

March 16, 1965

E. LAPIDES
DISPLAY PACKAGE

3,173,540

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2 Sheets-Sheet 1

FIG. 1

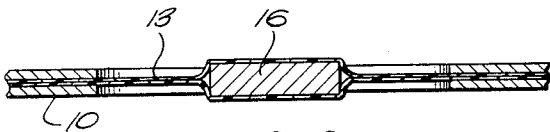
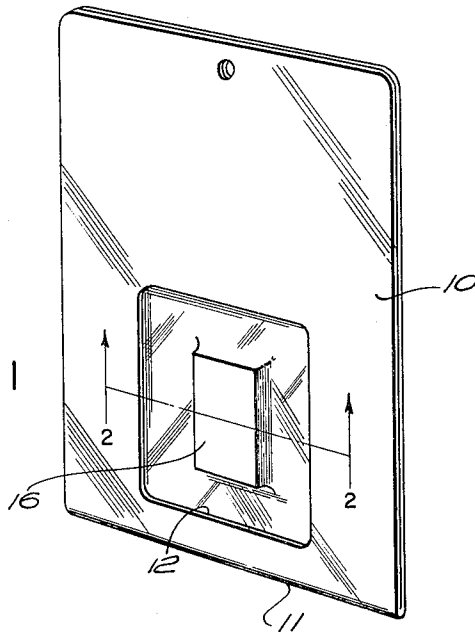


