This invention relates to filing devices which can double to practical use as a new kind of standard envelope or cover made seamless in series for non-fouling, to facilitate and ease the strains of business with economy.

Considering common practice we know that envelopes and covers are difficult to open, result in messy wastebaskets and entail a waste measured in tons of paper per day with enormous sums of money, another tax on business, for cleanup, handling, bulging and final disposal including the ash. Larger concerns even hire extra people and space to handle this to-date accepted waste, costing one a matter of thousands and nationally many millions per year. This is a tax which business itself can control.

Specialists are employed to find exotic quality and expensive materials and design fine covers to get attention, to be discarded adding to waste, not including the grand waste of messages never read due to waste, time and energy to get at the message by reason of a cover that cannot readily be opened before discarding. In desperation, a busy person discards the whole thing. Often using a knife, one slits an edge and the message along with it. An annoyed person does not read well.

Too often the cover is received with dog-eared corners adding to normal frustrations because it is harder to open and then impossible to use further, especially as a file. Too frequently a pencil or finger is used to tear it open, resulting not only in a messy raggedly torn waste but often in a cut finger from a razor sharp glued edge which infected has led to many deaths. It is an occupational hazard.

To overcome the known disadvantages of prior art, the present invention seeks to provide a smoother and better filing device to suit any standard commercial system; a filing cover quickly managed from the envelope of my invention which upon receipt is opened with neatness and dispatch without use of instruments and an envelope cover which thereby lends itself to further uses if desired.

The material for my file and mail envelope can be fashioned from commercial ream or roll, to form unitary blanks alike in series and then folded and glued to the completed structure of my cover in a line operation handmade or mechanically made when a suitable machine is manufactured.

To discourage and foil dog-eared corners formed by handling and use, the corners of my file and mail cover invention are angle-made or beveled from the design of the blank to save subsequent operations in manufacture.

To make a stiffer and tight dog-eared file corner proofed against dust, air, water, etc., I provide an upset inside projecting hat-fold, which when glued is indestructible. A scored fold line is provided to cause the flap to fold out of square, giving the open end of the envelope when sealed or with flap infolded, a canted end tapered wedge shape with respect to its opposite closed end of the piece. The closed end is made similar in style to opposite hand in which I provide a tapered accordion fold, by scoring fold lines in the blank tapered in width to meet somewhere in the original edge and from thence to fan out on either side to form two infolds with a reverse fold inside making the tapered accordion pleat as intended. These two slunted edges may be used in combination or either edge alone may serve the requirements of the order.

The general waste in envelopes and containers used in American business is counted in tons per day. This entails further wastes in money for disposal including the ashes, and a grand waste beyond calculation in messages received but never read because of annoyances and necessary time involved to wrestle with a cover and dispose of the mess before the contents can be seen and the catalog possibly filed. In many instances extra people must be hired and paid hard money just to handle this chore, which surely points out a need for invention.

The prime object of my invention is to provide a seamless, non-fouling, pleasing cover pre-indexed or indexed upon receipt and immediately filed with its contents and so held against the time when the customer wishes on demand, to see or analyze the message or catalog at interest.

Another object of my invention in an envelope or cover resides in a piece upon receipt, sealed or unsealed, easy to open without use of tools leaving true, even mechanically straight edges free from hardened glue that can cut like a razor edge with harm to handlers frequently, however careful they be.

Another object of my invention in an envelope or cover is a provision for suitable apertures at one or both ends of the edge to be opened to receive a human finger, pencil or the like, without necessary use of a knife or opener, to effect a neat, clean, uncrumpled side of the piece so it will lie smoothly without unduly bulking a pile.

Another object in my invention of an envelope or cover is to mitigate, or foil the tendency of any square corner to dog-eat in use from ordinary handling by employing a beveled more or less 45° angle open corner and so eliminate the customary square closed corners.

Another special object in my invention is to provide a seamless piece with an infolded tab associated with an outfolded tab, useful for non-foul filing and transport and which no envelope machine can make in one pass or any envelope machinery manufacturer has made or offered to do this job, to date, coupled with straight blank sides to form envelope edges without the draft always used to facilitate gluing and formations in envelopes hereofore. This dual use of an envelope and also a practical filing instrument managed in one piece must be a substantial aid in many areas of common business practice.

Another object of my invention resides in the ability of my envelope to frequently displaced the use of expensive cover pages used in many catalogs, advertising matter and so on, in which my envelope itself may act as the catalog cover and may be made of finer materials and printed in colors within the rules and limitations set by agencies handling such matter, in which the flat blank or the flat seamless character of my finished envelope, both lie smoothly even on a bed and so facilitate printing with resulting economy. And on receipt the envelope may be filed as is, pre-indexed in some cases by the printer, in others by the receiver indexed on the visible tab provided and easily recognized.

