the stripes **28** and **30** extend substantially continuously along the opposite side edges of only one of the panels **22** or **24**. An arrangement of this type generally is illustrated in FIGS. 13 and 14 and is described in detail hereinafter, like stripes **124**.

In the event the cement employed for the sealing stripes **28** and **30** is of the contact type, such as a dry pressure-sensitive adhesive, it is then preferred that the stripes **28** and **30** continue preferably entirely along the opposite side edges of the piece **10** so that when the panels **22** and **24** are folded upon each other, the engagement of said stripes of contact adhesive upon each other will immediately and permanently seal the same. Further, however, if a tacky pressure-sensitive type of cement is employed for the sealing stripes **28** and **30**, then protective covering strips of suitable material, of the type described hereinafter especially in regard to the embodiment of FIG. 4 or the various figures on sheets **3** and **4** of the drawings, should be utilized.

In the preferred construction of the embodiment shown in FIGS. 1 and 2, it is preferred that the panel **24** be a little longer than the panel **22** in order to provide a foldable sealing flap **32** connected to the outer edge of panel **24** by a fold line **34** which may be of a nature similar to the fold line **26** as described in detail hereinabove. Further, it is preferred that a stripe of sealing adhesive **36**, or a spaced series of dots thereof or the like, be provided to extend longitudinally along the sealing flap **32**. Accordingly, after the panel **22** has been folded onto panel **24** and the sealing stripes of adhesive **28** and **30** have been activated or otherwise adhered to each other so as to seal the opposite ends of the folded and overlying panels, the sealing flap **32** then is folded over against the adjacent edge of the uppermost panel **22** and the stripe of adhesive is placed in sealing engagement with said surface of panel **22** so as to complete the sealing of the mailing piece **10** into a folded arrangement which actually comprises an envelope.

Appropriate enclosures such as a check, money order or other form of payment, samples of paper, swatches of cloth or the like, or other items, may be enclosed and sealed within the envelope thus formed. Under most circumstances, such a mailing piece, especially when used in connection with an advertisement on the page of a magazine or insert for newspaper, will have the address of the advertiser or order solicitor printed directly on the outer face of one of said panels and, as is customary at present, an additional indication of postage being paid by the receiver usually is applied to said panel.

Referring to FIG. 2, an end elevation of the mailing piece **10** shown in FIG. 1 is illustrated somewhat in exaggerated form to accord a concept of the relative surfaces to which the various stripes of adhesive **28**, **30** and **36**, as well as stripe **18** of mounting adhesive are affixed. It will be seen from FIG. 2 that all of said stripes of adhesive preferably are affixed to the same surface of the unfolded piece **10**. However, under some circumstances, it may be preferred to affix the stripe of mounting adhesive to the opposite surface of the piece **10** from that surface to which the other stripes of sealing adhesive are affixed. Such exemplary arrangement is shown in FIG. 3, for example, where the stripe of mounting adhesive **18'** is shown applied to the opposite surface of the attaching strip **14** from the surface to which the stripe **18** is shown to be affixed in FIG. 2.

In the embodiment shown in FIG. 4, the general basic arrangement of the piece **10** is similar to that shown in regard to the piece **10** illustrated in FIGS. 1 and 2. Accordingly, the same reference numerals are applied to similar elements and features of the piece **10** shown in FIG. 4. The principal difference of the embodiment

shown in FIG. 4 over that shown in the preceding figures lies in the use of pressure-sensitive sealing adhesive for the sealing strips **28** and **30** thereof, thereby necessitating the use of preferably continuous strips of protective material **38** and **40**. These lightly adhere to and are readily separable from the strips of pressure-sensitive sealing adhesive **28** and **30**. Suitable treated paper as, for example, silicon fluid-treated paper, and the like is highly suitable for foaming the protective strips **38** and **40**. To remove the same, it is only necessary to lightly loosen one end of each strip by use of a fingernail, knife blade or the like, and then quickly peel the entire protective strip from the stripe of adhesive.

A simple and convenient expedient for facilitating the gripping of the protective strips **38** and **40** is illustrated in a slightly modified form in FIG. 6 which is a fragmentary illustration of the right-hand edge of the piece **10** shown in FIG. 4 and wherein it will be seen that the protective strip of material **38'** is substantially wider at least at one edge than the stripe of pressure-sensitive adhesive **28** which it protects. Such protecting edge of the strip **38'** readily may be engaged by simply projecting a fingernail or the like under it and then grasping it between a thumb and finger to quickly peel the entire strip from the stripe of adhesive.