FIG. 2

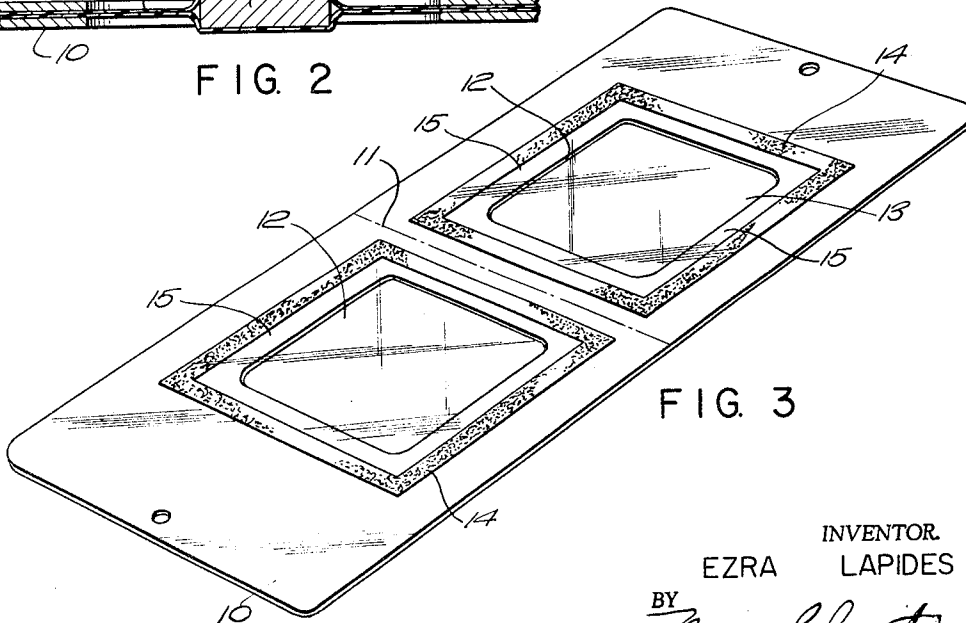


FIG. 3

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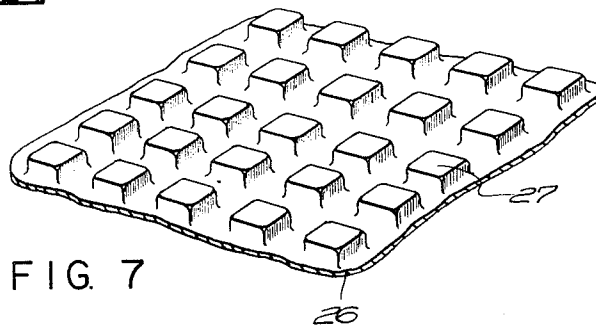
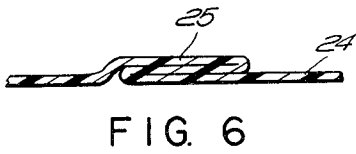
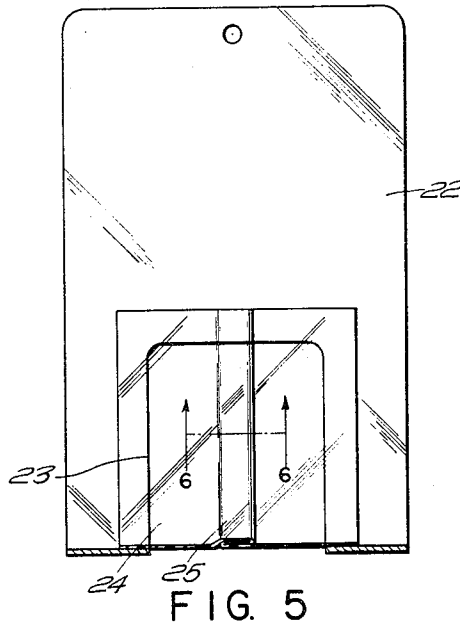
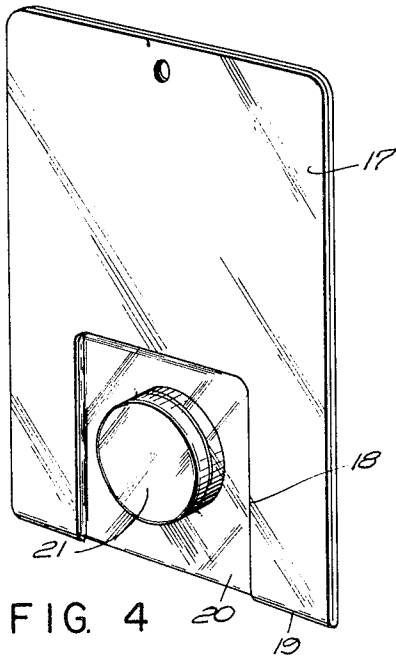
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2 Sheets-Sheet 2



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DISPLAY PACKAGE

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1 Claim. (Cl. 206—78)

My present invention relates to the packaging art and more particularly to a novel construction of a display package.

The principal object of the present invention is to provide a small retail package adapted to hold small articles of varying sizes and shapes.

Another object of the present invention is to provide a retail package which can be used for different articles without adjustment.

Another object of the present invention is to provide a retail package requiring little or no machinery to fill and close.

A further object of the present invention is to provide a retail package for small articles which is simple in construction and easy and economical to manufacture and assemble.

With the above and other objects and advantageous features in view my invention consists of a novel arrangement of parts more fully disclosed in the detailed description following in conjunction with the accompanying drawings and more particularly defined in the appended claim.

In the drawings,

FIG. 1 is a perspective view of a display package embodying my invention.

FIG. 2 is an enlarged section along line 2—2 on FIG. 1.

FIG. 3 is a perspective view of the package in open position.

FIG. 4 is a perspective view of another form of package embodying my invention.

FIG. 5 is a front elevation of still another form of package embodying my invention.

FIG. 6 is an enlarged section taken on line 6—6 on FIG. 5.

FIG. 7 is an enlarged fragmentary perspective view of another form of film for the package of the present invention.

Many articles are sold in retail packages which comprise a card on which a plastic bubble is mounted. The article is sealed within the bubble so that it is on display. Such packages must be engineered and designed for the particular article. The costs of designing the package and tooling the packaging machinery to handle the particular article are fairly high. Thus only articles that are sold in extremely large quantities are packaged in this manner.

The present invention is designed to provide an inexpensive display package which will hold articles of varying shapes and sizes without revision. The package of the present invention requires only the standard machinery for manufacturing the same and can be stocked in standard sizes for quick delivery to small users. Little or no machinery is required to fill the package or to close the same. As a matter of fact the filling and closing can be done manually.

