

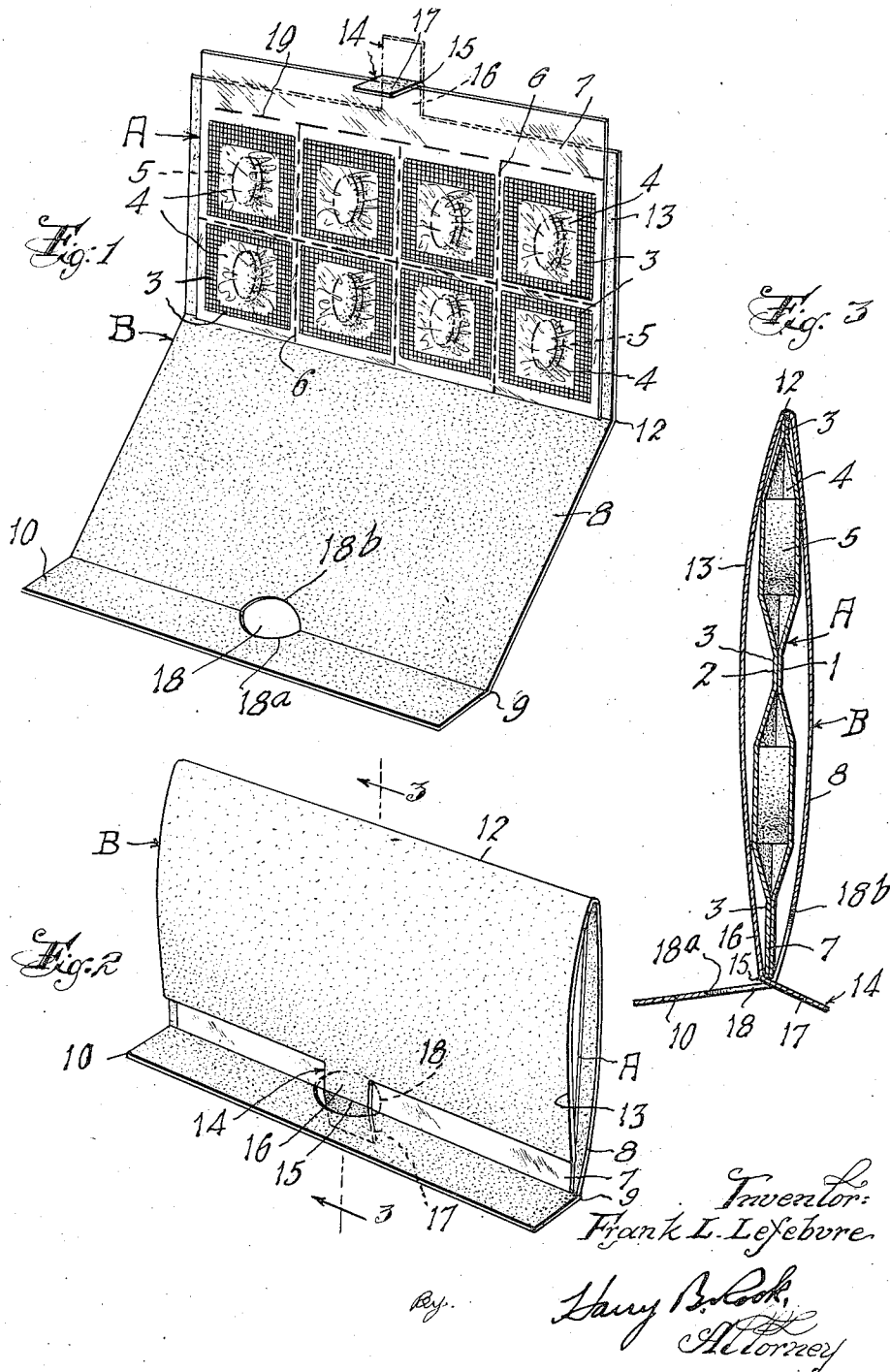
May 6, 1958

F. J. LEFEBVRE
COVERED PACKAGE WITH RELEASABLE INITIALLY
SEALED AND LOCKED CLOSURE FLAP

2,833,401

Filed Aug. 13, 1956

2 Sheets-Sheet 1



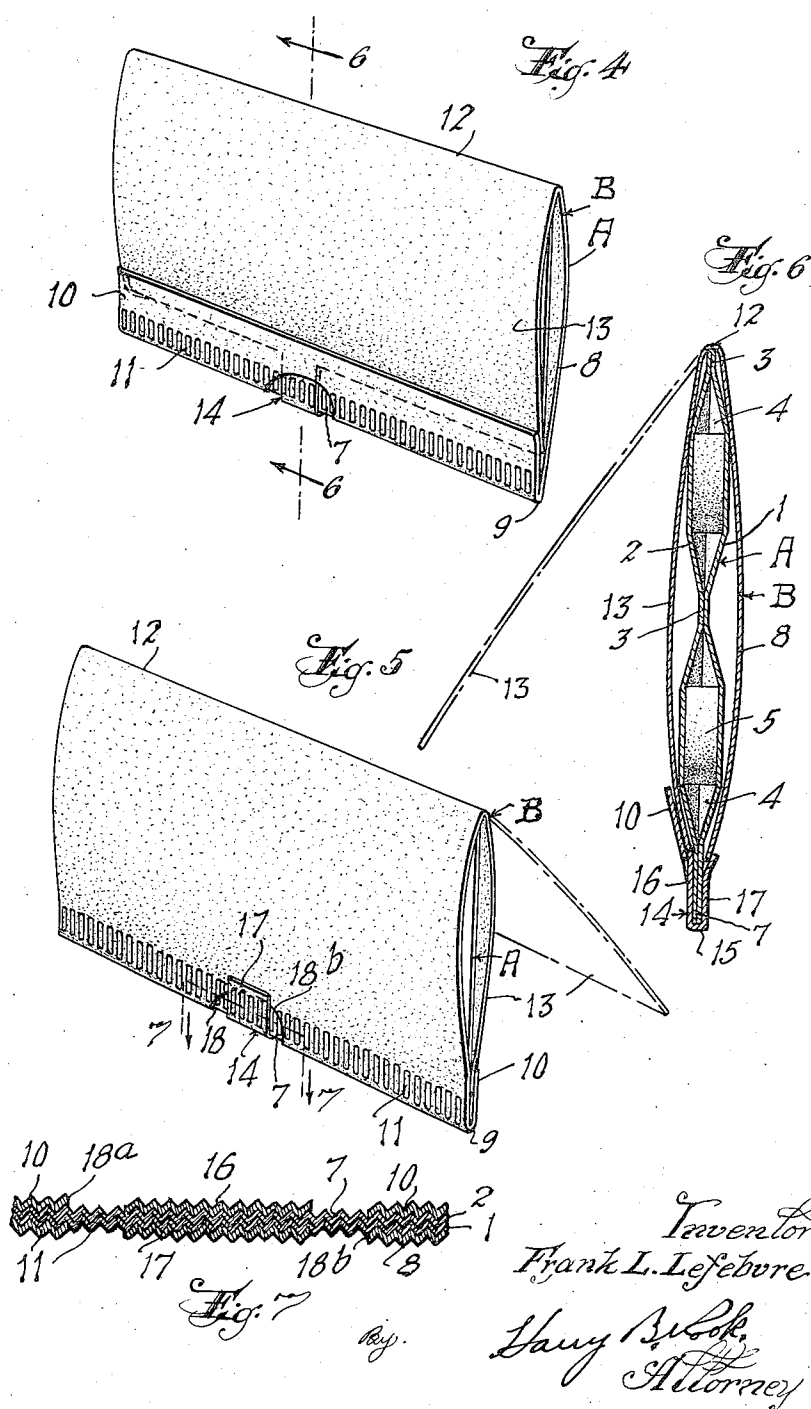
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COVERED PACKAGE WITH RELEASABLE INITIALLY SEALED AND LOCKED CLOSURE FLAP

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2 Claims. (Cl. 206—56)

This invention relates to packages of the type shown in the co-pending application of Lloyd I. Volckening, and John R. O'Meara filed April 30, 1954, Serial No. 426,706, for small articles such as tablets or for liquid, powder or paste, the package comprising in general an approximately flat rectangular bag, envelope or like container formed of sheet material having a thermoplastic outer coating, and a cover formed of a single strip of material folded around one end of the container and secured to the container adjacent the fold with a marginal end portion of the cover beyond the fold spaced from the container and with the body portion of the cover juxtaposed to one side of the container and folded around the other end of the container to form a closure flap that is of a size to overlie and cover the side of the container opposite said body portion of the cover and has the major portion of the other end edge tucked between said marginal end portion of the cover and said container and another zone of said end edge manually separable from said cover strip and initially thermoplastically sealed to one wall of the container so that the closure flap is initially held positively against unfolding but can be pulled from beneath said marginal end portion by manual separation of said zone after which the closure flap can be unfolded to open the package.

