Dec. 31, 1963 J. R. STRANG 3,115,989

PILFER-PROOF DISPENSING CARTON FOR PACKAGE STRIPS

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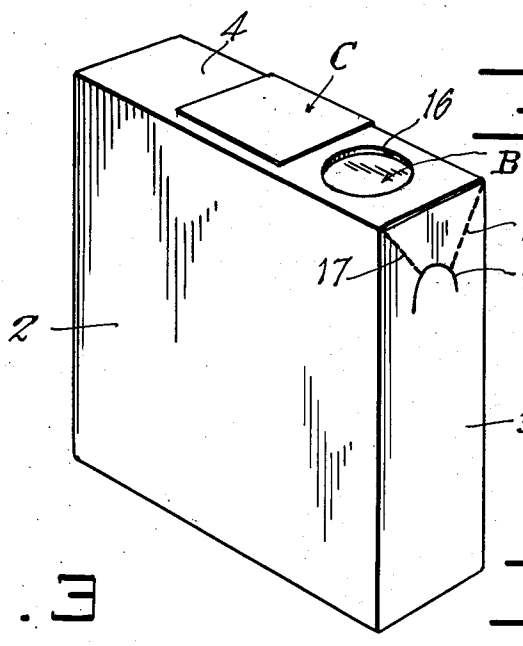


Fig. 1

Fig. 3

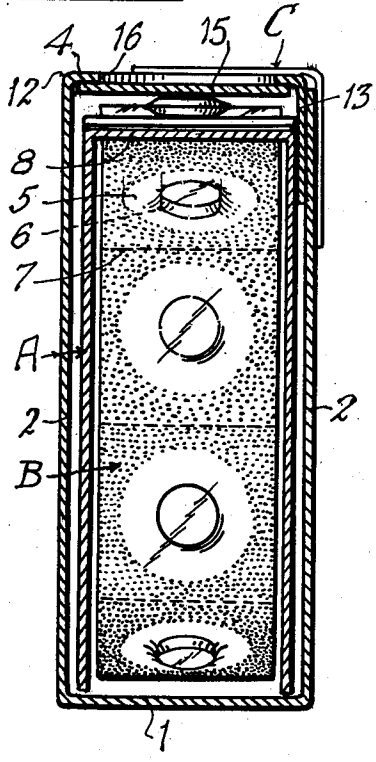
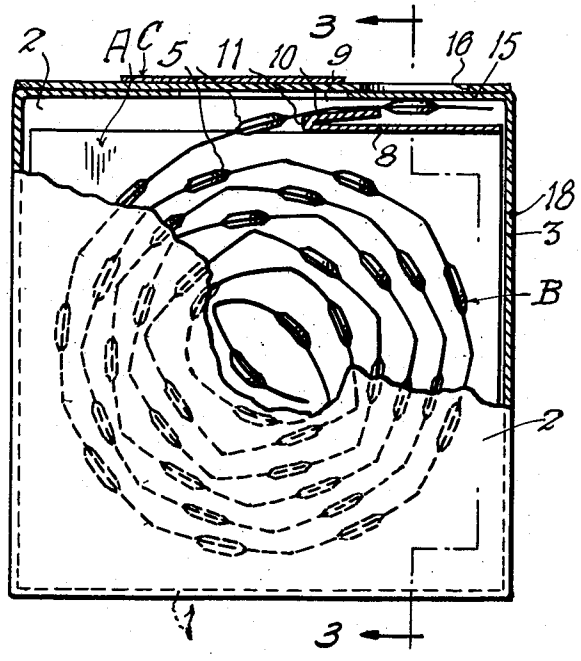