The package of the present invention is designed to take advantage of the properties of heat shrinkable film. This film comprises biaxially oriented plastic films such as polyvinyl chloride, polyethylene, and polypropylene. These films can be produced to provide up to approximately a fifty percent shrinkage when heat is applied thereto. The films permit an article to be initially loosely wrapped and then shrunk so that the film is reduced into

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contact with the article but is also relaxed and free of stresses and strains so that all wrinkling is eliminated. A simple form of packaging utilizing the properties of the shrink film is illustrated in FIGS. 1 to 3 inclusive.

An elongated rectangular cardboard base 10 is provided with a crease or fold line 11 to form the folded package shown in FIG. 1. Spaced from the fold line 11, each portion of the base 10 is provided with a die cut window opening 12. The openings 12 align with each other when the base is folded as shown in FIG. 1.

In accordance with the present invention each opening 12 is covered by a square of heat shrinkable film 13. To allow the film to adjust itself, the outer edge of the film is provided with an adhesive portion 14 for glueing to the base 10. The portion 14 may be of any desired width such as $\frac{3}{8}$ ". However, the film squares 13 are of such size that a strip of approximately $\frac{3}{8}$ " wide without adhesive surrounds the opening at 15.

With the parts thus assembled as shown in FIG. 3, the outer edges of the squares of film 13 may be provided with a self-sealing adhesive. The parts may also be adhered to each other with regular adhesive applied during the packaging operation.

In use a small package or article 16 is positioned in the center of the die cut opening 12 so that when the portions are folded the article is clamped between two sheets of shrinkable film which are now adhered to each other around the perimeter. By subjecting the package to a short blast of warm air the film will wrap itself around the package as shown in FIG. 2 without wrinkling and without stresses or strains. If desired the inner portion of the base 10 may be completely covered with one large patch of shrinkable film. Now when the package is folded into the form shown in FIG. 1 it can be heat sealed either with direct heating or high frequency induction heating.

The above construction provides an inexpensive display package for a small article which is easy to use and easy to open. Stock sizes may be manufactured in advance for quick delivery to small users for rapid overprinting and packaging. The package can be made on standard folding box equipment and requires little or no machinery to fill and close. In small quantities it can be done completely manually.

A variation of the package shown in FIG. 1 is illustrated in FIG. 4. In this form the base 17 is provided with a cut out portion 18 which extends through the fold line 19. The shrink film 20 thus must be in one piece across the fold line 19. The packaged article 21 is held in the opening 18 in the same manner as in the form shown in FIG. 1.

The shrink film has a tendency to relax and shrink thus eliminating stress and strain from the sheet and providing a smooth non-wrinkled finish. When the article is inserted between the sheets of films a certain amount of strain or stress exists due to the thickness of the article. This initial straining can be avoided by prestretching the pocket, or providing the film with embossing as shown in FIG. 7, or by folding the film to provide excess material in the pocket as shown in FIGS. 5 and 6. All this excess material shrinks away when the heat is applied. However, it may be found necessary to avoid tearing the film when the article has sharp corners. Referring to FIGS. 5 and 6, the base 22 is shown therein with the type of opening 23 illustrated in the construction shown in FIG. 4. The film 24 is provided with a central fold 25 which adds material to the pocket permitting the insertion of a bulky article.

FIG. 7 illustrates a sheet of film 26 having embossing 27 thereon. This embossing actually stretches the pocket and provides sufficient excess material for easy wrapping around a thick article. The embossing 27 and the fold

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25 in the previous form both disappear when the film is subjected to its shrinking temperature.

I have thus provided a novel display package in which a small article can be packaged and displayed between two sheets of heat shrinkable film. The film may be heat sealable or the package may be sealed with adhesive. Either way the package provides a stock item which can be readily available to small users at a reasonable cost. Other advantages of the present invention will be readily apparent to a person skilled in the art.

I claim:

A display package comprising an elongated rectangular sheet of base material having a central transverse fold line for folding said base upon itself to form a rectangular package of double thickness, said base having a cut out opening on each side of said fold line, said openings aligning when said base is folded, a sheet of heat shrinkable film covering said openings, said film surrounding an article placed between the folds of said base, and means

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for causing said folds to adhere to each other, said film comprising a single sheet covering the inner surface of said base and opening, said film having a plurality of spaced embossed portions to provide an excess of material for the article prior to heat shrinking.

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