While in the package shown in the aforesaid application a strong positive seal of the closure flap in closed condition is provided to prevent accidental opening of the closure flap during handling of the packages, for example, in the mail or in shipment of the packages in cartons, it is desirable to obtain an even stronger seal and lock of the closure flap in closed condition. Therefore, a prime object of the present invention is to provide a package of the general character described wherein the closure flap shall be initially sealed and locked in closed position in a novel and improved manner to provide a strong simple and inexpensive construction.

Another object is to provide such a package wherein a zone of the end edge of the closure flap, for example, a tongue projecting from said edge, shall be hooked or folded around the edge of the container and thermoplastically sealed to both of the opposite walls of the container.

Other objects, advantages and results of the invention will be brought out by the following description in conjunction with the accompanying drawings in which

Figure 1 is a perspective view of the commodity-container and the cover of the package during the first step of assembly thereof;

Figure 2 is a perspective view showing the next step in the assembly of the commodity container and the cover;

Figure 3 is an enlarged transverse vertical sectional view approximately on the plane of the line 3—3 of Figure 2;

Figure 4 is a front perspective view of the complete package with the closure flap in initially sealed and locked condition;

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Figure 5 is a rear perspective view of the complete package shown in Figure 4;

Figure 6 is an enlarged transverse vertical sectional view approximately on the plane of the line 6—6 of Figure 4; and

Figure 7 is a fragmentary horizontal sectional view approximately on the plane of the line 7—7 of Figure 5.

The package is shown as comprising a container A formed of two layers 1 and 2 of suitable flexible material such as cellophane, Pliofilm, metallic foil, paper or the like. The said material may be thermoplastic itself or may have a thermoplastic or fusible coating so that the juxtaposed layers can be caused to adhere together by application of heat and pressure, or the layers could be sealed together with an adhesive. As shown, the layers are heat sealed and crimped in zones 3 forming and bounding compartments 4 between the layers in which a commodity such as tablets 5 are enclosed, the container thus comprising a sheet of packages, each containing a tablet and being separable from the sheet along scored lines 6; and the sheet preferably has an edge portion 7 extending beyond the package and being initially unsealed.

The cover B comprises a single strip of sheet material such as heavy paper that preferably is relatively stiffer than the layers of which the container A is formed and includes a body portion 8 juxtaposed to one side of the container and folded at 9 around one edge portion 7 of the container to form a container-attaching flap 10 that is secured adjacent the fold to the container A for example, by application of heat and pressure where the layers 1 and 2 are thermoplastic or have thermoplastic coatings, the transverse marginal end portion of the flap being spaced from the container. Preferably the sealed zone is also crimped as indicated at 11. The body portion 8 of the cover is of approximately the same shape but somewhat larger than the container A in length and breadth and at the end of the body portion opposite the fold 9 there is another fold 12 in the strip around the edge or end of the container opposite the attaching edge 7, and beyond said fold 12 is a closure flap portion 13 that is of a size and shape to overlie and cover the side of the container opposite the body portion 8 of the cover; and the transverse end edge zone of said closure flap is adapted to tuck into the space between the transverse marginal end portion of the container-attaching flap 10 and the container, as best shown in Figures 4, 5 and 6.

In accordance with the invention, the end edge of the closure flap has a zone initially sealed and locked to hold the closure flap in closed position, and more particularly said zone may comprise the tongue projecting from the end edge of the closure flap and hooked around the edge of the commodity container A and sealed to the outer surfaces of both walls of said container.

As shown, the end edge of the closure flap has an elongate tongue 14 projecting from the end edge thereof about centrally of the length of said edge, said tongue preferably being bent, for example, along a scored line as indicated at 15 intermediate its length from the initial straight position indicated by dot and dash lines in Figure 1, so that the root portion 16 of the tongue may overlie one wall of the edge portion 7 of the container A while the tip portion 17 of the tongue may overlie the other wall of the container at said edge portion 7.

An opening 18 is formed in the cover at the juncture of the body portion 8 and the container-attaching flap 10 with one portion 18a of the edge of the opening lying in the container-attaching flap and the other portion 18b of the edge of the opening lying in the body portion 8, said edge portions 18a and 18b thus lying at opposite sides of the fold 9 between the body portion and the container-attaching flap.

