Jan. 4, 1949. L. L. SALFISBERG 2,457,924

PACKAGE

Filed March 8, 1945

Fig. 1

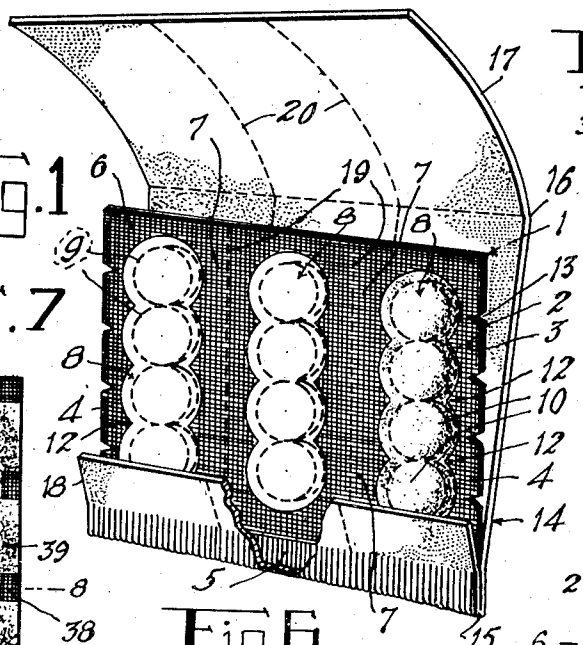


Fig. 7

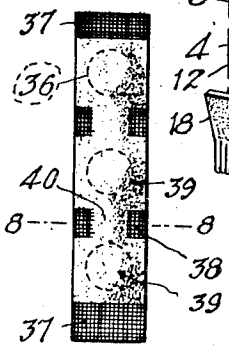


Fig. 6

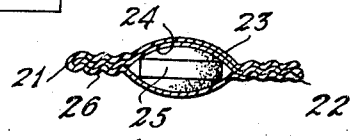


Fig. 8

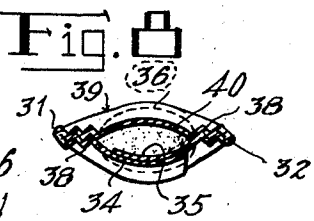


Fig. 5

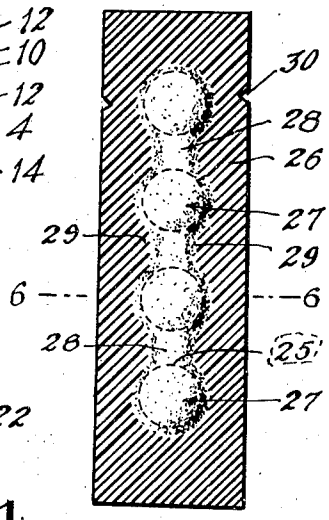


Fig. 4

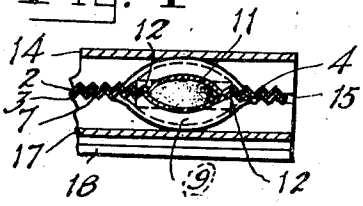


Fig. 3

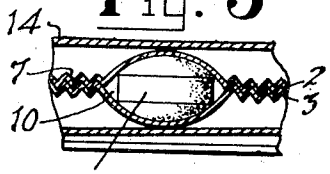
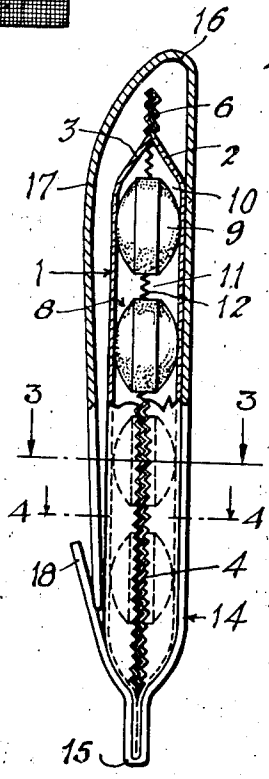


Fig. 2



INVENTOR.
Leroy L. Salfisberg,
BY
Harry R. Cook,
ATTORNEY

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PACKAGE

Leroy L. Salfisberg, South Orange, N. J., assignor to Ivers-Lee Company, Newark, N. J., a corporation of Delaware

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2 Claims. (Cl. 206—56)

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This invention relates in general to packages for small articles such as tablets, pills, buttons, or the like, particularly such packages wherein the articles are arranged in a row in a compartment for removal or discharge from the package singly or in succession.

The invention also contemplates a package of this general nature which includes a bag or envelope having a plurality of rows of articles therein and having attached thereto a foldable cover.

