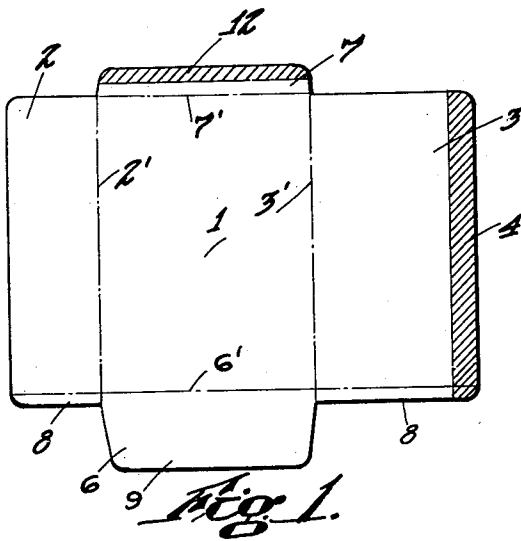


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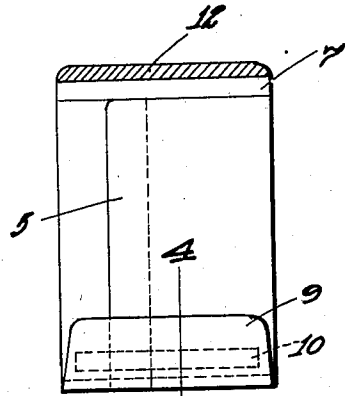
W. F. IRRGANG  
ENVELOPE OR CONTAINER

1,972,995

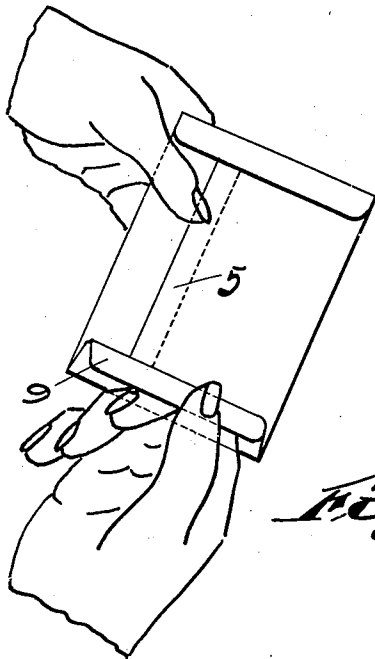
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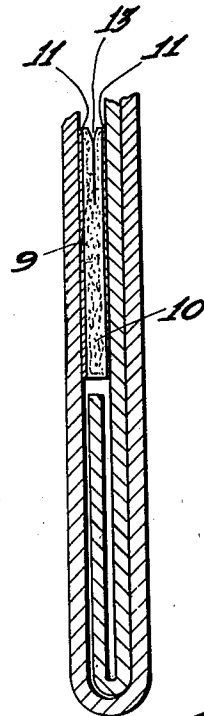
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

Inventor:  
William F. Irrgang  
By Geo. W. Kennedy  
attorney

# UNITED STATES PATENT OFFICE

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## ENVELOPE OR CONTAINER

William F. Irrgang, Chicopee, Mass., assignor to  
United States Envelope Company, Springfield,  
Mass., a corporation of Maine

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3 Claims. (Cl. 229—85)

The present invention relates to envelopes or containers of the type used for the packaging of relatively small quantities of goods or materials, —particularly perishable materials, such as edibles, or individual portions of powdered materials, such as cocoa or coffee, to be used at soda fountains or the like in the preparation of beverages.

Envelopes or containers of this character must afford complete protection to the contained materials, and also, especially if the materials are in finely powdered form, must be so constructed as to eliminate any possibility of the contents leaking or sifting out, in the ordinary handling of the envelope. At the same time, particularly in the use of such individual packages at soda fountains and the like, the envelopes or containers must permit an easy, prompt and complete discharge of their contents, with a minimum of effort or manipulation on the part of the user.

It is not practical, in the act of opening such an envelope along a seam or edge of the same, to separate or pull apart the overlapping layers or surfaces that are glued together in the ordinary manner; such gluing so intimately unites the layers of hard-surfaced papers ordinarily used as the material for such envelopes that non-uniform tearing and splitting almost invariably obtrudes itself as an obstacle to quick, clean, and complete opening of the container. It has heretofore been proposed to overcome this difficulty by incorporating with such an envelope a rip or tearing string or cord, so arranged that, when subjected to a pull, it will cut through the material of the envelope along one edge (preferably the bottom edge) so as to afford quickly and easily the maximum opening for the discharge of the envelope's entire contents into a cup or other receptacle. However, the use of such rip strings materially increases the cost of such envelopes or containers, and furthermore, there is oftentimes the possibility that the contained material will be contaminated by contact with the string or cord, or, if finely powdered, will sift through at the points where the ends of the cord pass out through the envelope walls.

The present invention provides an envelope or container of the above described type, equipped with an integral pull tab along one glued seam or edge, the latter being constructed so as to provide normally the effective sealing in of the envelope's contents, but to yield uniformly throughout its entire length to a pull on said tab, whereby to permit easy, prompt and complete discharge of the envelope's contents. Other and further

objects and advantages of the invention will appear from the following detailed description thereof, taken in connection with the accompanying illustrative drawing, in which—

Fig. 1 is a plan view of a blank suitable for manufacture into an envelope embodying my invention.

Fig. 2 is a rear view of the completed envelope made from the blank of Fig. 1, and showing the same in readiness for filling.

Fig. 3 is a perspective view, illustrating the act of discharging the contents of said envelope.

Fig. 4 is a fragmentary sectional view on an enlarged scale, the section being taken on the line 4—4 of Fig. 2.

