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2,752,037

CHAIN WRAPPER FOR PLASTIC AND LIKE PRODUCTS

Filed Feb. 28, 1951

2 Sheets-Sheet 1

Fig. 1

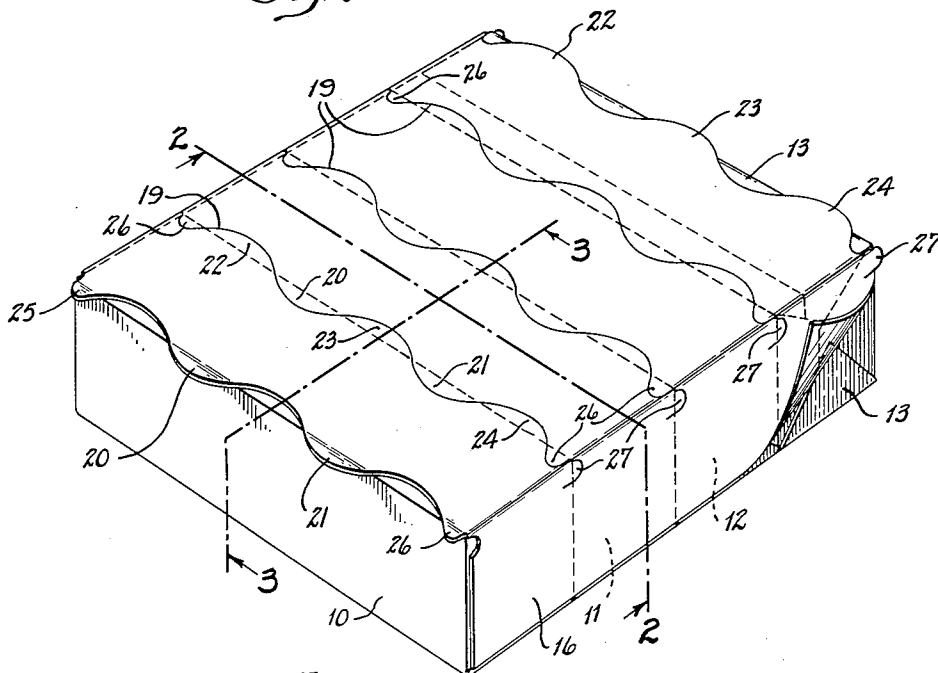


Fig. 2

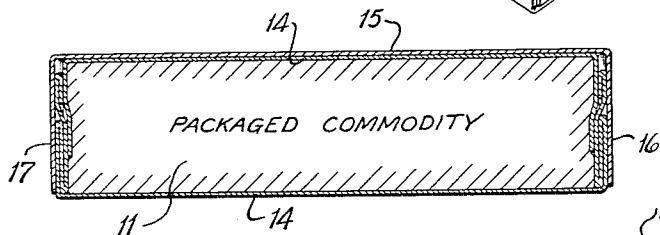


Fig. 3

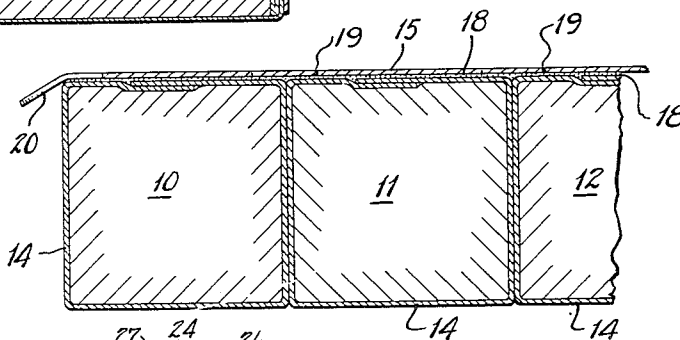
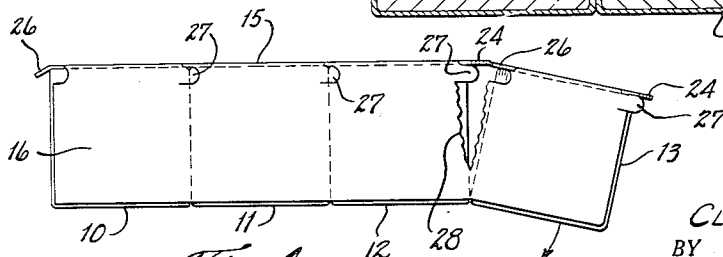


