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J. H. ROUSH
PACKAGING STRUCTURE

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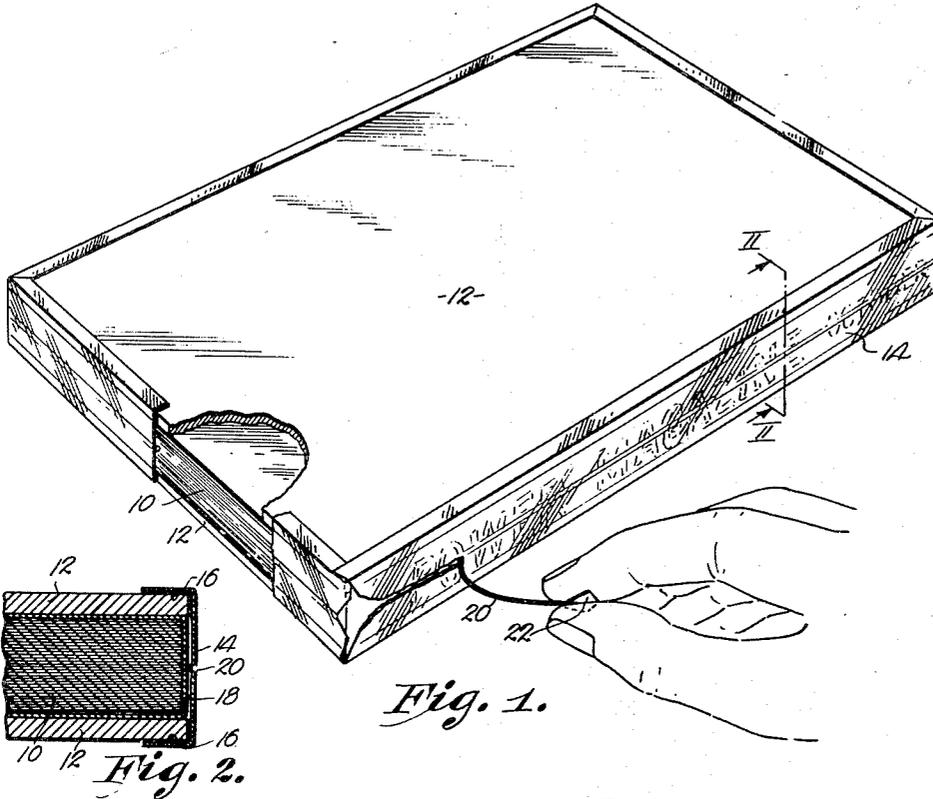


Fig. 1.

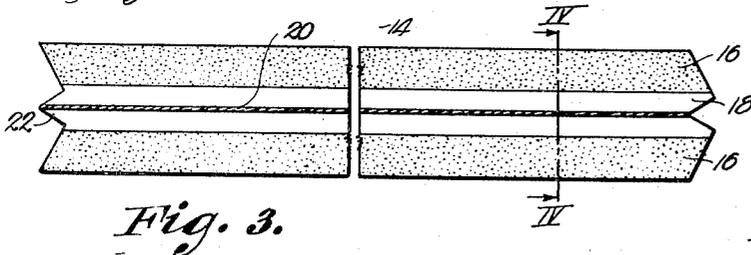


Fig. 3.

Fig. 4.

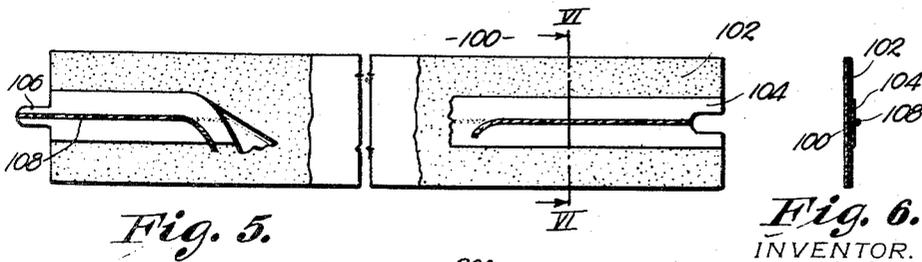


Fig. 5.