In view of the fact that when a series of connected but readily separable pieces **10** are arranged in a continuous strip form for compact arrangement for feeding to a machine of the type, for example, illustrated and described in said aforementioned copending application, the preferred method of separating the leading piece **10** from the next adjacent piece is by a bursting or quick jerk of the same to separate it along the severable line **12**. Hence, the application of the protective strips **38** and **40** over the strips of sealing adhesive **28** and **30** conceivably could impede the clean and substantially instantaneous separation of said leading piece **10** from the next adjacent piece.

To obviate the possibility of any such aforementioned impedance occurring, however, it is contemplated by the present invention that, for example, as the protective strips **38** and **40** are applied to the connected strip or series of pieces **10**, and incident to the scoring of the strip transversely at equal intervals to form the severable lines **12**, the strips **38** and **40** may be either completely or nearly completely severed in coincidence with the severable lines **12** as illustrated in several embodiments respectively illustrated fragmentarily in FIGS. 7 and 8.

In the embodiment shown in FIG. 7, a pair of notches **42** are formed so as to extend inward toward each other from opposite side edges of the exemplary strip **38** and must also extend through the panels of sheet **10**. In the embodiment shown in FIG. 8, only a single notch **44** is formed substantially in coincidence with the severable line **12** and the depth of the notch preferably is such so that it extends approximately entirely across the width of the exemplary protective strip **38**. A still further embodiment comprises a clean incision transversely through the protective strips **38** and **40**, substantially in exact coincidence with the severable lines **12** between adjacent mailing pieces **10**. This may be done by an appropriate knife or narrow punch and thereby form a square-cut end **46** as shown, for example, in FIG. 4 which completely severs the strips **38** and **40**, or they may be severed by a punched out space.

A still further, relatively simple and advantageous expedient of the invention is illustrated in perspective manner in FIG. 9. In this figure, the mailing piece **48** comprises a pair of panels **50** and **52** which are of similar length but uneven width. A mounting strip **54** which has feeding means such as a row of perforations **56** therealong is secured detachably along one edge of the mailing piece **48** by a row of perforations **58**. Also, as in the preceding embodiments, a stripe **60** of mounting adhesive is applied to one surface or the other of the mounting strip **54** so as to extend longitudinally therealong for attachment of the strip and the piece **48** secured thereto to a suitable mounting or supporting piece or web as described above in regard to the preceding embodiments.

It will be seen from FIG. 9 that a fold line **62** is arranged between the panels **50** and **52**, said fold line extending perpendicularly to the row of perforations **58**, for example, and transversely between the opposite edges of the piece **48**. The fold line may be formed in any suitable manner such as described with respect to the fold lines **26** and **34** of the preceding embodiments. Also, another fold line **64** extends along panel **52** only, in parallel spaced relation to the row of perforations **58**. In a similar location on panel **50**, a row of severing perforations **66** extends between the fold line **62** and the outer severed edge **68** along which the piece **48** has been separated from the next adjoining similar piece.

The perforations **66** define a small piece of waste material **70** which is defined at its outer edge by the perforations **58**. After the piece **48** has been severed from the mounting strip **54**, the waste piece **70** then may be quickly removed along the line of perforations **66** from panel **50** and the panel **50** then is in condition to be folded along the fold line **62** so as to overlie panel **52**. A foldable sealing flap **72** is defined by the fold line **64** and the adjacent outer edge of panel **52**. A stripe of sealing adhesive **74**, of suitable type, is applied to the sealing flap **72** either in a continuous line or interrupted dots of the same which may also extend along the waste piece **70**. For convenience, the adhesive **74** may be of the moistenable type so as to simplify the construction.

The panel **50**, for example, also has stripes **76** and **78** of sealing adhesive applied preferably continuously along the severed edge **68** and the side edge which is parallel to and opposite the row of perforations **66** in panel **50**. The strips of sealing adhesive **76** and **78**, especially for simplicity, also may be of the moistenable type. When activated, and the panel **50** is folded along the line **62** onto panel **52** so as to immediately overlie the same, the moistened adhesive stripes **76** and **78** will firmly adhere to the adjacent edges of panel **52** and thus form an enclosing type mailing piece which is then open only at the end to which the sealing flap **72** is connected.