Fig. 4



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2 Sheets-Sheet 2

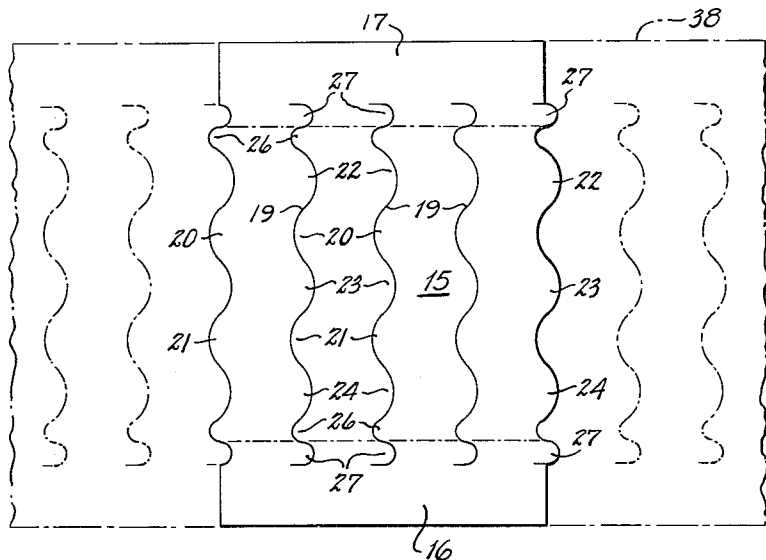


Fig. 5

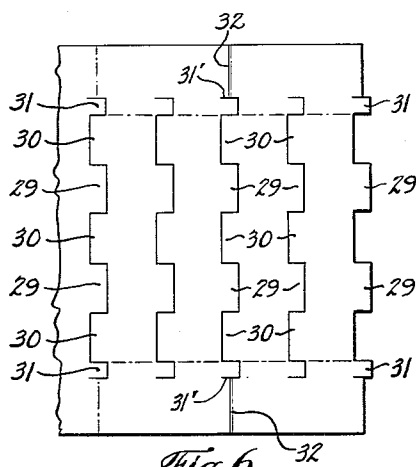


Fig. 6

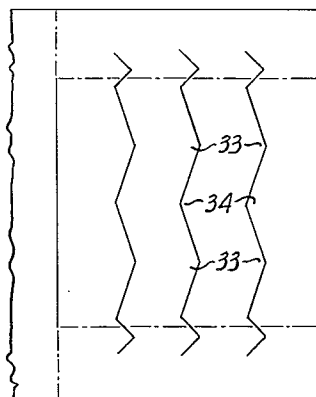


Fig. 7

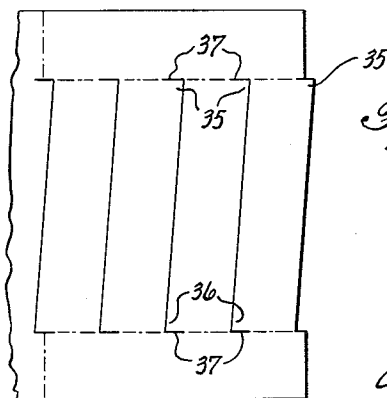


Fig. 8

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CHAIN WRAPPER FOR PLASTIC AND LIKE PRODUCTS

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Application February 28, 1951, Serial No. 213,110

4 Claims. (Cl. 206—56)

The present invention relates generally to holding or chaining members for a plurality of generally similarly shaped articles and embodies, more specifically, a form of such chaining member by means of which one or more of such articles may be conveniently separated from other of the articles without impairing the effectiveness of the member to hold the remaining articles.

In the packaging and distribution of products, such as butter, margarine, lard, ice cream, sherbet, and like comestibles, there has been an increasing demand for the packaging thereof in quarter-pound sizes (prints), and to facilitate distribution, these products are conveniently packaged in one pound units, each unit thus comprising four quarter-pound prints.

The packaging of these quarter-pound prints in the form of a pound print, that is, two layers each of two prints, all in contiguous relationship, has been a familiar sight in stores for many years. More recently it has been the practice to facilitate the sale of less than one pound lots by packaging the product in such fashion that the four quarter-pound units are packaged in a single layer. As a result, when one or several quarter-pound prints are removed from the package, the package with the remaining quarter-pound prints makes an untidy object and does not show at a glance the number of prints remaining in the package.

A further objection to packages of the type last above described lies in the fact that the outer cardboard wrapper for enclosing the individually wrapped prints is relatively expensive and also is of such nature that evaporation from the contents is not easily avoided after removal of a print.

In order to overcome the above mentioned difficulties and to provide other advantages presently to be pointed out, the present invention is designed to provide a holding or chaining member for a plurality of similarly shaped products by means of which a package containing such plurality of products may be broken apart to permit one or more of the products to be removed while still holding the package sealed and without separating the remaining products from each other and in such fashion that the remaining products may continue to be satisfactorily secured together for continued holding in a desired condition.

Another object of the invention is to provide a holding or chaining member of the above character wherein portions thereof are preformed to facilitate convenient separation of one or more products from other of the products held in assembled relationship by the securing member.