Fig. 2



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Fig. 4

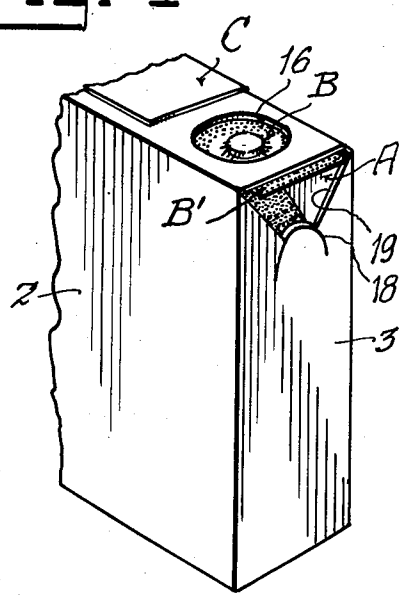


Fig. 5

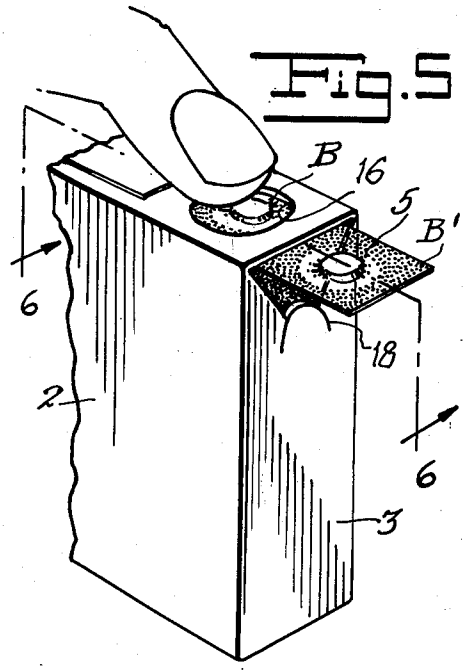


Fig. 7

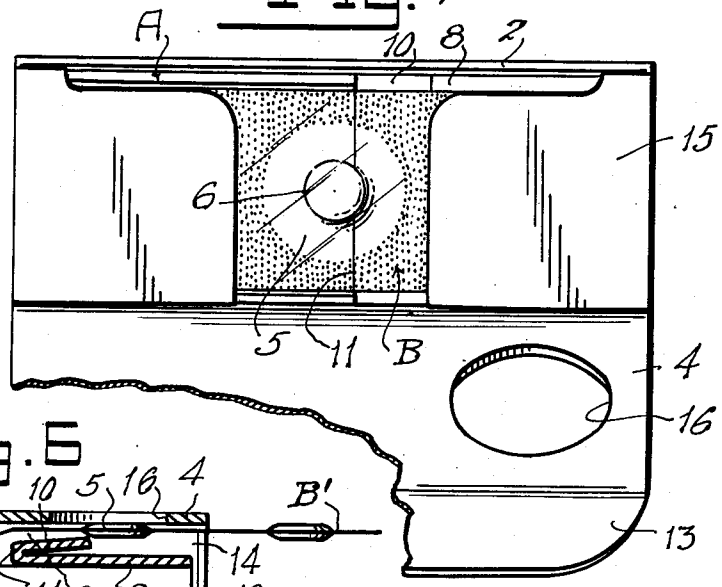
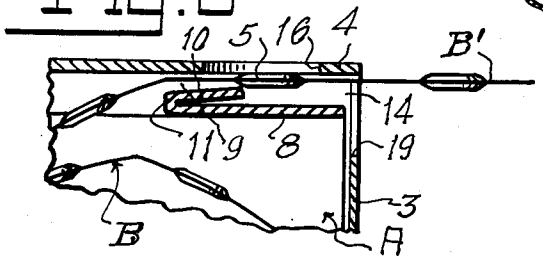


Fig. 6



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PILFER-PROOF DISPENSING CARTON FOR PACKAGE STRIPS

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1 Claim. (Cl. 221—25)

This invention relates in general to a carton of the type shown in United States Patent No. 2,771,214, dated November 20, 1956, and the co-pending application of Frank J. Lefebvre and John R. O'Meara, Serial No. 15,320, filed March 16, 1960, now Patent No. 3,001,643, for shipping and dispensing a package strip of the type that has commodity-containing compartments spaced longitudinally thereof and is severable between said compartments so that the compartments can be separated from the strip individually or in groups, as desired. Generally the package strips comprise layers of packaging material that are sealed together to form compartments between them for a commodity such as tablets, powder or paste, and the strips are weakened in lines transverse of the strip, as by scoring, to facilitate separation of the individual packages. The present invention is especially concerned with a carton for dispensing such a package strip which is spirally rolled and enclosed in the carton so that the strip can be pulled longitudinally through an opening in the carton to permit the package at the leading end of the strip to be pulled from the carton and be separated from the strip as by tearing the strip transversely along one of said weakened lines or scoring.