As in regard to the preceding embodiments, one surface of the mailing piece **48** may have spaces for correspondence and the indication of certain things to be ordered such as sizes, dimensions, etc., and the inclusion of the sender's name and address. Upon the forming of the mailing piece into an enclosing type arrangement as described immediately above, certain enclosures may be inserted within the piece through the open end thereof and then the sealing flap **72** is folded over onto the outer surface of panel **50** which then is uppermost and activation of the adhesive **74** then firmly seals the flap **72**. As in regard to the foregoing embodiments, the address of the advertiser usually is printed on the outer surface of one of the panels **50** or **52**.

Referring to FIGS. 10 and 11, a further embodiment of mailing piece **80** is shown which has a mounting strip **82** provided with feeding perforations **84** along the same, as well as a severable row of perforations **86** and a stripe of mounting adhesive **88**, all similar to corresponding elements in the above-described embodiments. In this embodiment, it is preferred that the fold line **90** be parallel to but arranged closer to the severed end **92** of piece **80** than the opposite severed end **94**. This results in panel **96** being smaller than panel **98**. A stripe of readily activatable sealing adhesive **100** extends around the opposite side edges and outer end of panel **96**.

When the adhesive **100** has been moistened or otherwise suitably activated, and appropriate blanks or otherwise formed on the upper surface of panel **96**, for example, have been appropriately filled in with the sender's name and address, suitable enclosures such as coins **102** may be placed upon panel **98** near the fold line **90** and then cov-

ered by panel **96**. Said enclosures then will be sealed between the overlying panels **96** and **98** by the stripes of sealing adhesive **100** as shown in exemplary manner in edge view in FIG. 11. As in regard to the preceding embodiments, the address of the advertiser usually is printed on the outer surface of panel **98**, for example, to render mailing of the same relatively effortless.

Referring to FIG. 12, a mailing piece **10'** is shown which is somewhat similar to the mailing piece shown in FIGS. 1 and 2, whereby similar reference characters have been employed for all elements and features which are common to the mailing pieces shown respectively in FIGS. 1 and 12. In the mailing piece **10'** shown in FIG. 12, however, essential differences comprise the means for determining the location of the fold lines upon which panel **24** is folded upon panel **22** and sealing flap **32** is folded upon the superimposed panels **22** and **24** and the arrangement of the foldable panels relative to the mounting strip **14**. As has been mentioned hereinabove, it is not essential that weakening lines or creases be provided. Instead, as shown in FIG. 12, notches **104** may be formed in the opposite ends **12** of the mailing piece **10'** so as to extend inward from said ends formed when the mailing piece is severed from the next one on the connected strip thereof along the line or perforations **12** and also separated from mounting strip **14** along perforations **16**. It readily can be visualized from FIG. 12 that an imaginary fold line **26** will extend between the notches **104** and the weakening of said edges by said notches will facilitate the determination of the fold line without the actual provision of weakening means or creases to indicate the same as otherwise suggested with respect to the weakened type fold line **26**, for example, in the embodiment shown respectively in FIGS. 1 and 4.

Similarly, an additional pair of notches **106** are formed respectively in the opposite ends **12** of the piece **10'** as described hereinabove with respect to notches **104**. The notches **106** are slightly spaced from perforations **16** to define an imaginary fold line **34** by which the sealing flap **32** is folded with respect to panel **22**. However, notches **104** and **106** primarily are exemplary.

In FIGS. 13 and 14, a still further, relatively simple embodiment of mailing piece is illustrated. Essentially, this embodiment differs from the preceding embodiments in that no sealing flap is formed on one end of the mailing piece **108**. Preferably, the foldably connected panels **110** and **112** thereof are of substantially equal size and the same are arranged to be folded into superimposed relationship along the fold line **114**. As in regard to the preceding embodiments, a mounting strip **116** is detachably connected to the piece **108** by a row of perforations **118**.

The attaching strip **116** also is provided with appropriate feeding means such as the row of feeding perforations **120**. Also, an attaching stripe of mounting adhesive **122** extends along the attaching strip **116** as in regard to the preceding embodiments. Also as in regard to the preceding embodiments, it is to be understood that the panels **110** and **112** may be utilized for purposes of writing or typing messages, names and addresses, etc., order identifications and the like for purposes of transmitting the same to an addressee, whose name and address usually is printed on the outer surface of one of the panels **110** or **112**.