A further object of the invention is to provide a holding or securing member of the above character by means of which a plurality of objects may be secured together in side by side relationship and in such fashion that separation of one or more of the products from the remaining products may be accomplished with facility regardless of the precise relationship of the position of the meeting edges of the products with respect to separation structure preformed in the securing member.

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Yet another object of the invention is to provide holding or chaining members of the above character wherein the preformed portions are of such nature as to overlap portions of each contiguous surface (lying generally in a common plane) of adjacent products held by the securing member.

A further object of the invention is to provide a chaining member of the character last above mentioned wherein means is provided to facilitate grasping and tearing away or removing of the chaining member from the products held thereby.

Yet another object of this invention is to provide a chaining member of the above character wherein the chaining member is formed to prevent evaporation from the contents of the products held.

It is a further object of the invention to provide a chaining member of the above character formed in such fashion as to impart substantial rigidity to the assembled products as a package.

Other and further objects will appear as the invention is described in further detail in connection with the accompanying drawings, wherein

Figure 1 is a perspective view of a package formed by a holding or chaining member constructed in accordance with the present invention and showing one corner of the member lifted;

Figure 2 is a view in transverse section, taken on the plane indicated by the line 2—2 of Figure 1, and looking in the direction of the arrows;

Figure 3 is a partial view in longitudinal section, taken on a plane indicated by the line 3—3 of Figure 1, and looking in the direction of the arrows;

Figure 4 is a view in side elevation of the package of Figure 1, but showing one of the products in the process of being separated from the remainder of the products of the package;

Figure 5 is a plan view of a portion of a continuous web from which holding or chaining members are formed, the structure of the web being in accordance with the present invention;

Figure 6 is a view similar to Figure 5, but showing a modified form of the invention;

Figure 7 is a view similar to Figure 5, showing a further modified form of the invention; and

Figure 8 is a view similar to Figure 5, showing yet another modified version of the invention.

With reference to the above drawings, and particularly to Figures 1, 2, and 3 thereof, the package is illustrated as being formed of four prints of a plastic substance, such as, for example, butter. The substance of the products, as well as the shape and other physical properties, forms no part of the present invention, and it will also be readily understood that the particular number of products assembled together as a unit or package may vary as desired. In Figures 1 and 4, the individual products are illustrated at 10, 11, 12 and 13. As illustrated, for example, in Figures 2 and 3, each of the products is enclosed by a suitable wrapper 14, and all of the products are held in the position illustrated in Figure 1 by means of a holding or chaining strip or member indicated generally in Figure 2 by the reference character 15. The marginal portions 16 and 17 extend uninterruptedly throughout the length of the package formed by the ends of the juxtaposed products 10, 11, 12, and 13, and upon the inner side of the member 15 a suitable adhesive is provided, as illustrated at 18.

In spaced relation crosswise of the chaining member 15 there is provided a plurality of cuts or scores 19. In the form of the invention illustrated in Figures 1 and 5, the cuts are of undulating shape and form a series of flaps 20 and 21 extending to the left as viewed in Figure 1, and a second series of flaps 22, 23, and 24 that extend

to the right, as viewed in Figure 1. The flaps 20 and 21 are positioned in a line between the lines of respective flaps 22, 23, and 24, and all of these flaps thus overlie portions of certain of adjacent products. As illustrated in Figure 1, for example, the flaps 20 and 21 overlie and adhere to the right-hand top portion of the print of butter or other product 10 while the flaps 22, 23, and 24 overlie and adhere to the product 11. It will thus be seen that each adjacent pair of products is held in assembled relationship so that the products forming the pair are held in the desired assembled relationship by the overlying flaps formed by the undulating cut in the chaining strip or member 15.

End flaps 25 and 26 extend in the same direction as flaps 20 and 21 and are preferably formed so that they are located at the ends of the products held by the chaining strip. Each cut or score then terminates in a portion 27 that extends generally parallel to the margins 16 and 17 of the strip. These extremities provide greater strength at the marginal portions of the strip over a cut formation terminating in a plane substantially perpendicular to the length of the strip and, as a result, the products are held together in assembled relationship much more securely.

Inasmuch as the chaining strip 15, in its assembled position, is of channel or U-shape, as illustrated in Figure 2, its assembled shape imparts additional rigidity to the package.

The particular form of adhesive 18 that is used to secure the chaining strip to the products forms no part of the present invention. It preferably remains peelable or of such nature that it will give or rupture before the material of the holding member tears (that is, the shearing strength of the adhesive is less than the tearing strength of the paper) and may, for example, be formed of a thermo-setting or thermoplastic material or of adhesive now commonly used and which employs heat to activate the adhesive, the adhesive remaining activated for a predetermined length of time following the removal of the source of heat therefrom. Adhesives having a treated wax ingredient, as well as adhesives of the synthetic thermoplastic resin type (including those utilizing cellulose derivatives, acrylic and vinyl resins) have been found quite suitable for the purpose of this invention. In any event, when the chaining strip is applied as illustrated, the adhesive holds it securely to the products, and the latter are securely held in assembled relationship until it is desired to separate them.

