June 14, 1966 H. J. KELLER 3,255,869

MAILING PIECE

Original Filed Jan. 11, 1962

FIG. 1

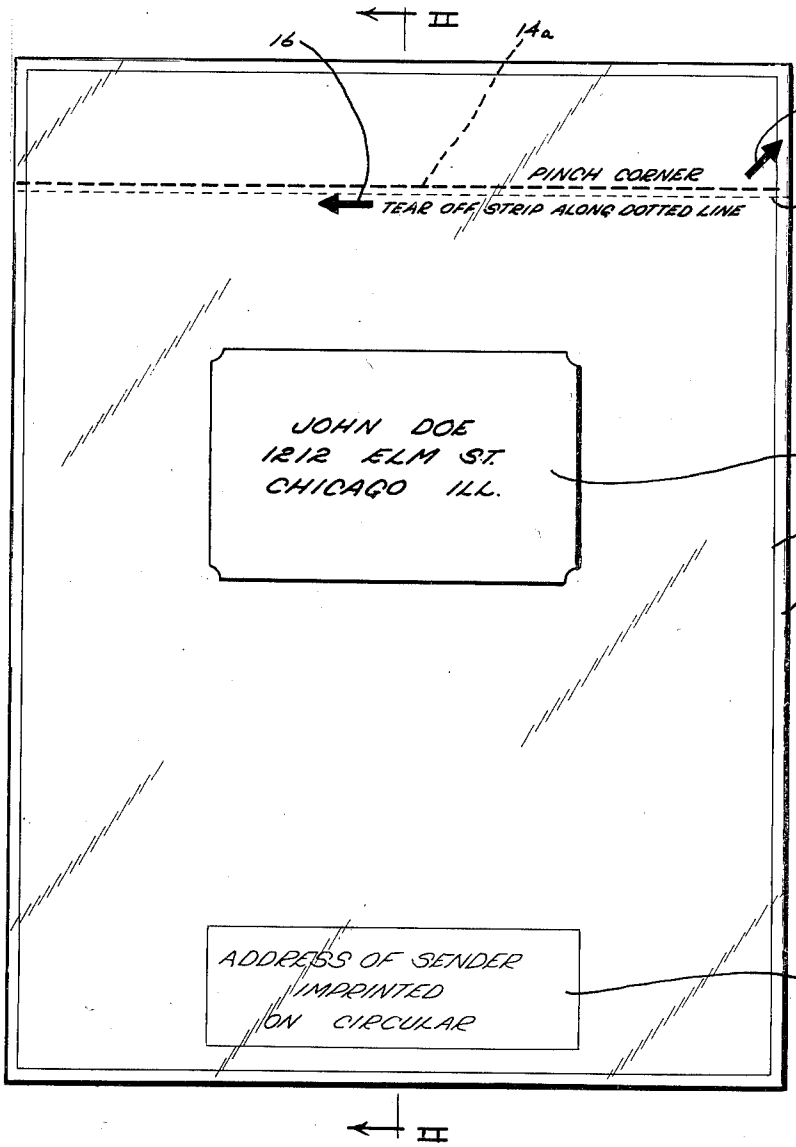
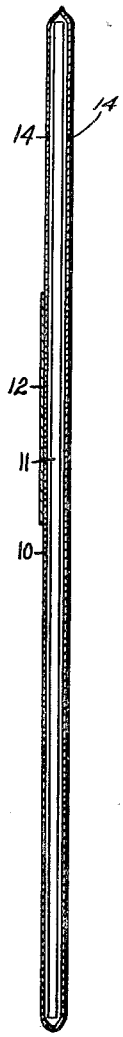


FIG. 2



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United States Patent Office 3,255,869 Patented June 14, 1966

3,255,869

MAILING PIECE

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Continuation of application Ser. No. 165,545, Jan. 11, 1962. This application Aug. 31, 1964, Ser. No. 394,649

1 Claim. (Cl. 206—45.33)

This application is a continuation of my copending application Serial No. 165,545, filed January 11, 1962, which is abandoned with the filing of this application.

This invention relates to a mailing piece, and particularly to one that includes an envelope of transparent or semi-transparent polyethylene or similar heat sealable or heat sealing material which encloses a brochure, such as a catalog, corporate report, or the like.

The use of such an envelope as a part of the mailing piece is advantageous for such use, not only because of its light weight, relatively low cost and excellent protective qualities, but also because of the transparency of the material which enables the recipient to ascertain the identity of the sender and the character of the contents before opening the mailing piece. Furthermore, such transparency enhances the display effect of expensive and attractive colored covers with which the contained brochures are frequently provided.

