

June 26, 1962

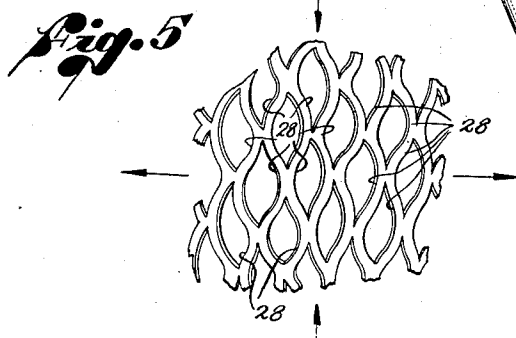
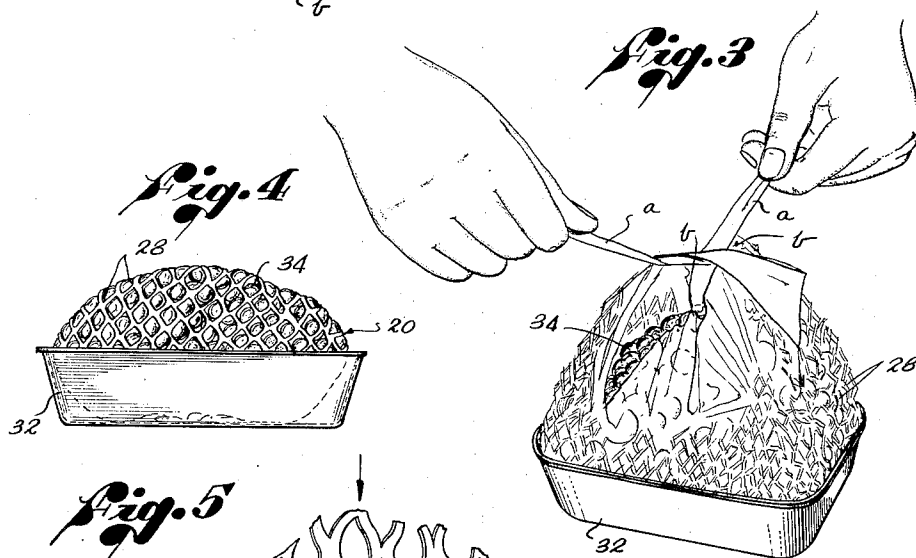
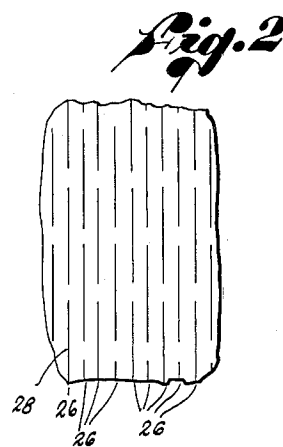
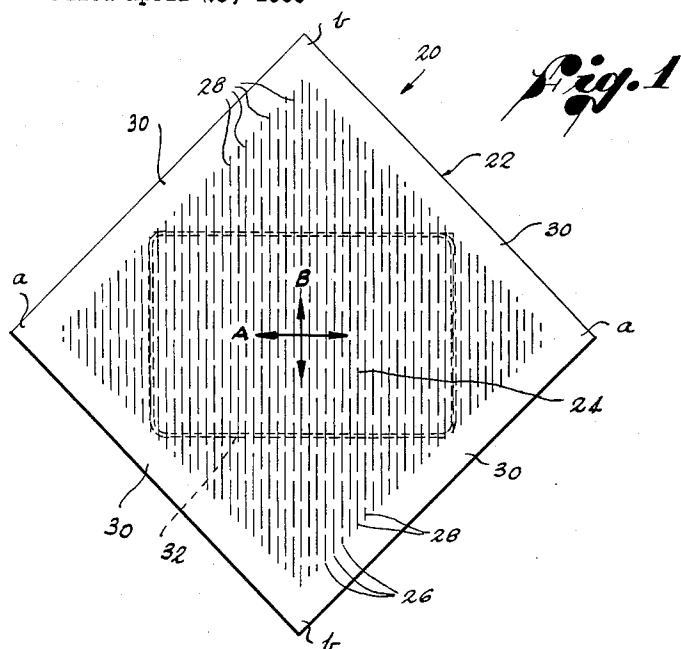
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3,040,968