After severing the mailing piece **108** from its attaching strip **116** along the line of perforations **118**, and after any writing or typing has occurred on the panels involved, the panel **110** then may be folded along the line **114** onto the panel **112**. In order to seal the overlying, adjacent side edges of said panels together, only one of said panels, such as panel **110**, is provided adjacent its opposite side edges with stripes of sealing adhesive **124** which, particularly for simplicity, may be of the moistenable type to render the same active. Upon sealing the side edges of the panels **110** and **112** together by means of the stripes of adhesive **124**, an envelope-type structure is provided which is still open along the adajacent and overlying severed end edges **126**.

Any desired inserts then may be disposed through said open end of the srtucture prior to activating a sealing stripe **128** of appropriate adhesive which extends adjacent the edge **126** of panel **112**, for example. To facilitate such insertion, as shown in FIG. 14, the outer edge of one of the panels extends slightly beyond the other to facilitate spreading said edges apart transversely. Said adhesive is of the same type as the stripes **124**. Particularly if of the moistenable type, final sealing of any contents within the thus-formed sealable type enclosure then is completed. Such completed and sealed configuration is illustrated in end view in FIG. 14 and it will be seen from this that the outermost severed edges **126** of both the panels are substantially in coincidence with each other. Under the circumstances, the need for a sealing flap is obviated.

In regard to all of the above-described embodiments in which the stripes of sealing adhesives are indicated as preferably being of the moistenable type, for example, it is to be understood that at least with appropriate modification and provision of protective strips which are lightly and peelably adhered to the stripes of sealing adhesive, other types of adhesive than the contact and moistenable types may be employed, such as pressure-sensitive adhesive. Also, where weakened type fold lines are shown, notches of the type shown in FIG. 12, to locate the fold lines, may be used in lieu thereof.

In addition to the relatively simple type of protective strips of material such as strips **38** and **40** in the embodiment shown in FIGS. 4 and 5, somewhat more sophisticated types of protective strips and especially means to facilitate the removal thereof from the strips of adhesive are illustrated in subsequent embodiments which are illustrted in FIGS. 15–21, the principal one of these additional embodiments being shown in FIGS. 15–18. Details of the structure shown in these figures are as follows.

Referring particularly to FIG. 15, it will be seen that the mailing piece **130** preferably is at least initially flat and of uniform width. At least along one edge thereof is a combination mounting and feeding strip **132** which, preferably, is provided with exemplary feeding means such as a row of feeding apertures or perforations **133**. The mounting **132** also is detachably secured to one edge of the mailing piece **130** by a row of readily separable perforations **134**. Also extending transversely between opposite edges of the mailing piece **130** is a fold line **136** which divides the piece into two panels **138** and **140**.

The panel **140** also is provided adjacent the outer end **142** thereof with another transversely extending fold line **144** which preferably is similar to and formed by the same type of means as the fold line **136**. The fold line **144** defines a closing flap **146**. Preferably, the portion of panel **140** between the fold lines **136** and **144** is only slightly longer than the panel **138** in the direction of the major axis of the flat piece illustrated in FIG. 1, so that the panels are substantially equal but permit ready folding of the flap into fully closed position.

The mailing piece **130**, particularly when provided with the mounting strip **132** thereon, is readily adapted to be affixed to a supporting or carrying piece such as a printed web of the type referred to above. The mailing piece **130** primarily is intended for use as an enclosing type mailing piece associated with certain advertising matter and intended to be removed by a reader and folded into an envelope-like item for the mailing of an order in conjunction with the advertisement and, more particularly, to afford such an envelope-type mailing piece in which, for example, payment in suitable form for merchandise may be enclosed and fully sealed. The mailing piece **130**, in flat and single sheet thickness condition, is secured to such supporting means by a stripe of adhesive **148** secured to one surface of the mounting strip **132**. Said stripe of adhesive **148** is shown in full lines in the upturned

corner portion of the mounting strip **132** as viewed in FIG. 17.

Transversely extending lines or rows of several means **150** are formed between adjacent flat mailing pieces **130** in order that said strip of mailing pieces may be arranged in compact, overlying relationship either for shipping purposes, storage, or for delivery to suitable feeding, severing and applying machines such as the type comprising the subject matter of said aforementioned pending patent application, Ser. No. 685,122. One appropriate arrangement of such connected strip of flat mailing pieces **130** is illustrated in FIG. 22 in which said pieces are arranged in so-called fan-fold disposition. In FIG. 23, said strip of mailing pieces **130** is shown as being arranged compactly in coiled or roll formation. Still other arrangements are possible in accordance with the principles of the present invention.

