Aug 5, 1941. E. B. BERKOWITZ 2,251,391

QUICK OPENING ENVELOPE

Filed Jan. 14, 1939

Fig. 1.

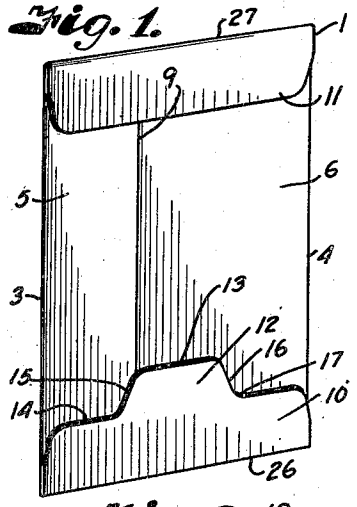


Fig. 2.

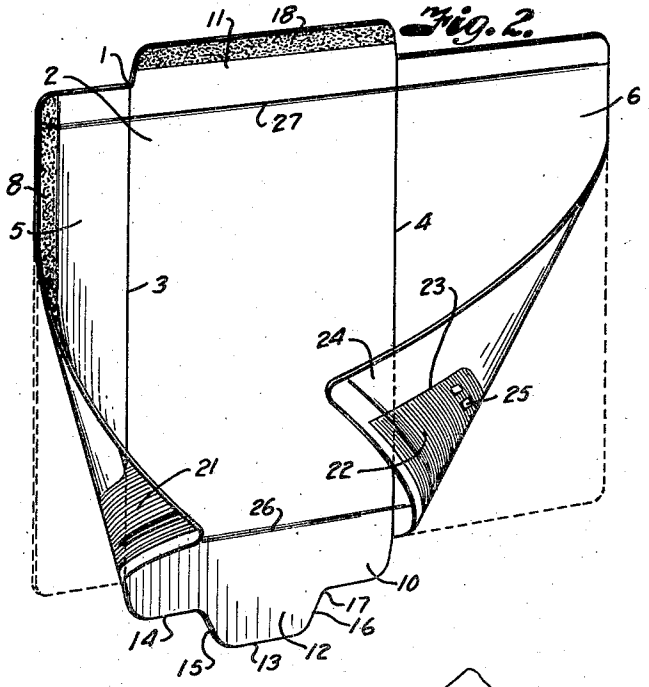


Fig. 3.

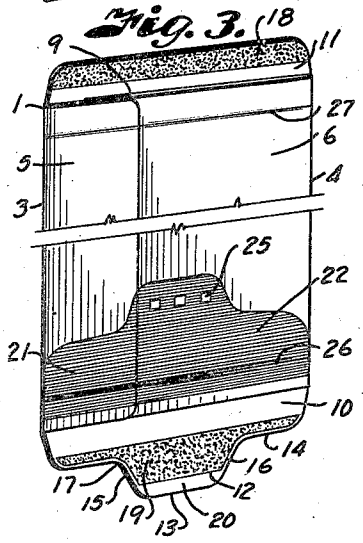


Fig. 4.

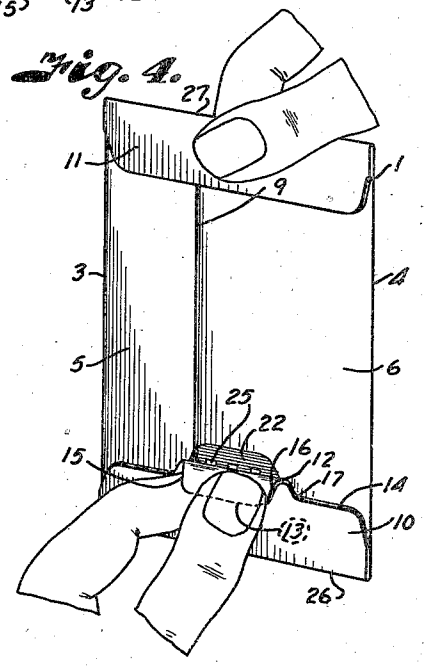
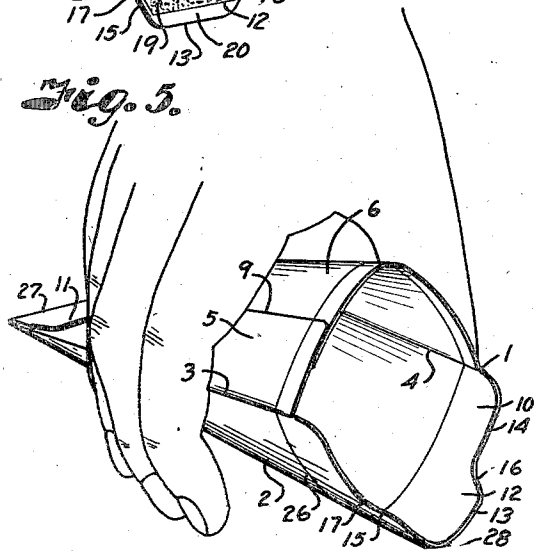


Fig. 5.