Another object of my invention as a filing device to create a single instrument at once suited to the varied uses of any particular filing system in which one will use an open end envelope to which my unsealed piece is suited without change; another will use a folder open at one end and one top side; another will demand a pocket

FILE AND MAIL ENVELOPE

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filer open at the top side and closed at both ends in which my envelope will serve by ripping one side and further by sealing its flap either with an infold or an outfold glued; another customer will prefer the standard open filer in which my envelope is ripped at the top side and slit at its closed end, in which the flap may be left open or loosely infolded, to position the contained material or glued to reinforce one end. In all of these uses the top side edge is reinforced with the glued tab, visible and true to line without attention.

Another object of my invention as a filing device in any manner of use is to make it non-fouling in a packed file, and dually as an envelope, non-fouling in a postman’s packed bag. The seamless construction of the piece assures that result since the bottom side tab is infolded and cannot engage or grab an adjacent projecting tab or seam thus operating to make the envelope stiff and so resist its removal or even more annoying, to bring the adjacent matter up with it to usually mix in with foreign material or fall down into the dirt defeating required neatness in such matter.

Another object of my invention as a filing device is to achieve an instrument more readily inserted and also withdrawn, without fouling, from a packed file. The beveled bottomside ends or corners, especially if free from dog-earring, are a distinct aid as is any wedge shape to such insertion. Sharp corners tend to bind and stick in the corners of a hard box or drawer always present in a filing cabinet, which the beveled corner cannot by engagement accomplish, wherefore its withdrawal is made easier and without damage due to canting the piece in an effort to get it started out.

Another object of my invention above is to further ensure a filing device even more readily inserted or removed by creation of a distinct wedge shaped piece narrower on the bottom side than on its top side which can be managed from the shape of the blank used in manufacturing the envelope. This I do by slanting out of square either or both ends of the envelope in which the closed end is a tapered accordion pleat terminating somewhere in the closed end edge fold.

Another important object of my invention in an envelope is to create a tight piece proofed against entrance of dirt, dust, moisture and so on without sacrificing the other virtues of my work in which a re-entrant cap-shape squared fold is employed which adds the virtue of added stiffness to a beveled corner proofing it further against dog-earring which can be stiffened up by the addition of glue inside the hat-void or inside the envelope to stick a flat side of the hat which also then mitigates a tendency of the contents to foul a close-laid flat surface. This type of hat-infold made from a square corner has transfer values to other materials than paper in which clear plastic sheets, leathers, rubbers, and their synthetic counterparts, and substitutes discovered and yet to be discovered may produce important results and it is intended that other materials of any nature may be used to satisfy new conditions of commerce as they change to require the use of a variety of envelopes, containers or filing devices.

An important object in my invention resides in a perforated edge for opening the piece with dispatch, without instruments or tools, in a neat, mechanically straight line, leaving two edges, one of which is reinforced or doubled for various applications to use and also in various materials to accomplish the desired results namely, safe transit and easy opening under any conditions met with in connection with a material selected for my seamless envelope in which (1) the edge to be opened to consist of an unglued tab with perforations or (2) to fold over said tab into an edge with long cuts intermittent the solid part or parts of said edge, to one single limited scoring make to practically solid edge with perforations on its ends for the entrance of a form of opener to cut or slit the edge open if sealed over on a side of the envelope; (2) a series of intermittent small tabs to be bent over edge to close an open slot or a series of such tabs each side, staggered to interlock when bent over opposing sides and glued, or the same with perforations in the way of the fold to ensure a neat, more or less continuous line of perforations on the closed edge, appropriate to metals or stiff fabrics in particular; (3) a system of intermittent short or longer slots and solid edges, which may or may not be further perforated in dashed or holed intermittencies and (4) floating or loose labels, perforated to ensure a neat fold for the purpose of application over an edge to part close or completely closing a slot or open end or side of an envelope or other piece, leaving an intermittent to continuous closing perforation by folding over said labels and using intermittent labels, etc.

While this method and the device are suited to paper, an application to metal or a self-sealing plastic with some stiffness is in mind.

Another object of my invention in an envelope, with one or more perforated edges to open the piece with slight effort and no instruments is to at the same time devise a way to proof such perforated edge from opening of itself from ordinary or rough postal handling to effect which I would stop the perforations a distance back from the corner terminating the line of perforations so the inherent strength of the material used would function to prevent a start as a tear to open up the weaker perforated edge of the piece; another method would consist of a not visible label stuck to the inside of the envelope by attachment to the blank before fabrication and still another method would be to attach a label visible on faces over the edge exterior of the piece, in each case the said label acting to terminate the perforated edge or line, functioning to prevent by its extra ply reinforcement to superior strength, the start of a tear to violate the perforated edge, possibly its whole length.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts in which to bear hardness in the accompanying drawing and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportions and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a plan view of a paper blank cut prior to forming the improved envelope.

Fig. 2 is a plan view of the reverse side of the finished envelope.

Fig. 3 is a cross section view taken on line 3—3 of Fig. 2.