After individual mailing pieces **130** are separated from the mounting strip **132** therefor, means are provided by which the panels **138** and **140**, when folded into overlying position upon each other along the weakening line **136**, for example, may be firmly secured together at the outer edges thereof. To effect this, each of the mailing pieces **130** is provided adjacent opposite edges thereof with a preferably continuous narrow stripe of sealing adhesive **152**. One of said stripes is illustrated in partially exposed manner in FIG. 16. Said stripes of adhesive are applied to the same surface of each mailing piece **130** and said adhesive may be either of the moistenable, contact, or pressure-sensitive type, as desired. If the adhesive is of the contact type and even more particularly if it is of the pressure-sensitive type, suitable prtoective means for the same are provided.

Particularly when the sealing adhesive is pressure-sensitive, the present invention provides protective means for said stripes of adhesive in the form of extra covering strips **154** which are preferably of a paper-like material and are of such nature or otherwise are prepared so that they only lightly adhere to the stripes of adhesive and thus are readily removable therefrom simply by pulling upon one end of each covering strip, thereby exposing the stripes of adhesive beneath the same. Means to facilitate such removal of the strips are described in detail hereinafter.

When the covering strips **154** have been removed from the stripes of adhesive **152**, and the panel **138**, for example, is folded along the fold line **136** onto panel **140**, so as to evenly overlie the same, it will be seen that the stripes of adhesive respectively on said panels will also overlie and respectively contact themselves. Especially where pressure-sensitive or contact-type cements are used, such engagement immediately firmly secures together the opposite end portions of the panels to form a pocket.

To secure items desired to be sealably enclosed within the envelope-like mailing piece, the closing flap **146** is folded along the fold line **144** into engagement with the outer surface of the adjacent end of panel **138**, for example. To secure said flap **146** in such closed position, several embodiments of adhering means are provided. One of these comprises an elongated area or stripe of adhesive **156** which, for example, may be of the moistenable type. Supplementary securing or adhering means for the closing flap **146** are described hereinafter.

To facilitate the removal of the covering strips **154** from the stripes of adhesive **152**, removal or pull tabs **158** may be proided. Such tabs preferably comprise corner portions adjacent opposite edges of the outer end of panel **138**, for example. As illustrated in FIGS. 15 and 20, one embodiment of such tab is shown as being triangular. Said tabs are formed by either partial or complete incisions such as the diagonal incisions **160**. If desired, such incisions, rather than being a continuous cut, may be in the form of perforations. In either event, however, the incisions should be such as to lend the tabs **158** to ready separation from the panel **138**, for example, when it is desired to remove the cover strips **154** from the stripes of adhesive **152** therebeneath.

The triangular type tabs **158** as shown in FIGS. 15 and 20 are defined by either a straight cut or incision **162**, which may be coincident with the line of perforations **134** as shown in FIG. 20, or, as shown in FIG. 15, the line of perforations **134** may suffice to define the outermost edge of the tabs **158** at the left-hand side of the panel **138** as viewed in FIGS. 15 and 20. With respect to the opposite tab **158** adjacent the right-hand side of the panel **138** as shown in FIG. 15, the outer edge of the tab will comprise the outer edge of the sheet from which the mailing piece **130** is formed.

As shown in FIG. 21, the exemplary tab **158'** shown therein is illustrated as being somewhat rectangular. Such tab may be defined by a transverse straight cut **164** or incision of limited length extending between the row of perforations **134** and the short row of perforations **166** parallel thereto and extending between the outer end of panel **138** and the incision **164**. If desired, the short row of perforations **166** may be replaced by a straight or continuous cut or incision.

Also, in regard to forming the rows of perforations or straight cuts or incisions defining the various types of pull tabs **158** and **158'** illustrated in the drawing and described hereinabove, it is to be understood the same may be applied to the stock strip of material from which the successive mailing pieces **130** are formed incident to otherwise forming said pieces upon suitable machinery including the application of printing to one or both surfaces of the mailing pieces **130**, including the mailing address of the advertiser and the application of suitable paid postage indications thereon.