WRAPPER FOR PACKAGED PRODUCE

Filed April 28, 1959

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 6

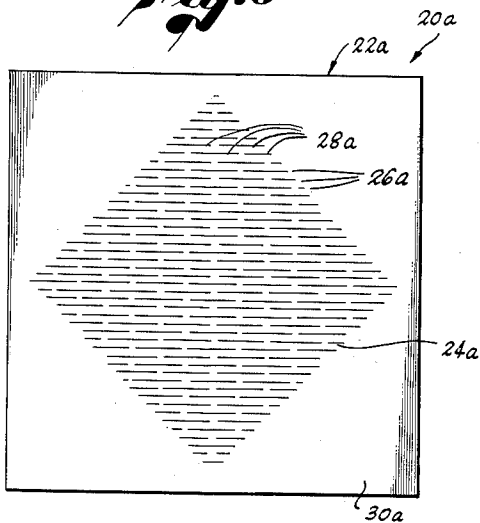


Fig. 7

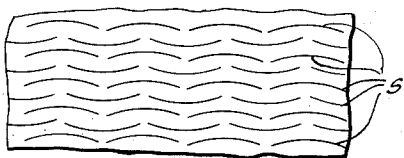
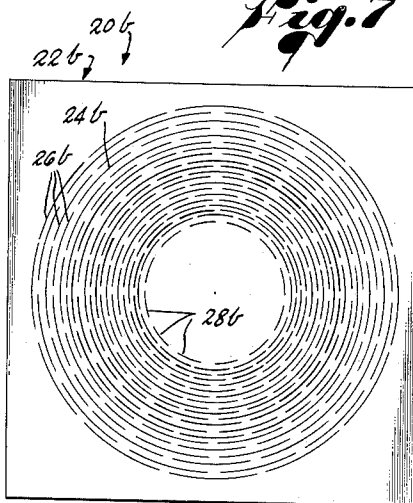


Fig. 8

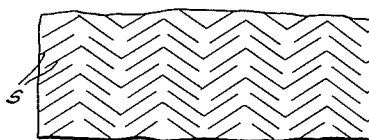


Fig. 9

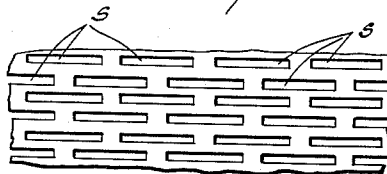
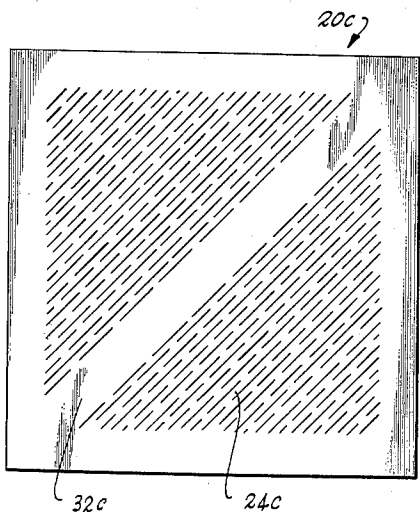


Fig. 10

Fig. 11



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WRAPPER FOR PACKAGED PRODUCE

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Filed Apr. 28, 1959, Ser. No. 809,391
8 Claims. (Cl. 229—87)

This invention deals generally with article packaging means, and more particularly with a packaging wrapper.

The invention has special utility in packaging articles of produce, such as berries, grapes, cherries and the like, for retail sale. For this reason, the invention will be described in connection with, but without limitation to, the above use.

Articles of produce of the kind referred to above are commonly packaged for retail sale in open topped baskets. In some cases, the contents of each basket may be preweighed and its price marked on the basket.

The prime advantage of this type of produce packaging means is its simplicity and economy. The basket by itself is deficient, however, in that articles in the basket may easily fall out of the latter. Also, shoppers frequently pick articles out of the baskets.

Various types of wrappers have been devised for baskets of this type to prevent accidental and deliberate loss of the basket contents. The prior wrappers for this purpose are deficient, however, primarily because of their relatively high cost, unpleasing appearance, difficulty of application to the baskets, and lack of ventilation openings.

The present invention provides a wrapper which is especially adapted for the use just discussed and which avoids the above-noted and other deficiencies of the existing wrappers of this type. It will become apparent as the description proceeds, however, that the present wrapper may be used by itself for packaging articles of produce and also may be employed in the packaging of other than articles of produce.

With the foregoing preliminary discussion in mind, a broad object of the invention may be stated as being a provision of a new and improved wrapper for the purpose described.

A more specific object of the invention is to provide a wrapper for the purpose described which is capable of conforming nicely to the articles being packaged.