Heretofore, the opening of envelopes of this type has been difficult and has mitigated against widespread use thereof. Problems also have been encountered in the automatic labeling thereof. Also, when envelopes of this type have been employed in the past, they have typically been totally sealed so as to keep out dirt, moisture and the like. However, a totally sealed or air-tight envelope, particularly of polyethylene or any material having similar slipperyness, is particularly awkward to handle when the same contains a substantial quantity of entrapped air. Moreover, there has been a tendency for such envelopes to burst along a seam due to the application of handling forces, as a somewhat higher internal pressure is often thereby obtained. Further, a similar pressure difference is achievable when the mailing piece is transmitted by flight at a considerable altitude in a non-pressurized compartment.

The present invention overcomes the labeling problem by providing opaque paper labels to bear address indicia which may be machine applied to the envelope, such as by heat sealing, in a machine which also closes the envelope by heat sealing. More importantly, the present invention overcomes the problems of unwanted bursting and of difficulty in opening by the provision of a means which defines a series of normally closed aligned slits which comprise both a line of weakness and which enable the escape of entrapped air without admitting air.

Such structure, namely the means which provides the row of aligned slits, is virtually invisible as a part of the mailing piece, and therefore there is further provided means along the virtually invisible row of aligned slits which simulates the appearance of a series of aligned slits in an exaggerated form.

It is therefore an object of the present invention to provide a mailing piece including an envelope of heat sealable material provided with means which defines a series of aligned normally closed slits which both facilitate manual opening of the sealed envelope, and which enable internally trapped air to escape thereform without rendering the mailing piece susceptible to the intake of dirt, moisture, or air.

It is a further object of the present invention to provide a transparent envelope of polyethylene or similar

heat sealable material as part of a mailing piece wherein an apaque address label is applied thereto.

Yet another object of the present invention is to provide means by which a substantially invisible row of aligned slits is in effect rendered visible by means of opaque portions which simulate the appearance of such series of aligned slits.

Other and further important objects of this invention will be apparent from the specification and the annexed drawing.

On the drawings:

FIGURE 1 is a front elevational view of a mailing piece constructed in accordance with the present invention showing the brochure within the envelope.

FIGURE 2 is a section on line II—II of FIGURE 1 with parts shown in elevation.

The reference numeral **10** indicates an envelope made of heat sealable polyethylene or similar transparent material. The envelope may be made in any desired way as, for example, in tubular form, where one end has been closed by heat sealing prior to insertion of the material to be transmitted in the envelope as, for example, a brochure such as a catalog **11**, the other end being closed by heat sealing after insertion of said contents **11**. As seen in FIGURE 2, the brochure **11** is flat. An address label **12** of paper is secured flatwise to the exterior surface of a side of the envelope **10**, and thereby provides a surface on which postal officials may write. The address-label **12** is so prepared as to be adhesively affixed to the outer surface of the envelope **10**, such as by heat sealing, and is thus preferably applied to the envelope by means of an automatic machine which forms no part of this invention, but which also operates to heat seal the envelope to close the same at its open end. It is a property of polyethylene film or sheet that the same is resilient. The envelope **10** is sealed at all four edges, some of such edges thus comprising heat seals and others comprising a folded edge of the material.

It is a property of polyethylene, such as when the envelope is empty, that the sides tend to adhere together so that the empty envelope is initially substantially devoid of air and flat. However, it is necessary to billow the envelope in order to insert the brochure **11**. Because of such billowing, and because of the inherent nonflatness or springyness of such a brochure, there is a substantial quantity of air initially entrapped within the envelope **10**. Until this air is purged, both sides of the envelope **10** fail to lie smoothly and entirely flatwise against the brochure **11**.

A return address may be made visible through the transparent envelope by being imprinted at **13** on the brochure **11** enclosed therein, and the brochure **11** is so inserted in the envelope **10** that the return address and name of the sender is visible therethrough on the same side as that to which the address label **12** is affixed.