The use of removal or pull tabs **158** and **158'** in the form of corner portions of the panel **138** of the mailing piece, for example, in addition to serving as means to facilitate the removal of the covering strips **154**, also provide an additional useful feature of the present invention which is best illustrated in FIG. 18. It will be seen that when the panel **138** has been folded upon the other panel **140** which is beneath the same as viewed in said figure and the side edges thereof have been secured together by the overlying stripe of adhesive **152** along each of the opposite sides thereof, the diagonal cut line **160** at the corners of the panel **138** expose an appreciable portion of the stripe of adhesive **152** on panel **140**. In addition, the inner surface of the closing flap **146** likewise has a continuation of the same stripe of adhesive **152** thereon. Accordingly, when the endmost portions of the closing flap **146** are pressed downwardly into engagement with the panel **138**, said exposed portions of the adhesive **152** will overlie and engage each other in sealing manner, thereby augmenting the securing function of the other stripe of adhesive **156** described above as being in the inner surface of the closing flap **146** when the same is folded into overlying relationship upon the outer surface of panel **138**.

When the mailing piece has been completely folded and sealed into enclosing condition, it can be appreciated particularly from FIG. 19, which is a view of the so-called rear side of the mailing piece that is opposite from that which bears the address of the advertiser, for example, that the closing flap **146** will be adequately secured in sealed condition. The position of the stripe of adhesive **156** relative to the overlying portions of the stripes of adhesive **152** at the upper end of the enclosure assures such firm sealing of said closing flap.

One additional convenient feature is provided in the mailing piece **130**, as well as in certain preceding embodiments, in the form of additional rows of perforations **168** which are parallel to and closely adjacent the innermost edges of the stripes of adhesive **152** which extend along the opposite side edges of the mailing piece, including both panels **138** and **140** as well as closing flap **146**. When the mailing piece has been completely folded into the condition shown, for example, in FIG. 18 as well as in FIG. 19 and sealed, which is the condition in which

the same is mailed, it will be seen that the rows of perforations **168** are conveniently located to permit ready removal of the connected and sealed opposite ends of such folded and sealed mailing piece **130** in order to expose the contents thereof as when the advertiser has received the mailing piece in the form of an order and enclosures therein are to be removed, in addition to exposing to view the written order on the interior of the mailing piece. Though two rows of perforations **168** are illustrated, it is to be understood that either only a single row may be used if desired, or a third row may be provided along the third sealed edge to facilitate opening the piece.

While the invention has been illustrated and described in its several preferred embodiments, it is to be understood that the invention is not to be limited to the precise details herein illustrated and described since the same may be carried out in other ways falling within the scope of the invention as shown and described.

We claim:

1. A single flat sheet of readily foldable relatively stiff material suitable for forming a mailing piece and comprising a pair of panels connected for folding into overlying relationship to form an enclosing type mailing piece, a longitudinally extending feeding and mounting strip of said material connected to said sheet solely along one edge thereof by a row of readily severable means, said strip having feeding means thereon for engagement by feeding mechanism and being adapted to have a stripe of mounting adhesive applied thereto on one surface thereof to secure the sheet to one surface of a carrying piece until need for use thereof as a mailing piece, and sealing adhesive extending along certain predetermined edges of said panels and operable when said panels are folded upon each other to seal all unfolded overlying edges of said panels together.

2. The mailing piece sheet according to claim **1** in which said sealing adhesive is the pressure-sensitive type and said sheet further including protective strips of peelably removable material lightly adhered to said sealing adhesive to protect the same against contact with other surfaces or itself, and means on said strips to facilitate removal thereof from said sealing adhesive.

3. The mailing piece sheet according to claim **2** in which said covering strips are wider than the stripe of sealing adhesive to provide at least at one edge of each of said covering strips a portion readily engageable manually to facilitate removal thereof from the sealing adhesive.

4. The mailing piece sheet according to claim **1** in which said feeding means on said mounting strip comprises a longitudinally extending row of punched holes engageable by feeding means of a machine to which a connected strip of such sheets may be fed for separation and application of said sheets to carrying pieces.

5. The mailing piece sheet according to claim **1** in which said row of readily severable means comprises a row of perforations, said sheet further having weakened means defining fold lines.

6. The mailing piece sheet according to claim **1** in which one of said panels is longer than the other, whereby the excess length of said one panel comprises a closing flap foldable exteriorly over onto the other panel when said panels are folded into overlying relationship, said flap having at least a portion of one edge detachably connected to said mounting and feeding strip.