Another object of the invention is to provide a wrapper for the purpose described which may be used with article containers of various sizes and configurations.

Yet another object of the invention is to provide a wrapper for packaging produce which effectively retains the packaged articles of produce and yet permits unrestricted ventilation of the articles so as to improve refrigeration and avoid condensation.

A further object of the invention is to provide a wrapper for the purpose described which is economical to produce, easy to apply, pleasing in appearance, and otherwise ideally suited to its intended use.

Other objects, advantages and features of the invention will become readily apparent as the description proceeds.

Briefly, the objects of the invention are attained by providing a wrapper having a central portion formed with rows of spaced or interrupted slits or slots and a solid, unslit border or margin about the slit central portion. In use, the articles to be packaged are placed on the slit central portion of the wrapper and the corners of the latter are brought together over the articles and joined in any suitable way. The wrapper and its contents are then turned over and placed in a basket or other container. It is not essential that the packaged articles be placed in a container in this way, however, since the

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wrapper forms itself into a bag-like structure which may be readily handled and stored.

The slits in the central portion of the wrapper afford the latter with the ability to stretch and mold itself into nice conformance with the packaged articles, so as to afford the resulting package with an extremely pleasing appearance. This stretching of the wrapper widens the slits into openings which allow free circulation of air through the package as is necessary in the case of packaged produce for preservation of the latter.

A better understanding of the invention may be had from the following detailed description thereof, taken in connection with the annexed drawings, wherein:

FIG. 1 is a plan view of one form of the present wrapper;

FIG. 2 is an enlargement of a portion of the wrapper of FIG. 1;

FIGS. 3 and 4 illustrate the steps in packaging articles in the present wrapper;

FIG. 5 is a view similar to FIG. 2 but showing the wrapper in a stretched condition;

FIG. 6 illustrates a modified form of wrapper;

FIG. 7 illustrates a further modified form of wrapper;

FIGS. 8-10 illustrate various ways in which the present wrapper may be slit; and

FIG. 11 illustrates a further modified wrapper.

Referring first to FIGS. 1-5 of these drawings, the illustrated wrapper 20 comprises a rectangular sheet 22 of suitable pliable material, such as cloth, paper or plastic, for example. A generally rectangular central area 24 of this sheet is formed with rows 26 of spaced or interrupted slits 28. The rows of slits extend diagonally of and terminate approximately equal distances from the edges of the sheet so as to leave a solid unslit border or margin 30 which extends entirely about the slit area 24.

Slits 28 have approximately the same length and spacing lengthwise of the rows 26. As may be clearly observed in the drawing, the slits in alternate rows are approximately aligned in the transverse direction of the rows. The slits in adjacent rows on the other hand are offset in the lengthwise direction of the rows.

The slits 28, which are arranged in somewhat the same fashion as the slits in so-called "expanded metal," render the center portion 24 of the sheet 22 capable of stretching or expanding in the diagonal direction A of the sheet, that is, in the transverse direction of the rows of slits. The slits do not, of course, have any effect on the ability of the sheet to be stretched in the diagonal direction B, parallel to the rows of slits, stretching in the latter direction being determined entirely by the elasticity of the material from which the sheet is made.

The wrapper just described is intended for use in packaging produce of the kind preliminarily mentioned, in an open top, rectangular fruit basket, such as illustrated at 32. In this case, the wrapper is used as follows.

The wrapper is placed over the open top of the basket 32 in such a way that the diagonal direction A of the wrapper extends lengthwise of the basket. Owing to the aforementioned stretchability of the wrapper in the diagonal direction, the center portion 24 of the wrapper will tend to sag into the basket and form a pocket. The produce to be packaged, such as a bunch of grapes 34, is placed in this pocket. The center portion of the wrapper, of course, will sag further into the basket until it rests on the bottom of the latter under the weight of the grapes.

The two corners a-a of the wrapper at the ends of the basket are now brought together over the bunch of grapes and looped, as shown in FIG. 3. The other two corners b-b of the wrapper are then brought over the grapes, as shown. Finally, the wrapper and grapes therein are turned over and placed in the basket so that the corners of the wrapper are lowermost and the slit center

portion of the wrapper is uppermost, as shown in FIG. 4.

When the corners of the wrapper are drawn upwardly over the grapes, the slit center portion of the wrapper stretches into conformance with and, in effect, molds itself about the bunch of grapes. This results in the final produce package of FIG. 4, having an unusual and pleasing appearance, as may be readily observed in the drawings. During this stretching of the wrapper, the slits 28 widen to form a multiplicity of ventilation openings (FIG. 5) which permit free circulation of air.