In assembling the container A and the cover B, the container is laid upon the closure flap portion 13 with the edge portion 7 overlying the portion of the tongue 14 between the fold 15 and the root of the tongue as shown in Figure 1, whereupon the closure flap and container are folded downwardly over the body portion 8 so as to bring the longitudinal edge of the portion 7 of the container into the fold 9 of the cover with the tongue 14 inserted through the portion 18a of the opening 18 in the container-attaching flap 10, as shown in Figures 2 and 3. Thereupon, the container-attaching flap is hooked or folded upwardly over one wall of the portion 7 of the container and the tip portion 17 of the tongue is folded against the opposite wall of the container through the portion 18b of the opening 18 that is in register with the portion 18a. Thereupon the container-attaching flap and both the root portions 16 and the tip portions 17 of the tongue are permanently secured to the container. This may be effected by softening or fusing of the thermoplastic substance where the container is formed of material that is itself thermoplastic or has a thermoplastic coating. The tongue portions 16 and 17 may also be crimped in the same way and at the same time that the container-attaching flap and cover are sealed to the container in the zone 11.

It will be seen that the completed package as shown in Figures 4, 5 and 6 has the end edge of the closure flap tucked between the free marginal portion of the container-attaching flap and the container A, and that the tongue is hooked around the edge of the container that is exposed in the opening 18 with the two portions 16 and 17 of the tongue permanently sealed to and in direct contact with the outer surfaces of the opposite walls of the container.

Preferably, but not necessarily, the walls 1 and 2 of the container and the cover are formed of tearable material and when it is desired to open the package, the tongue and the portion of the package to which it is sealed may be torn away by the thumb and index finger of the user so as to manually separate the tongue 14 from the closure flap, whereupon the closure flap may be freely pulled from beneath the container-attaching flap and swung away from the container to expose and permit access to the container as indicated by the broken lines in Figures 5 and 6. It will be observed that the edges of the opening 18 in the attaching flap and in the body portion will serve as tearing guides and facilitate the tearing of the tongue and the juxtaposed portion of the container to which the tongue is sealed. It is desirable, especially when the materials are not of an easily tearable nature that the container walls be weakened as by a scored line 19 and that the tongue 14 also be weakened transversely adjacent its juncture with the wall flap to make it easier to tear the walls of the package and the tongue in removing the tongue. Scoring 19 also permits the container A to be removed as a whole from the cover where that is desired.

It will be understood by those skilled in the art that the cover may be constructed in different ways and that the form and location of the opening 18 and of the tongue

14 may be widely varied and that other modifications and changes in the construction and combination of the cover and container may be made within the spirit and scope of the invention.

To avoid circumlocution, the term "commodity-container" is used in the appended claims to denote bags, envelopes or the like containing a plurality of articles such as tablets, or a powder, liquid or paste, as well as assemblages or groups of commodities held together in some other way, for example, strips of matches.

What I claim is:

1. A package comprising an approximately flat commodity-container having two opposed walls with outer thermoplastic surfaces, and a cover comprising a strip of flexible material having a fold providing a body portion with a container-attaching flap, one edge portion of said container being disposed in said fold in juxtaposition to said body portion with one side positively secured to said body portion and with the other side at least partially covered by and positively secured to at least a part of said container-attaching flap, said body portion having a closure flap hinged at the end of the body portion opposite said container-attaching flap and of a size and shape to overlie the second mentioned side of said container, there being an opening in said cover extending across said fold and providing registering gaps in said body portion and said container-attaching flap through which are exposed portions of both of said outer surfaces of the container, and said closure flap having a tongue passing through both of said gaps and hooked over said edge of said container that is exposed in said gaps and thermoplastically sealed to both of said surfaces of the container to positively hold the closure flap in overlying relation to said container, said closure flap being otherwise free of said container, there being provision for simultaneous manual separation from said closure flap and from said container, respectively, of said tongue and the part of said container that is sealed to said tongue, thereby to release said closure flap for swinging thereof away from the container to provide access to the container.

2. A package as defined in claim 1 wherein the provision for manual separation of said tongue and of said part of the container consists in the cover and the walls of the container formed of tearable material, the location of the edges of said opening adjacent the juncture of the tongue with the closure flap, and weakened zones in the walls of the container adjacent said edges of the opening so that said edges of the opening provide guides for tearing from the cover said tongue and the portions of the container walls in said gaps.

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