7. The mailing sheet piece according to claim **1** in which said panels are foldably connected along a line parallel to said mounting strip, and one of said panels having another folding line formed therealong in spaced relation and parallel to said row of severable means which connects said feeding and mounting strip to said sheet to form a foldable closing flap, said closing flap having sealing adhesive thereon, and the opposite edges of one of said panels which are transverse to said folding lines having said sealing adhesive thereon to engage the corresponding edges of said other panel when folded into overlying relationship therewith and thereby form sealed ends for said mailing piece.

8. The mailing sheet piece according to claim **7** in which said another folding line is on said panel which is farthest from said mounting strip and said adhesive on said closing flap extends substantially along the full length of the same.

9. A plurality of single flat sheets of relatively stiff readily foldable material suitable for forming similar mailing pieces, each of said sheets comprising a pair of panels connected for folding into overlying relationship to form an enclosing type mailing piece, readily severable connecting means extending between adjacent sheets transversely between opposite side edges thereof to form a strip of such connected flat sheets readily separable from each other, a narrow feeding and mounting strip of said material extending longitudinally solely along one side edge of said strip of connected flat sheets and seperably connected thereto by a row of readily severable means, said feeding and mounting strip having feeding means thereon for engagement by feeding mechanism and being adapted to have a stripe of mounting adhesive applied thereto on one surface thereof to secure said individual sheets when separated from each other to one surface of a carrying piece until need for use thereof as a mailing piece, and stripes of sealing adhesive of predetermined width extending along certain free edges of said panels of said connected strip of sheets and operable when said sheets are separated from each other and folded upon themselves to connect the panels of said sheets firmly into overlying relationship.

10. The series of connected sheets according to claim **9** further including protective strips of material coextensive with said stripes of sealing adhesive and overlying the same for peelable adherence thereto, said protective strips being weakened in coincidence with the transverse lines of connection of said sheets to each other and thereby prevent any impedance of rapid separation of said sheets from each other which might result from any tendency of said covering strips on adjacent sheets to remain connected to each other.

11. The flat sheet mailing piece according to claim **1** further including protective covering strips overlying and peelably adhering to stripes of said sealing adhesive along said certain predetermined edges of said panels, and removal tabs on one end of each covering strip comprising separable portions of one of said panels of said sheet and manually engageable to remove the same from protecting position over said stripes of adhesive prior to folding said panels upon each other.

12. The flat sheet mailing piece according to claim **11** in which said separable portions of said one panel are corner portions thereof at the outer end of said one panel and respectively adjacent the edges thereof.

13. The flat sheet mailing piece according to claim **12** in which said separable corner portions are partially severed from said one panel and are arranged readily to be completely severed therefrom by manually pulling said corners incident to removing said covering strips from said stripes of adhesive.

14. The flat sheet mailing piece according to claim **12** in which one of said panels is longer than the other to provide a closing flap arranged to be folded over the outer end of one of said panels when folded upon themselves, said adhesive stripes also extending along the opposite side edges of said closing flap in positions to engage respectively portions of the stripes of adhesive on the adjacent panel of said mailing piece to which said flap is foldably connected when said portions of said stripes are exposed upon separation of said removal tab corners from the panel to which they initially were attached, whereby sealing of the ends of said closing flap to said folded and connected panels is effected.

15. The flat sheet mailing piece according to claim **14** further including areas of adhesive material applied to

one of the adjacent surfaces of said closing flap and panel of the mailing piece which it overlies when folded into closed position, thereby sealing said adjacent surfaces and supplementing the sealing afforded by the opposite ends of said closing flap as aforesaid.

16. The flat mailing piece according to claim 11 in which an additional row of perforations is formed along at least one edge of said flat sheet adjacent and parallel to one of said stripes of adhesive and inwardly therefrom to form on the folded and sealed mailing piece a severable edge arranged for ready removal by the recipient of the mailing piece tearing said end along said row of perforations to expose the contents of said folded and sealed mailing piece.

17. The flat sheet mailing piece according to claim 11 in which rows of perforations are formed respectively along the edges of said sheet adjacent and parallel respectively to said stripes of adhesive and inwardly therefrom to form on a folded and sealed mailing piece severable

edges readily and selectively removable by the recipient of the mailing piece tearing one or more of said sealed edges along said rows of perforations to expose the contents of said folded and sealed mailing piece.

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