Like reference characters refer to like parts in the different figures.

The envelope blank shown in Fig. 1 comprises a rectangular body portion 1, having opposite side flaps 2 and 3 adapted, when folded over on the lines 2' and 3', to overlap each other in the formation of the envelope's back wall,—one of said flaps being gummed along its free edge, as shown at 4, so that the overlapping of this edge with the edge of the other flaps produces the back wall seam 5. Also projecting from the body portion 1 is a bottom flap 6 and a closure or seal flap 7, the former having the line of fold 6' and the latter having the line of fold 7'. The side flaps 2 and 3 preferably have lower portions 8, 8 below the line of fold 6' of bottom flap 6, so that, following formation of the seam 5 as above described, the turning up of bottom flap 6 on the line 6' results in a fold of two thicknesses of the blank material, transversely of the envelope, this fold including the rear wall (as formed by the flaps 2 and 3) as well as the front wall (as formed by the body portion 1). Because of this double or safety fold at the bottom, the envelope or container is entirely leak proof at its lower corners; the contained material, no matter how finely powdered, will not sift through at these points, because when the bottom flap 6 is stuck down, as hereinafter described, against the rear wall 2, 3, said material cannot readily get past the bottom line of fold 6'.

The edge of the bottom flap 6, according to my invention, is left free and ungummed, the same constituting a pull tab 9 by which, when desired, the adhesion between flap 6 and the rear wall may be broken to afford a clean and complete opening of the envelope along its bottom edge. If such adhesion were of ordinary character, involving a band of gum or glue directly interposed between the surfaces of flap 6 and back wall 2,

3, the act of pulling on tab 9 would scarcely ever result in a clean and complete separation of the superposed layers of adhesively-secured material; instead, such pulling would almost inevitably result in irregular tearing of either or both of the layers, accompanied by such mutilation and shredding of the material as to materially obstruct and delay the complete opening of the envelope along its edge for the discharge of its contents. To avoid this, the adhesive attachment between flap 6 and back wall 2, 3 is secured, according to my invention, in the following manner:—Between the back wall 2, 3 and the flap 6 is interposed adhesively a multi-ply strip 10, the same being positioned inwardly of the tab portion 9 of said flap and serving as the bond that holds the flap 6 in place and completes the envelope, so far as the establishment of the double or safety fold at the bottom thereof is concerned. As best shown in Fig. 4, this adhesively interposed strip may advantageously take the form of a ply of loose-fibered material, such as blotting paper, faced on opposite sides with paper plies 11, 11 of ordinary texture to avoid undue absorption of the adhesive or glue. The envelope so completed, as shown in Fig. 2, is in readiness for filling by the introduction of the material at the open upper portion thereof; when the envelope has received the desired quantity of material, the gummed surface 12 of the closure flap 7 is moistened, and said flap is folded down on the line 7' to adhere, over practically its entire area, to the rear wall 2, 3, thereby effectively sealing the contained material within the envelope.

In order to effect an instant and complete discharge of the contents thus sealed within the envelope, it is only necessary for the user to pull, as shown in Fig. 3, on the free edge or tab 9 of the flap 6; under such pull, the loosely constructed fiber of the strip 10 readily gives way throughout the entire length of said strip, the latter splitting apart cleanly to open the bottom of the envelope across its entire width, so that the maximum opening is afforded for the discharge of the envelope's entire contents. In this way, there is no irregular tearing, mutilation, or shredding of the envelope material at the latter's lower end, nor any loose pieces of said material to fall into the receptacle that receives the contents, nor any strings or the like to be disposed of. The strip or layer 10 of loose-fibered material may be split along its edge, as shown at 13, to facilitate the above-described action, by reducing the resistance to separation, when a pull is applied to the free edge 9.

I am aware that the interposition of a supple-

mental gummed flap of easily-tearable material between the back wall and the sealing flap of an envelope has heretofore been proposed, in order to afford easy detection, by the mutilation of said supplemental flap, of any attempts at surreptitious unsealing of the envelope. I make no claim to such structures, but what I claim and desire to secure by Letters Patent of the United States is as follows:—

1. As a new article of manufacture, an envelope or container providing along an edge thereof an adhesive closure seam between two overlapped portions of the envelope material, one of said portions having its edge left free, said seam, to facilitate its breakage for the opening of the envelope and the discharge of its contents, incorporating between said overlapped portions a layer of multi-ply material adapted to split apart in the junction plane of its plies under a pull applied to said free edge for the separation of said overlapped portions, whereby the opening of the envelope by said pull is effected in the absence of tearing, shredding or mutilation of the said two overlapped portions.

2. As a new article of manufacture, an envelope or container providing along an edge thereof an adhesive closure seam between two overlapped portions of the envelope material, the outer of said portions having its free edge in the form of a pull tab, for the opening of said seam to discharge the envelope's contents, said seam, to facilitate its opening by such a pull, having interposed between said overlapped portions a layer of loose-fibered material whose resistance to splitting in a predetermined plane under such pull is appreciably lower than the resistance to tearing or shredding possessed by either of said overlapped portions, whereby the opening of the envelope by said pull is effected in the absence of tearing, shredding or mutilation of the materials constituting said seam.

3. An envelope or container of the class described, having a closure along one edge formed by overlapping portions of the envelope material, one of which portions provides a pull tab, said portions having adhesively interposed between them a layer of loose-fibered material adapted to give way readily in a substantially central plane of least resistance when said tab is subjected to a separating pull, thereby to open the envelope for the discharge of its contents in the absence of any tearing, mutilation or shredding of the material of said overlapping portions, an edge of said interposed layer of loose-fibered material being split, to define the plane of its parting.

WILLIAM F. IRGANG.