Inasmuch as the leading end of the package strip is always accessible in the known package, it is relatively easy for a dishonest person to pick up a carton from, for example, a shelf of a drugstore and pull out and remove one or more of the individual packages. Should such unauthorized removal of the packages take place, the ultimate purchaser of the package would obtain less than the represented quantity of the commodity.

A primary object of the invention is to provide a novel and improved pilfer-proof package of the general character described, that is, a package the construction of which shall be such as to reduce the possibility of unauthorized removal of the packages and to require modification of the package structure upon removal of the packages such that the fact that the package has been tampered with will be evident upon examination of the carton.

Another object of the invention is to provide such a dispensing carton so constructed that when it is completed by the manufacturer and supplied to a retail dealer or the consumer, the end of the package strip will be inaccessible, and it will be necessary to tear away a portion of the carton wall in order to gain access to the package strip for removal of the package so that the torn portion of the package will clearly indicate that the carton has been opened and that at least one of the packages may have been removed.

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 a pilfer-proof dispensing carton for package strips embodying the invention, showing the carton in its initial packaged and closed condition;

FIGURE 2 is a composite side elevation and central vertical sectional view of the carton shown in FIGURE 1;

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 view similar to FIGURE 1, showing the carton in open condition;

FIGURE 5 is a similar view showing the manner of removing a package from the carton;

FIGURE 6 is a fragmentary vertical sectional view on the plane of the line 6—6 of FIGURE 5; and

FIGURE 7 is an enlarged top plan view of the carton with a top wall or cover unfolded into open position and with portions thereof broken away.

For the purpose of illustrating the invention, the carton has been shown as rectangular and comprising a bottom wall 1, side walls 2, end walls 3 and a top wall 4. The bottom wall 1 may be of any suitable construction, preferably such that the bottom end of the carton can be opened and the top wall 4 is preferably also of such a nature as to permit opening and closing of the upper end of the carton to permit insertion and removal of the package strip.

The carton has within it a chamber that is rectangular in both longitudinal and transverse cross section and of such dimensions as to enclose within it a guide support A for holding and guiding a package strip B that is shown as comprising two layers of flexible packaging material such as cellophane or metal foil, sealed together along their longitudinal edges and transversely to form compartments 5 between the layers in which the commodity such as tablets 6 is enclosed. The compartments with their commodities form protuberances on and spaced longitudinally of the strip and preferably the strip is weakened as by scoring 7 between the compartments to facilitate severing of the individual packages from the strips. A guide support A is shown as inverted U-shaped in cross-section and formed of cardboard or the like of the same shape and dimensions as the interior of the storage chamber in the carton and has a cut-away portion forming an outlet passage 9 between one wall 8 and the top wall 4 through which the leading end B' of the package strip is pulled outwardly as best shown in FIGURES 2 and 6. A guide extension 10 extends from and above said wall of the guide support and provides a rounded fold 11 or lip at the inner edge of the guide passage 9 over which the package strip must slide during its movement from the storage chamber through a discharge opening that is provided at the top of the carton.

As shown, the top wall 4 of the carton is hinged to one side wall as indicated at 12 and has a tuck flap 13 at its swinging edge for insertion between the other side wall and the guide support A as shown in FIGURE 2. The top wall is disposed at right angles to one end wall 3 and when the package has been opened as hereinafter described, a discharge opening 14 is provided between the juxtaposed ends of said walls through which the leading end of the package strip is withdrawn from the carton (see FIGURE 6). However, initially the carton is entirely closed and said outlet opening is formed only upon removal of a portion of the carton. As shown, the end wall 3 has an inturned flap 15 that overlies the free edge portion of the guide extension 10 and the leading end of the package strip as shown in FIGURE 2.