Now with more specific reference to the drawings Fig. 1 shows a plan view of a material cut in the form of a blank from which by folding and gluing a complete envelope is fabricated for use, by manual method known as "Handmade" with its roll folded closed and edge and side edges and smooth closely distended body which results in a rich and exceptionally fine bit of stationery when made of commercial papers and mostly used for classy affairs by invitation where some increase in cost is justified, or the envelope can be made from the same blank by mechanical means, when a suitable machine is produced not yet in the market rule or direction of opening without instruments.

The blank can be made from a larger sheet or from an
endless roll in continuous process by means of an assemblage to design of rules, found in any printing shop of size, which cut, score and perforate, mounted in a narrow frame, and in operation, cut and form all sides score the sheet for all folds and also perforate parts of the blank with no waste except from the relatively tiny cutouts if ordered, from a suitable size sheet or width of roll. This assumes importance in envelopes made of expensive stock, silk, heavy gauge newer plastics and possibly metal or other costly materials, metal cut with a heavier suitable die, at considerable savings for the cost of such die as compared with the present commercial practice.

Referring to the numerals designating parts as named the waste-cut 10a and waste-cut 10b which when properly folded to design make the larger beveled corner Figs. 2 and 3, opening for entrance of a finger, pencil or instrument to rip open the perforated or closed top-side of finished envelope. Waste cuts 11a and 11b, member after folding to make a beveled dog-ear fold 11. Waste cuts 12a and 12b after folding the blank make dog-ear folds in the finished piece Fig. 2; in which the face 14 is the sheet part forming the face of the envelope and back 15 is a part forming the back of same. 16 is a tab part of back 15 to infold about the line 17, following which the back is overfolded about the line 18 when the tab 16 comes in contact with the glued portion 19, following next the tab 20 as a part of the face sheet 14, is glued over its area and immediately infolded about the perforated line 21 and brought to contact the reverse side of the back 15 which forms a seamless envelope with a scored line 22 above which the flap 23 can be folded inward as a stop for stuffed material or folded outward and sealed tight to safely contain said material. The width of the tab 20 is substantially equal to the width of the tab 16 so that when the envelope blanks are cut from a continuous sheet, there is little waste since the material left at the side of the tab 20 forms the tab 16 of the next blank and the edges of the tabs 16 and 20 remote from the back 15 and the face 14 are substantially parallel to each other. When the contained material is desired for inspection, the sealed envelope is opened with neatness and dispatch by inserting a finger in the hole at the corner to rip open easily and safely along the perforated and so weakened edge which immediately then changes the envelope into a standard letter or legal or other size as the case may be. "Pocket Folder" to further use, with reinforced index-tab and other superior features as dog-ear folds, easier to insert and also remove and being seamless absolutely foul-proof in a packed file and amenable to at least three other styles of filing-folder for use in any standard filing cabinet. The broken lines through the back and face indicate that the blank can be any dimension in either direction as may be desired, larger or smaller.

Fig. 2 is an air-blown elevation of the back of my new type envelope, made seamless in which 10 is a beveled open corner which may or may not be larger than the other companion corners of the piece numbered 11, 12, and 13 all of which are open and angle-beveled or cut as dog-ear folds to guard against such dog-ear from use; the infolded tab 16 is a part extended of the back 15 showing the overfolded tab 20 and the perforated line 21 which in some cases may be extended to include as perforated edges also one or both ends and other side as well, or any of them as may be ordered to suit a customer. The inside of front is shown 14 with the fold line 22 for the extended flap 23 which may or may not be gummed for sealing or ordering.

Fig. 3 is a section on line 3—3 looking toward the open end of the handmade envelope (with large radius on the fold) showing how this is attained by means of an infolded tab 16 attached to back 15 and the outfolded tab 20 a part of the face 14 outfolded and attached to back 15 with the open 21 perforations in the edge to facilitate opening the piece by ripping with finger, pencil or instruments at hand.

To facilitate opening the envelope shown in Figs. 1 and 2, the envelope could be perforated parallel to the tab at 200 and a pull tab 201 on an end of the tab 20. Then to open the envelope, a person could grasp the pull tab 201 and rip off the tab along the perforations and thereby open the envelope.

The foregoing specification sets forth the invention in its preferred practical forms but the structure shown is capable of modification within a range of equivalents without departing from the invention which is to be understood is broadly novel as is commensurate with the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A filing and mailing cover comprising a face sheet and a back sheet connected together along a first line, a first tab attached along a second line to said face sheet along a third perforated line, and a second tab attached along a fourth line to said back sheet at the side thereof opposite said first tab, said first tab being outfolded and said second tab being infolded, said infolded second tab being sealed to said face sheet on the inside surface thereof, the edge of said first tab and the edge of said second tab remote from said face sheet and said back sheet, respectively, being substantially parallel to each other, said first tab and said second tab being of substantially the same width, the corners of each said face sheet being waste cut, said cover being producible from a continuous sheet of material wherein said first tab is formed by material remaining in the sheet at the side of the material cut therefrom to form said second tab.

2. The cover recited in claim 1 wherein one said corner is waste cut deeper than the others to provide an entry place for a finger or blunt tool.

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