Fig. 6.

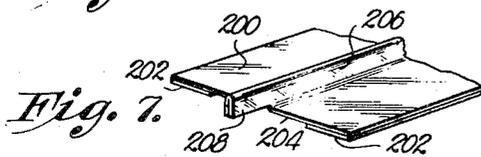


Fig. 7.

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PACKAGING STRUCTURE

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1 Claim. (Cl. 229—51)

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This invention relates to packaging structure and more particularly to package sealing and opening means and the primary object is to provide a strip having a coating of adhesive on one face thereof and so disposed as to prevent adherence to that portion of the article that is usually exposed to the strip when application is made, and to provide a rip-cord at that portion which is free from adhesive for tearing the strip when opening of the package is to be performed.

An important aim of this invention is to provide packaging structure having a strip of adhesive coated material wherein one end thereof has a tab or gripping tongue extending therefrom and a rip-cord extending the entire length of the strip, including the tongue and is affixed thereto whereby the user may grasp the tongue and the end of the cord for tearing the strip when opening of the package is desired and the tongue will tear towards the rip-cord to provide an effective grasping surface throughout the package opening operation.

A still further object of this invention is the provision of packaging structure having a strip of adhesive coated material, so formed as to present a bead of double thickness, integral with the strip per se, extending laterally from the face thereof opposite that provided with adhesive, and disposed throughout the entire length of the strip to present a tearing means that may be grasped by the user when a package is to be opened.

Other objects, equally important, will be made clear or become apparent during the course of the following specification, referring to the accompanying drawing, wherein:

Fig. 1 is a perspective view of a package, parts being broken away to reveal the manner of applying the package sealing and opening means forming a part of my present invention.

Fig. 2 is a cross-sectional view on an enlarged scale taken on line II—II of Fig. 1.

Fig. 3 is an inverted plan view of the strip shown in Figs. 1 and 2.

Fig. 4 is a cross-sectional view taken on line IV—IV of Fig. 3.

Fig. 5 is an inverted plan view of a modified form of my invention, parts being broken away to reveal details of construction.

Fig. 6 is a cross-sectional view taken on line VI—VI of Fig. 5; and

Fig. 7 is a fragmentary, perspective view of another modified form of my invention.

In the embodiment of this invention chosen for illustration in Figs. 1 to 4 inclusive, the pack-

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age shown in Fig. 1 illustrates a magazine and is broadly designated by the numeral 10. It is realized of course, that the type of article to be wrapped is immaterial and that books, papers or any other article requiring protecting stiffener such as cardboards 12 are more easily packaged through use of the structure about to be described.

A strip or tape 14, made from any suitable material of a flexible nature, such as paper, fabric, cellulose film, etc., comprises a relatively narrow body and as is clear in Fig. 3, a coating of adhesive 16 is placed thereon along the two, longitudinal, marginal edges thereof. Such disposition of the adhesive 16 presents a void area 18 that is free from adhesive, which area is substantially midway between the said longitudinal edges of the strip 14.

A rip-cord or tearing thread 20 is centrally disposed along the area 18 and is affixed thereto by glue or other fastening means and extends the entire length of the strip 14, including a tab or gripping tongue portion 22.

It is contemplated that the strip 14 could be produced for use on spools or reels or be produced in specified widths and lengths in a flat condition as shown. If used from spools, the cutting knife of the dispenser would be specially shaped to produce the gripping tongue 22. As the tongue 22 and the underlying end of the cord 20 is grasped by the operator as shown in Fig. 1, the strip 14 will tear on both sides of the cord 20 from the point at which the tongue 22 is joined to the main body of the strip 14 to a point inwardly from the end of the tape 14 and at the straight line of tear adjacent to the cord 20. As the strip 14 is entirely torn, a positive gripping surface is afforded the user throughout the opening operation.