Thus when the guide support and the rolled package strip A are inserted into the storage chamber, as shown in FIGURES 2 and 3, the leading end of the package strip passes through the guide passage 9 over the folded edge 11 of the guide extension 10 and under the flap 15 as shown in FIGURE 2, and the package is initially sealed in this condition in any suitable manner as by an adhesive sealing tape or label C that is secured to the top wall and side wall behind which the tuck flap 13 is located, the sealing tape thus preventing unfolding or opening of the cover or top wall 4 until the sealing tape is torn or ruptured. With this construction, it will be observed that the leading end of the package strip is inaccessible as clearly illustrated in FIGURES 2 and 7.

Access to the package strip for removal of the packages is provided by a removal of a portion of the carton wall, and as shown, the wall 3 which carries the flap 15 has weakened or scored lines 17 extending diagonally of said end wall from the ends of the line of juncture of the end wall and the flap and intersecting another scored or slit portion 18 in said wall 3 which preferably is arcuate in shape and can be easily pressed inwardly of the carton by a thumb or finger. In order to open the carton, the wall 3 is pressed inwardly along the scored line 18 after which the portion of the wall bounded by the scored line 18 and the lines 17 is gripped between the thumb and index finger and torn from the carton wall. This action results in a removal of a portion of the wall and the flap 15 so as to leave the end of the package strip B exposed for removal of the packages as shown in FIGURES 4 and 6. The opening 19 thus formed in the wall 3 makes it possible to insert the finger into the carton to grip the package strip, but preferably the top wall 4 has an opening 16 offset from the guide passage 9 and adjacent the discharge opening 14 through which a human finger or other member may be inserted into contact with the package strip for pushing the package strip through the discharge opening as shown in FIGURE 5. The material of which the package and the guide support are formed, and the dimensions of the parts are such that the lip 10 is normally biased toward the underside of the top wall 4 so as to apply friction to the package strip and thereby restrain accidental movement of the strip into and out of the carton, but, if desired, other means, such as those shown in said copending application Serial No. 15,320, may be utilized to prevent backward movement of the package strip into the carton. After a package has been pulled out of the carton, as shown in FIGURE 5, it may be removed easily by simply tearing it along the weakened line 7 and along the edge of the top wall 4.

From the foregoing, it will be understood that the carton with the package strip therein is supplied by the manufacturer in the form shown in FIGURE 1 and it is impossible to remove any portion of the package strip. However, when the portion of the wall 3 bounded by the weakened lines 17 and 18 is torn away with the flap 15, it is easy to remove the package strip, and it is clearly evident that the carton has been opened and that possibly one or more of the packages may have been removed. The only other way to open the carton would be to tear or remove the sealing tape or label C, and such removal would not be effected without detection.

While the invention has been shown in connection with a particular form of carton and package, it should be understood that this is primarily for the purpose of illustrating the principles of the invention and that the invention may be embodied in other types of packages and modifications and changes can be made in the structural details of the carton and of the package strip within the spirit and scope of the invention.

I claim:

A package including a flexible package strip having commodity-containing compartments and being severable between said compartments, and a carton having walls forming a storage chamber for a plurality of layers of said package strip with two of said walls meeting at an angle and one of said two walls having a hole and the other of said two walls having a flap projecting at an angle therefrom and extending inwardly beneath the other of said two walls and closing said hole, one end of said package strip normally being disposed beneath said flap and inaccessible from outside the carton, and a guide-support wall within said chamber underlying said end of the package strip beneath said hole cooperating with one of said two walls to define a guide passage, said guide support disposed in closely spaced relation to said one wall, the wall from which said flap projects having weakened zones extending diagonally of the wall from the ends of the line of juncture of said flap with the wall to a point within the boundaries of the wall providing for tearing the wall along said weakened zones to remove a portion of the wall and said flap attached thereto and thereby expose said end of the package strip through said hole and form a discharge opening at the zone of intersection of said two walls through which said package strip may be pushed longitudinally out of said chamber by the insertion of a member through said hole into contact with said package strip, thereby urging said strip into contact with said guide support for movement thereover.

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