In known packages of the general character described, to remove the articles from the compartment, one end of the compartment is opened to provide a discharge opening through which the articles may be discharged in succession. However, annoyance occurs when it is desired to remove only one of the articles at a time, because in attempting to do so, usually two or three or more of the articles fall from the compartment by action of gravity when it is attempted to remove the article nearest the discharge opening.

Furthermore, in such packages the articles in the compartment are in contact with each other so that during handling of the package the articles are rubbed together and crushed upon each other, which of course is objectionable.

Therefore, one object of my invention is to provide a package of the general character described which shall include novel and improved features of construction such that the articles may be removed from the compartment one at a time or two or more at a time as may be desired.

Another object is to provide in such a package a compartment which shall be divided into communicating sections so that the articles in one section normally are prevented from moving into another section except when that is desired by the user of the package and yet the articles may be forced from one section to the other at the will of the user.

A further object is to provide a package of this nature which shall embody novel and improved features of construction for maintaining the individual articles in separated or spaced relation to prevent rubbing or crushing of the articles upon each other.

A further object is to provide a package which shall include an envelope having a plurality of sections each including an article containing compartment, said envelope having a foldable cover for protecting it, and the envelope and cover being so constructed and related to each

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other that one or more of the sections of the envelope and corresponding section of the cover may be detached from the other compartments and associated cover for individual use when desired.

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 package embodying my invention, showing the cover unfolded for access to the envelope.

Figure 2 is an enlarged side elevational view of a slightly modified package with the cover folded and closed and with portions of the package broken away and shown in section.

Figure 3 is a horizontal sectional view on the line 3—3 of Figure 2.

Figure 4 is a transverse vertical sectional view on the line 4—4 of Figure 2.

Figure 5 is a plan view of another form of package embodying the invention.

Figure 6 is an enlarged horizontal sectional view on the line 6—6 of Figure 5.

Figure 7 is a plan view of another modification of the invention, and

Figure 8 is an enlarged horizontal sectional view on the line 8—8 of Figure 7.

Specifically describing the embodiment of the invention shown in Figure 1, the package comprises a bag, envelope or like container generally designated 1 formed of suitable flexible material, preferably "Cellophane," "Pliofilm," metallic foil, cloth, paper or the like, especially sheet material which itself is thermoplastic and can be softened by heat or has a thermoplastic or fusible coating so that juxtaposed layers can be caused to adhere together by application of heat, and pressure, or with glue, to form a seal.

As shown, the bag comprises two opposed layers or sheets 2 and 3 of packaging material joined together as by sealing along the longitudinal or side margins 4, the transverse or end margins 5 and 6, and along spaced parallel zones 7 to form three compartments or receptacles 8 for articles, for example tablets 9, to be packaged.

The compartments 8 extend longitudinally of the envelope and in accordance with the invention each compartment is divided into a plurality of sections 10, preferably arranged in a straight row, each of which is adapted to contain one or more articles and communicates with the next adjacent compartments through openings 11, which preferably are longitudinally alined and comprise in effect restricted necks or discharge pas-

sages for the compartments, said passages or discharge openings being of less cross-sectional area than one of said articles or of such cross-sectional dimensions as normally to prevent passage of the articles from one compartment into another but permitting the articles to be forced from one compartment to another by application of squeezing pressure behind the articles to be removed on the flexible and deformable walls of the compartment.

As shown, these restricted passages, necks or discharge openings are formed by shaping the longitudinal sealing zones 4 and 7 so that portions thereof extend between adjacent articles as indicated at 12. These portions 12 of the sealing zones may be of any desired shape and size so as to permit the articles normally to contact with each other as shown in Figure 1 or to hold the articles in adjacent compartments in spaced relation to each other as shown in Figure 2 and in Figure 5.

Preferably the layers of packaging material at the sealed zones 4, 5, 6 and 7 are also interdigitated or corrugated both for greater security and for stiffening the bag, the interdigitations in the package shown in Figures 1 and 2 comprising approximately square pyramidal projections and recesses.

For facilitating opening of the compartments, the edges of the sheets may be formed with notches 13 in alinement transversely of the bag with the respective sections 10 of the compartments to facilitate tearing of the packaging material to open the compartments.

With this construction, it will be observed that when the endmost section of either compartment of the bag is opened, the article or articles therein may be dropped from the opened section of the compartment by action of gravity, but the portions 12 of the sealed zones which form the restricted discharge passages 11 will form abutments to prevent accidental discharge of the article or articles in the next innermost section of the compartment. However, by exerting squeezing pressure on the compartment inwardly of the last-mentioned article the latter may be forced through said discharge passage past the abutments 12 and out of the compartment. During this operation, the portions 12 of the sealed zones and the packaging material will be slightly deformed or stretched to allow movement of the articles through said restricted discharge passage 11. If desired all of the articles in one compartment may be ejected in one operation.

The package thus permits the removal of the articles from the compartment singly and successively and prevents accidental discharge of all of the articles from the compartment when an attempt to remove one article is made. Furthermore, the articles may be held in spaced relation to each other in the compartment so as to prevent rubbing or crushing of the articles upon each other.