The wrapper of FIG. 1 is especially suited for use with a rectangular basket owing to the ability of the center portion of the wrapper to stretch in diagonal direction A so as to accommodate the longer dimension of the basket 32 in that direction. This ability of the wrapper to stretch to accommodate itself to a rectangular basket enables a wrapper, for particular basket size, to be made from a smaller piece of material than would be required for a conventional wrapper for such a basket which does not possess the ability to stretch in the lengthwise direction of the basket.

The length of the slits 28 is not critical. Obviously, however, this length must be such that when the wrapper is applied, the resulting ventilation openings are sufficiently small to confine the particular articles being packaged. The "stretchability" of the wrapper may be varied by varying the length of the slits and/or the spacing between them.

The border 30 of the wrapper constitutes a highly important feature of the invention. This border restricts stretching of the outer periphery of the wrapper so that when the center portion 24 stretches or expands it forms the pocket previously described. There would, obviously, be appreciably less tendency for the pocket to form if the slits extended to the edges of the wrapper. Moreover, if the slits extended to the edges of the wrapper, the latter would be extremely awkward to handle and apply to the produce.

If desired, the wrapper may be used by itself merely as a bag for holding the packaged articles. In this case, the packaged articles would not be placed in the basket as previously described, and the four corners of the wrapper would be brought together over the articles and joined in some convenient way, such as by an elastic band.

FIG. 6 illustrates a modified form of the present wrapper which is especially designed for use in packaging articles in square baskets. The modified wrapper 20a is similar to wrapper 20 in that the former comprises a rectangular sheet 22a, having a rectangular center portion 24a formed with rows 26a of spaced or interrupted slits 28a. As in the previous wrapper, the rows 26a of slits 28a terminate short of the edges of the sheet 22a, so as to leave a solid unslit border 30a about the slit area 24a.

In contrast to the previous wrapper, the sides of the rectangular slit area 24a of wrapper 20a approximately parallel diagonals of the sheet 22a rather than the sides of the sheet, as in the case of wrapper 20. Also, the rows 26a of slits extend parallel to two side edges of the sheet 22a, rather than parallel to the diagonals of the sheet, as in the case of the previous wrapper.

In use, the modified wrapper is placed over a square basket in such a way that the sides of the slit area parallel the sides of the basket. The articles to be packaged are then placed on the slit area, the corners of the wrapper are drawn up over the article, and the wrapper and articles turned upside down in the basket, as before. The slits in the wrapper again allow the latter to mold itself about the articles to form a package of pleasing appearance.

It will be observed that the diagonal directions of the sheet 22a are inclined at approximately 45 degree angles with respect to the rows 26a of slits 28a. This affords the slit area 24a with approximately the same degree of stretchability or expansion in the diagonal directions of

the sheet 22a and adapts the wrapper for use on square baskets, as just mentioned.

FIG. 7 illustrates a further modified form of the present wrapper which is especially designed for packaging articles in circular baskets or containers. As before, wrapper 20b comprises a rectangular sheet 22b having a central portion or area 24b formed with rows 26b of interrupted or spaced slits 28b. In contrast to the previous forms of the wrappers, the rows 26b of slits conform to concentric rings centered at the approximate center of the sheet 22b. The slits 28b in alternate rows 26b are approximately aligned in the radial direction of these concentric rings. The slits in adjacent rows, on the other hand, are angularly offset, that is, offset in the lengthwise direction of the rows, in a manner similar to the offsetting of the slits in adjacent rows of the previous wrappers. The slits in each of the circular rows 26b have approximately the same length and spacing as before. However, the slits in the successive rows toward the center of the ring become progressively shorter in proportion to the gradual decrease in circumferential distances toward the center.

The modified wrapper just described is used in much the same manner as the previous wrappers. Thus, the articles to be packaged are set on the slit center portion 24b of the wrapper, the corners of the latter are drawn together over the articles, and the resulting package is turned over and placed in a circular produce basket. As mentioned previously, of course, the wrapper could be used by itself as a bag for holding the produce.

It will be evident that owing to the similarity of the slit arrangement in the wrapper 20b with the slit arrangement in the previous wrappers, the modified wrapper molds itself about the articles and the slits widened to form ventilation openings in a manner generally similar to that previously described. It will be observed, however, that the slit center portion 24b of the modified wrapper 20b possesses the same degree of stretchability or expandability in all radial directions so as to conform to the circular basket.