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QUICK OPENING ENVELOPE

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Application January 14, 1939, Serial No. 251,001

5 Claims. (Cl. 229—85)

This invention relates to envelopes particularly for containing individual quantities of materials, for example an individual portion of powdered chocolate as used at soda fountains, restaurants, and the like, in the preparation of a cup of chocolate beverage.

Envelopes or containers of this character must be adequately sealed to retain and protect the contents, and preferably designed so that they may be readily opened with a minimum of effort and manipulation on the part of the user.

The principal object of the present invention is, therefore, to provide an envelope construction which thoroughly protects and prevents loss of contents and which, at the same time, is readily opened with a minimum effort on the part of the user.

It is a further object of the invention to provide a quick opening envelope that may be constructed on standard envelope manufacturing machines.

In accomplishing these and other objects of the invention, as hereinafter set forth, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawing, wherein:

Fig. 1 is a perspective view of an envelope constructed in accordance with the present invention.

Fig. 2 is a perspective view of the inner side of a blank from which the envelope is formed, the lower portions of the side flaps being turned so as to illustrate the printing over which gum is applied to effect seal of the bottom flap.

Fig. 3 is a perspective view of the blank with the side flaps folded and sealed to each other, but showing the bottom and closure flaps in extended position.

Fig. 4 is a perspective view of the completely folded and sealed envelope showing the method of breaking the bottom seal to permit emptying of the contents.

Fig. 5 is a perspective view of the envelope showing manipulation thereof in shaping a spout of the pull tab so as to facilitate emptying of the contents.

Referring more in detail to the drawing:

1 designates an envelope blank shaped to provide a body portion 2 defined by lines of fold 3 and 4 to form the front part of the envelope. Extending laterally from the lines of fold 3 and 4 are side flaps 5 and 6, the side flap 6 being of greater width than the flap 5 so that when they are folded over the body portion the marginal edge thereof will overlap a stripe of sealing gum 8 on the marginal edge of the flap 5 to form a seam 9 offset from the median line of the envelope as shown in Fig. 3.

The ends of the body portion 2 are provided with a bottom flap 10 and a sealing flap 11. The sealing flap 11 is of conventional shape but the bottom flap 10 has a tab-like portion 12 projecting therefrom preferably in the median line of the flap and which is provided with a substantially straight lower edge 13 extending parallel with the edges 14 of the main portion of the closure flap. The tab 12 may have diverging end edges 15 and 16 merging into the edges 14 on curves as indicated at 17.

The closure flap 11 may be provided with gum 18 extending across the width thereof and the bottom flap is provided with gum 19. The gum, however, is applied so as to leave a slight margin at the edge of the flap and terminates short of the edge 13 of the tab to leave an unattached lip 20 for a purpose later described.

The front face of the blank is usually printed with the trade name, instructions, and similar information concerning the contents of the material to be inserted in the envelope. At the time of this printing the lower ends of the side flaps are also printed with an oil base ink so that the ink covers areas 21 and 22 substantially conforming to the shape of the bottom flap when it is folded thereover. The terminal edge 23 of the printing on the side flap 6 terminates short of the marginal edge of the flap so as to provide an unprinted margin 24 for sealing engagement with the gum 8, as shown in Fig. 2, so that the ink does not interfere with sealing of the side flaps.

The printed area 22 on the side flap 6 has a plurality of unprinted spots 25 wherethrough the surface of the side flap is directly exposed for contact with the adhesive on the bottom flap.

In folding the blank the side flaps are folded on the side folds 3 and 4 so that the sealing stripe 8 is brought into sealing contact with the side flap 6 to form an offset seam at the back portion of the envelope, as shown in Fig. 3. When the blank is thus folded the inked portions on the side flaps appear as in Fig. 3, and conform to substantially the shape of the bottom closure flap. The envelope is then folded on a fold line 26, extending through the body portion of the envelope, so that the gum on the sealing flap is brought into sealing contact with the inked portions of the side flaps and with the exposed spots 25. With the fold 26 extending through the body portion of the envelope, a positive closure is ef-

fected so as to prevent sifting out of the material. Unless a sufficient amount of gummed area is provided between the bottom flap and the back of the envelope, it is difficult to retain the bottom flap in sealing contact during the manufacture, but with the gum on the sealing flap, sufficient adhesion or tack is effected with the inked area so that the flap is retained in place while the envelope is being carried through the machine or until the adhesive contacting the exposed areas **25** dries. The gum, however, does not finally stick to the inked area since the ink is repellent thereto, consequently the gum, in contacting the ink, merely crystallizes and has no function after the tackiness thereof has been destroyed. Therefore closure of the bottom flap is dependent entirely upon the portions of the adhesive adhering to the spots **25** wherein the seal is directly between surfaces of the blank.