The bag or envelope 1 is associated with a cover generally designated 14 which is foldable around the bag to enclose and protect it and also to receive printing matter such as advertising media. Preferably the cover is formed of a single strip of material relatively stiffer than the material of which the bag is formed and is folded at 15 around and secured at one end of the bag as by adhesive or by heat and crimping where the material of which the bag is formed is thermoplastic. The body portion of the cover strip lies along or is juxtaposed to one side of the bag 1, and the cover strip has a second fold 16 to receive the other end of the bag and to form a cover flap 17 that is hingedly connected at 16 to the body portion of the cover strip.

The flap 17 is of a size to cover the side of the bag opposite the body portion of the cover strip, as more clearly shown in Figure 2 of the drawings.

Suitable means may be provided for holding the cover flap in this cover-closing position, but as shown the marginal end portion 18 of the cover strip beyond the fold 15 is in spaced relation to the bag 1 so as to releasably receive the edge of the closure flap when the cover is folded around the package, to hold the cover flap against unfolding as shown in Figure 2.

With this construction, it will be observed that the cover protects the relatively thin and weak material of the bag, but obviously the cover may be omitted if desired.

Another feature of the invention is the division of the bag 1 and the cover 14 into a plurality of sections, each containing one or more of the compartments 9. This result may be obtained by scoring or forming a line of slits in the bag between the compartments as indicated at 19 and correspondingly scoring or perforating the cover as indicated at 20. As shown, the bag and cover can be torn at the same time along the corresponding scoring or lines of perforations 19 and 20 so as to form one or more units each comprising one or more of the compartments and the corresponding portion of the cover.

A modification of the invention is shown in Figures 5 and 6 where the envelope is formed of a single piece of packaging material folded upon itself at 21 and 22 and having its edge portions 23 and 24 in overlapping relation to each other to form a tube in which the articles 25 are arranged in spaced relation. The tube is crimped or corrugated as indicated at 26 to form a compartment which includes a plurality of sections 27 each communicating with adjacent sections through restricted necks or discharge passages 28 similar to the passages 11, the sealed zones having portions 29 corresponding to the portions 12 of the package shown in Figures 1 to 4 inclusive, extending between the various sections of the compartments. The envelope may have notches 30 to facilitate opening the compartment, and the articles are removed from the compartment in the same manner as described in connection with the package shown in Figures 1 to 4 inclusive.

Another form of package embodying the invention is illustrated in Figures 7 and 8 where a single strip of material is folded upon itself as indicated at 31 and 32 with its edge portions 34 and 35 overlapping each other to form a tube in which a plurality of articles 36 are arranged in spaced relation longitudinally of the tube. The tube has sealed transverse end zones 37 and other sealed zones 38 extending inwardly from the edges of the tube between the adjacent articles to form a compartment comprising sections 39 in which the articles are located and between which are restricted necks or discharge passages 40 corresponding to the passages 11.

The articles may be removed from any of the compartments by tearing the tube or envelope inwardly from the edges of any compartment, and the articles in the other compartments will be prevented from falling from said compartments in the same manner as described in connection with Figures 1 to 4 inclusive.

It will be understood by those skilled in the art that the invention may be embodied in other types

of packages and that the details of construction of the packages may be modified and changed, all within the spirit and scope of the invention.

I claim:

1. A dispensing package comprising opposed flat layers of tearable flexible packaging material sealed together along zones which form and bound an elongate compartment between said layers to receive articles closed at its ends and including a plurality of sections spaced longitudinally of said compartment which communicate with each other only through normally open passages between adjacent sections of such normal cross-sectional area as normally to prevent movement of the articles from one compartment section into another, said passages being formed by portions of said sealed zones extending from opposite sides of said compartment into the spaces between adjacent sections of said compartment and leaving portions of said layers unsealed and said sealed zones and said packaging material being of a nature that they may be deformed or stretched to increase the cross-sectional area of each passage and permit movement of an article therethrough upon exertion of outward pressure on the walls of said passage caused by the forcing of an article from an adjacent compartment section into said passage by application of squeezing pressure on the exterior of two opposite walls of said compartment section behind said article, whereby an endmost compartment section can be opened by tearing said packaging material outwardly of said section or between it and an adjacent section to permit removal of the

article therefrom and accidental removal of the articles from the other compartment sections being prevented through said passages but deliberate removal of said articles being possible by squeezing them through said passages between the respective sections and said opened section or by tearing open the corresponding sections.

2. The dispensing package as defined in claim 1, wherein said portions of said sealed zones that extend between the adjacent compartment sections are located to hold the articles in said sections in spaced relation to each other and prevent contact of articles in adjacent compartment sections through said passages.

LEROY L. SALFISBERG.

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