The term "slit" is used herein in its broadest meaning and is intended to cover not only slits produced by a simple slitting operation with a knife edge, but also narrow elongated openings, or slots, S which are produced by punching sections out of the wrapper, as shown in FIG. 10. Moreover, the term as used herein is intended to cover not only slits which conform to either a straight or a circular line, such as those previously described, but also slits of various other shapes. For example, the slits S may be arcuate as illustrated in FIG. 8, or angular, as illustrated in FIG. 9. Various other slit shapes are possible also.

In some cases it may be desirable to provide the wrapper with a solid area to which a label may be affixed. The circular unslit center of the wrapper 20b in FIG. 7 provides such an area. FIG. 11 illustrates one way in which such an area may be provided on the wrapper of FIG. 1. The wrapper 20c of FIG. 11 is identical in all respects to the wrapper 20, except that a section 32c, which extends diagonally across the rectangular slit area 24c of the wrapper, is left unslit. This diagonal section provides a solid band to which a suitable label, bearing advertising or the price of the packaged articles, for example, may be applied. If desired, the wrapper may be provided with a pair of parallel diagonal bands in this way.

As preliminarily mentioned, while the invention is described in connection with packaging of articles of produce, it is obvious that the wrapper may be useful for packaging a wide variety of other bulk items and, therefore, should not be thought of as limited in use to such produce packaging purposes.

It will be apparent therefore that there has been described and illustrated a packaging wrapper which is fully capable of attaining the objects and advantages preliminarily set forth. While certain preferred forms of the

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wrapper have been disclosed for illustrative purposes, numerous modifications of the wrapper are possible within the scope of the following claims.

We claim:

1. A packaging wrapper, comprising a sheet of thin, pliable, plastic material having a central slit area bounded by a solid, unslit margin which extends entirely about the slit area, said area having generally parallel rows of spaced slits, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows.

2. A packaging wrapper comprising a sheet of thin, pliable, plastic material having a central, generally circular slit area and a solid unslit margin which extends entirely about the slit area, said area having generally circular and concentric rows of circumferentially spaced slits, the slits in alternate rows being approximately aligned in radial directions of the rows and the slits in adjacent rows being offset in the circumferential direction of the rows.

3. A packaging wrapper comprising a rectangular sheet of thin, pliable plastic material having a central quadrilateral slit area bounded by a solid, unslit margin which extends entirely about the slit area, the sides of said area being parallel to the side edges of the sheet, respectively, said area having generally straight and parallel rows of spaced slits which extend diagonally of the sheet, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows.

4. A packaging wrapper comprising a rectangular sheet of thin, pliable plastic material having a central quadrilateral slit area bounded by a solid, unslit margin which extends entirely about the slit area, the sides of said slit area extending in diagonal directions of the sheet, said area having generally parallel rows of spaced slits which extend diagonally of the area and generally parallel to two opposite side edges of the sheet, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows.

5. A packaging wrapper comprising a sheet of thin, pliable plastic material having a central slit area bounded by a solid, unslit margin which extends entirely about the slit area, said slit area having generally parallel rows of spaced slits, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows, and the spacing between two adjacent

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rows being appreciably greater than the spacing between the remainder of the rows to provide a solid, unslit band to which a label may be applied.

6. A packaging wrapper comprising a film of thin, pliable, transparent plastic material having a central slit area bounded by a solid, unslit margin which extends entirely about the slit area, said area having generally parallel rows of spaced slits, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows.

7. A produce package comprising, an open-topped container, a quantity of produce filling said container and extending above the open top thereof, a thin film of pliable plastic material having a central slit area bounded by a solid, unslit margin which extends entirely about the slit area, said area having generally parallel rows of spaced slits, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows, the slit area of said film overlying said produce and being stretched thereover and downwardly along the sides thereof and into said container, the unslit margin of said film being in said container between said container and said produce, with said slits stretched to define relatively large openings.

8. A produce package comprising, a quantity of produce, a thin film of pliable plastic material having a central slit area bounded by a solid, unslit margin which extends entirely about the slit area, said area having generally parallel rows of spaced slits, the slits in alternate rows being approximately aligned in the transverse direction of the rows and the slits in adjacent rows being offset in the lengthwise direction of the rows, the slit area of said film overlying said produce and being stretched thereover and downwardly along the sides thereof, with the margin of said film arranged beneath said produce, with said slits stretched to define relatively large openings, and means for holding said film in said position relative to said quantity of produce.

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