Figure 4 illustrates the manner in which separation of one or more of the products from the remaining products of the package is facilitated by the scoring or cutting operation above described. For example, if one of the products (the right-hand product 13 illustrated in Figures 1 and 4) is to be removed from the remaining products, it is simply pulled away at its top edge whereupon the marginal portions of the strip tear along the line indicated generally at 28. With the exception of the slight irregularity of the tear line, the remaining products are held in the desired position with an appearance substantially unaltered from the original appearance of the package, although it is possible to tell immediately at a glance the number of products remaining in the package. It will be observed that each and all of the products, when separated from adjacent products, constitutes a complete unit similarly wrapped and displayed. The structure of the chaining strip 15, in the case of comestibles, such as butter and the like, is preferably of a moisture impervious material and since it overlies the meeting edges of the wrapper in which the product is contained, it will prevent evaporation therefrom both along the lengthwise overlapping edge and also at the ends.

It will be understood that printed matter may be applied to the chaining strip in the portions between the successive cuts or scores 19 and, since the location of the products is definitely assured with relation to the scores

or cuts, printed matter may also be effectively registered and applied to the marginal portions of the strip. The various tabs or flaps above described serve as a convenient means for stripping or removing the chaining strip 15 from the products held thereby, and the specific form of these flaps may be varied as desired. To this end, modified versions of the invention are illustrated in Figures 6, 7, and 8. In Figure 6, for example, instead of the undulating form of cut, such as illustrated in Figure 5, square cornered flaps 29 and 30 are formed, the end flaps 31 also being squared instead of curved. Moreover, if it is desired to impart an initial weakness in the marginal portions of the strip to insure a clean separation of the products, score lines, such as indicated at 32, may be provided to extend from the terminal portions 31' of the cut to the adjacent edges of the marginal portions.

In Figure 7, the flaps are shown at 33 and 34, as being pointed in shape, but symmetrical, whereas in Figure 8 flaps 35 and 36 are illustrated as being non-symmetrical and formed by a single straight cutting line intersecting with the end lines of the cut 37.

In operation, it will be found convenient to form the material of the chaining strips 15 as a continuous web 38, as illustrated in Figure 5. The individual chaining strips may be cut from the web in any suitable fashion, one such complete strip being illustrated in solid lines in Figure 5, with the adjacent strips from which such strip was cut being illustrated partially and in dot-and-dash lines.

In all of the forms of the invention illustrated, save that of Figure 8, the cut is of such form as to form flaps having re-entrant extremities which are designed to overlie and adhere to the top surfaces of the adjacent products. In the form of the invention illustrated in Figure 8, the flaps have no re-entrant portions on the top surfaces of the products although, if it is desired to form the longitudinally extending end cuts, there will be a re-entrant portion at the ends of the products.

It is to be observed that the holding member provides smooth end surfaces for the object upon which may be applied a label or printed matter for the application of information pertinent to the object to which it is applied. Moreover, it is to be understood that the cuts or scorings in the holding member may be shorter than the entire width or length of the product. These cuts may also be formed as the material of the member is advancing to the point at which it is applied to the product. If desired, the ends of the member may be straight with the cuts located within the boundaries of the member.

The material of the holding member may be formed in a roll or from a reversely folded stock such as is commonly referred to as a ticket folded stock, and the invention is not to be limited save as defined in the appended claims.

I claim:

1. A package, comprising a plurality of similarly shaped unwrapped products and a holding member having an adhesive on one side thereof adhesively securing the products in side-by-side relation with meeting sides of adjacent products in contiguous relationship, said holding member being secured only to the opposite ends and one intermediate non-meeting side of each of the products, said holding member having marginal portions overlying the ends of the products and a plurality of cuts in said holding member spaced apart in a direction parallel to the marginal portions and at a distance equal to the width of the products and having at least a part thereof lying in directions intersecting the planes of the meeting faces of the products to form flaps alternately overlapping and secured to adjacent sides of the products lying in the same plane, the cuts extending to at least the inner edges of said marginal portions and terminating inwardly of their outer side edges.

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2. A package, according to claim 1, wherein the cuts are undulating in form.

3. A package, according to claim 1, wherein the ends of the cuts terminate in portions extending generally parallel to the side edges of the marginal portions.

4. A device, according to claim 1, wherein the adhesive for securing the member to the products comprises a peelable adhesive.

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