Heretofore, a great deal of difficulty has been encountered in opening envelopes of this type due to the toughness of the polyethylene. This difficulty is overcome in the present invention by slitting both sides of the envelope as at **14**, the slits **14** thus comprising means defining a series of aligned normally closed slits through each side of the envelope **10**. As the envelope is sealed at all of its edges, the slits **14** are the sole means through which internally trapped air may be vented to the atmosphere. When a number of mailing pieces such as that shown are stacked on top of each other, they tend to compress each other, thereby creating an internal pressure higher than atmospheric which causes the slit-defining means to open at individual slits without tearing, thus enabling venting to the atmosphere of some of the internally entrapped air. Such forces may also be produced by a

postal employee who may hold a stack of these in the hand, as well as also by other sources of handling forces. Once such slits **14** have opened slightly and have thus released internally entrapped air, as the material is resilient, the slits **14** reclose of themselves.

In the event that a higher external pressure should arise, such as by the brochure's acting like an expansion spring, the atmospheric pressure will act on the outer sides of the envelope **10** and press the row of aligned slits **14** flatwise against the brochure. As the slits are backed up under this condition, they do not tend to pucker or deflect further into the brochure, and are thus precluded from opening. Thus as the slits **14** are self-reclosing, and as they are backed up by the brochure **11**, they preclude the entry of dirt, rain or other moisture, or air. Thus the slits **14** are disposed in overlying relation to the brochure **11** and are rendered substantially invisible by the adjacent surface of the brochure, but are disposed in spaced relation to the address label **12**.

As the slits **14** are virtually or substantially invisible when overlying the brochure **11**, particularly when overlying the same in a close manner, there are provided opaque means **14***a* disposed on at least one side of the envelope **10** paralleling the aligned slits **14** and adjacent thereto, and simulating the appearance of a series of aligned slits. It will be noted that the opaque portions **14***a* represent an exaggerated representative or simulation of such slits. As the material from which the envelope **10** is made is transparent, the opaque portions **14***a* may be on either the interior of a particular side.

Moreover, the series of aligned slits **14** comprises a line of weakness which facilitates opening the envelope **10**. As indicated above, a great deal of difficulty has been encountered heretofore in opening envelopes of this type which have no line of weakness due to the toughness of the polyethylene. This difficulty is overcome in the present invention by the slits **14**. If desired, the envelope may be imprinted with suitable directions as to indicate initial operation—"Pinch Corner"—together with an indicating arrow **15** imprinted thereon as shown in FIGURE 1. After the corner has been pinched by grasping the same at the point indicated by the arrow **15**, a lateral tearing movement along the opaque simulation **14***a* will serve to remove the end at both sides of the envelope to enable ready withdrawal of the brochure or contents **11** thereof. If desired, the user may be further informed as to this operation by means of an indicating arrow **16** together with the instructions "Tear off strip along dotted line," as shown in FIGURE 1.

It will be apparent from the foregoing that this invention provides an arrangement whereby the mailing piece may readily be opened and likewise provides plain and easily understood instructions and indicating indica to enable the user to effect such opening with ease and facility. Further, and most importantly, the means by which the mailing piece is rendered readily opened also serves as the means by which an excess amount of entrapped air is vented to preclude rupture of the envelope during handling, and comprises means which is self-reclosing so as to exclude the entry of moisture, dirt, or re-entry of air.

The opaque address label, which is of a material, or which is coated with a material, to facilitate its adherence to the outside of the envelope **10**, may be imprinted either prior to or as a part of the automatic sealing operation whereby the envelope is closed and said label is applied.

I am aware that various details of construction may be changed without departing from the principles of this invention and therefore do not propose limiting the patent granted hereon otherwise than necessitated by the scope of the appended claim.

I claim as my invention:

A mailing piece, comprising:

(a) a flat brochure;

(b) a flat envelope of transparent polyethylene film enclosing said brochure, and having edges adjacent to the edges of said brochure, said envelope having such a seal at all of its edges as to entrap normally, at assembly, a substantial quantity of air therein with said brochure;

(c) means defining a series of aligned normally closed slits through each side of said envelope, and extending in overlying relation to said brochure, said slits being rendered substantially invisible by the adjacent surface of said brochure, said slits consisting the sole means through which such internally trapped air may be vented to the atmosphere in response to handling forces applied to the maining piece, said slit-defining means being self-reclosing and being engaged by said flat brochure in response to a higher external pressure and prevented by said brochure from opening, said slit-defining means being also a line of weakness along which said envelope may be torn open;

(d) opaque means disposed on at least one side of said envelope paralleling said aligned slits adjacent thereto and simulating the appearance of a series of aligned slits; and

(e) a paper address-label secured flat-wise to the exterior surface of a side of said envelope in spaced relation to said slots.

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