The manner of applying the tape 14 is clearly shown in Figs. 1 and 2. The portion of the strip 14 having adhesive 16 thereon is folded over the edges of the stiffener 12 to adhere the edges thereof and a portion of the outermost faces of stiffeners 12. The portion 18 of the strip 14, being free from adhesive, does not adhere to the article being packaged, and when completely wrapped, the cord 20 is disposed between the article 10 and the strip 14. Fig. 1 shows the strip 14 as one continuous member circumscribing the entire article 10, terminating at the point of beginning with the tongue 22 freely accessible to the operator when the same is to be opened. However, four separate strips may be used if desired and if any of the tongues 22 are covered

3 by the strips that are last applied, these tongues will be available for use after one of the strips 14 is removed since they will not adhere to the surface 18.

In the strip 100 shown in Figs. 5 and 6, the adhesive coating 102 covers the entire one face thereof and a narrower strip 104 is held in place by the adhesive 102. This strip 104 is of a width sufficient to protect the entire edge of the article 10 since it is free from adhesive the same as the area 18 of the previously described strip 14, and extends the entire length of strip 100, including the gripping tongue 106. A rip-cord 108 is glued or otherwise fixed to the strip 104 and terminates at the outermost, free end of the tongue 106. The tongue 106 is contoured as shown in Fig. 5 to illustrate that any design that presents a sharp point of merger between the tongue and the main body of the strip is satisfactory, so that the tape will start to tear as the tongue is grasped by the operator.

While the rip-cord 108 is shown to constitute part of the structure illustrated in Figs. 5 and 6, it is obvious that this cord may well be eliminated entirely by forming strip 104 from material having greater tensile strength than that of the strip 102. In such construction, the strip 104 serves as the ripping means as tab 106 is grasped by the operator.

Fig. 7 illustrates another form of the invention in which the necessity of a separate rip-cord is eliminated. As in the form shown in Figs. 1 to 4 inclusive, strip 200 is provided with areas of adhesive 202 on one face thereof along its two longitudinal marginal edges and an area 204 of non-adhesive. As the strip 200 is formed, it is crimped or curled along its longitudinal center to present a bead or fold 206 of double thickness on the face of strip 200 opposite to adhesive 202. This bead 206 extends the entire length of strip 200 as well as beyond one end thereof to form a grip 208. It is clear that the bead 206 may well serve as a grip without the necessity of an additional extension 208 if such is desired.

It has been found desirable to form the tape 200 in this modified form from material such as plastic that will readily fuse upon itself as heat is applied thereto. Thus, when the wrinkle 206 is folded in the tape 200, the opposed, inner faces thereof will fuse together to present a relatively strong bead to serve as the ripping means as it is grasped to tear the tape 200 along the edges of bead 206.

Many uses of this invention will become apparent to those skilled in the art, in addition to the book illustrated in Fig. 1. One such application is to seal mailing tubes of the character having telescoping cylinder-like sections disposed

4 in tip-to-lip relation. Another is to secure the lid of containers formed in the manner that is common with pill boxes wherein walls of the box are disposed in abutting relation, or for use on conventional cardboard boxes of the collapsible kind having a number of flaps foldable to close the ends of the box.

In almost all of its uses, the packaging structure herein set forth affords the advantage of resealability of the receptacle upon which it is used. The removal of the conventional tape that is commonly used to close various types of boxes, usually damages that portion of the box to which the tape is glued. Use of any form of my invention eliminates such mutilation, thereby permitting continued reuse of the boxes by merely applying another layer of tape over the abutting edges or lip-to-lip portions of the box, each time increasing the strength of that portion of the box covered with tape.

Many advantages will arise from the employment of packaging structure having this invention as a part thereof, and while a large number of important features have herein been set down, it will be understood that those made possible by the invention are contemplated thereby.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

30 Package sealing and opening means comprising an attenuated strip of sheet material having adhesive on one face thereof along portions of each of its two longitudinal, marginal edges; and a continuous, relatively thin ripping element carried by the strip intermediate the proximal boundaries of the said portions of the marginal edges, said ripping element comprising a bead on the opposite face of said strip, said bead being formed from a pair of overlapped portions of said strip, said portions having their innermost faces joined together.

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