The envelope is filled through the opposite end and the closure flap is folded on a fold line **27** extending transversely across the body of the envelope, as shown in Fig. 3, so that the sealing gum may be brought in sealing contact with the back flaps.

When the envelope is opened the lip **20** of the tongue **12** may be grasped between the thumb and finger, as shown in Fig. 4, and drawn retractively so as to break the seal at the spots **25**. As soon as the spot seals are broken, the entire flap pulls freely from the inked area. The envelope may then be cupped, as shown in Fig. 5, to form a spout **28** by which the contents may be readily discharged from the envelope.

From the foregoing it is obvious that I have provided a quick opening type of envelope which is of relatively simple and inexpensive construction, and which positively retains the contents, but which is adapted to be readily opened with a minimum of effort on the part of the user. It is also apparent that since the adhesion of the gum to the inked area is effective as long as the gum is tacky, no special machinery is required to hold the flap down while the envelope is being formed.

What I claim and desire to secure by Letters Patent is:

1. A quick opening envelope including a body portion and a seal flap portion extending along an opening in said body portion through which contents of the envelope is emptied, a gum repellent coating on one of said portions and substantially coextensive with the other and defining restricted sealing space within the area of said gum repellent coating, and gum between said portions, said coating having a character to effect adhesiveness of the moist gum thereto and to repel adhesiveness of the gum when the gum is dry, whereby the gum is effective over the entire coated area including said restricted sealing space when the gum is moist and effective only at said restricted sealing space when the gum is dried.

2. A quick opening envelope including a body portion and a seal flap portion extending along an opening in said body portion through which contents of the envelope is emptied, a gum repellent coating on one of said portions and substantially coextensive with the other and defining restricted sealing spaces within the area of said gum repellent coating, gum between said portions, said coating having a character to effect adhesiveness of the moist gum thereto and to repel adhesiveness of the gum when the gum is dry, whereby the gum is effective over the entire coated area including said restricted sealing spaces when the gum is moist and effective only at said restricted sealing spaces when the gum is dried, said restricted sealed areas being adapted to be pulled loose when the envelope is opened, and a pull tab on the seal flap portion and projecting beyond said coated area to facilitate detachment of the seal flap portion from said restricted sealing spaces.

3. An envelope including a body portion having front and back sides forming a pocket, a seal flap portion enclosing an opening to said pocket and folded on a line of fold extending across both of said sides to close said opening, said body portion having a gum repellent coating covering an area underlying the seal flap portion including said folded over portion of the body and having restricted sealing areas underlying the seal flap portion, and gum for adhering said seal flap portion, said gum repellent coating having an affinity for moist gum to maintain the seal flap portion closed when the gum is moist and repellent to the gum when the gum is dry over said restricted sealing areas, said seal flap portion being adapted to be pulled loose from said restricted sealed areas when the envelope is opened.

4. An envelope including a body portion having front and back sides forming a pocket, a seal flap portion enclosing an opening to said pocket and folded on a line of fold extending across both of said sides to close said opening, said body portion having a gum repellent coating underlying an area of the seal flap portion including said folded over portion of the body and having restricted sealing areas underlying the seal flap portion, gum for adhering said seal flap portion, said gum repellent coating having an affinity for moist gum to maintain the seal flap portion closed when the gum is moist and repellent to the gum when the gum is dried over said restricted sealing areas, said seal flap portion being adapted to be pulled loose from said restricted sealed areas when the envelope is opened, and a pull tab on the seal flap portion extending beyond said restricted sealed areas to facilitate breaking seal of said restricted areas.

5. A quick opening envelope including a body portion and a seal flap portion extending along an opening in said body portion through which contents of the envelope is emptied, a gum repellent coating on one of said portions and substantially coextensive with the other, a restricted sealing area between said portions, and gum between said portions to seal said portions at the restricted sealing area, said coating having a character to effect adhesiveness of the moist gum thereto to retain the flap portion closed until set of the gum at said restricted sealing area and to repel adhesiveness of the gum when the gum is dry to prevent adhesiveness of the gum covering said coating when the gum is moist, said seal flap portion being adapted to be pulled loose from said restricted sealed area when the envelope is opened.

EUGENE B. BERKOWITZ.