Aug. 8, 1967 R. WATTS, JR 3,334,804

DISPENSER PACKAGE

Filed Dec. 20, 1965

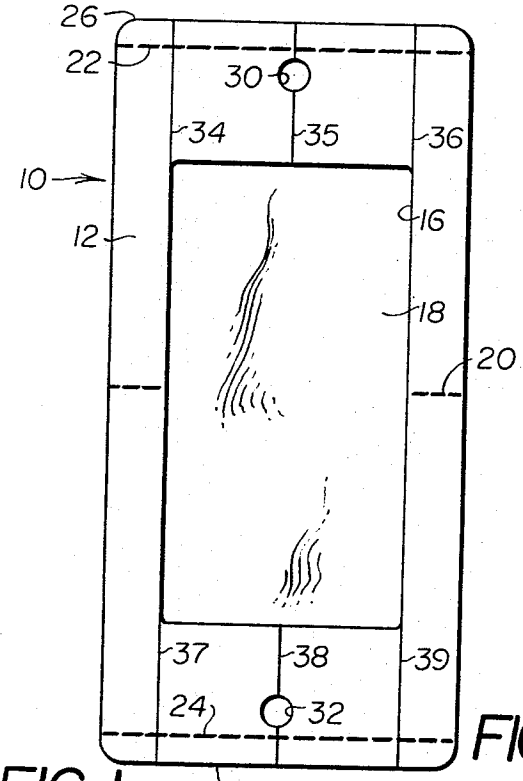

FIG. 1

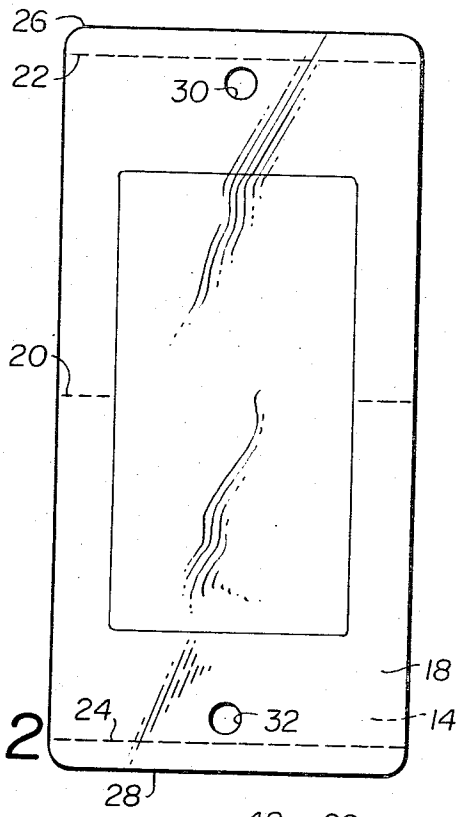

FIG. 2

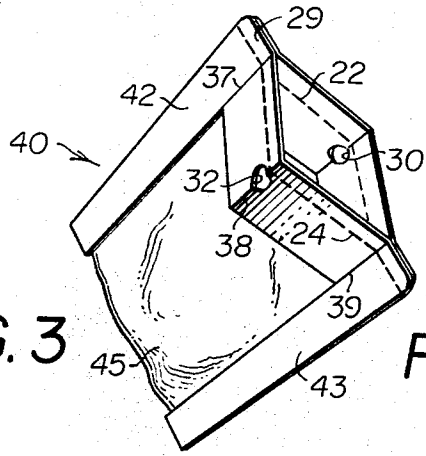

FIG. 3

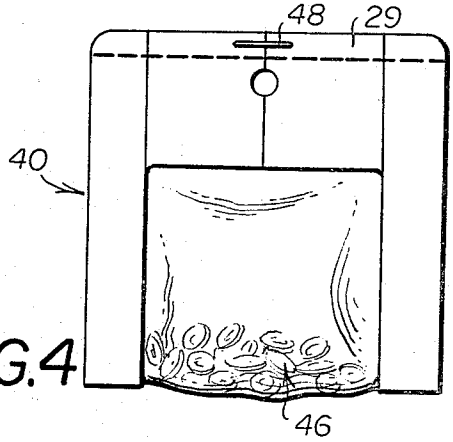

FIG. 4

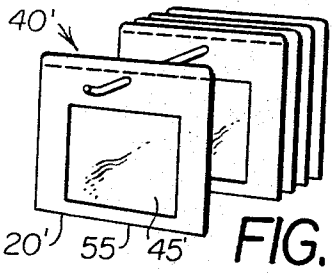

FIG. 5

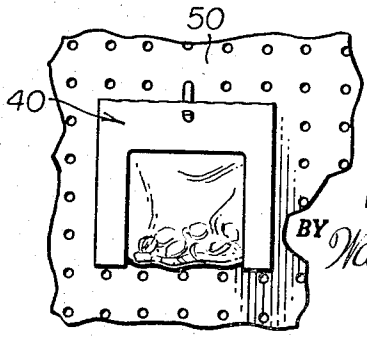

FIG. 6

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DISPENSER PACKAGE

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12 Claims. (Cl. 229—53)

This invention relates to packaging and more particularly to a package in which an article or articles are contained in a plastic pocket supported by a folded card.

In present-day merchandising, many articles are packaged in separate units. Retail products are often packaged in separate units in order to display the products against an attractive background which can additionally contain art work, illustrations of use, trademark, and price. Packages for separate units facilitate self-service, so-called impulse sales, serve as protection in shipment, and deter pilferage.

In general, many packages of the above type provide a sealed container for the article and are intended to be destroyed when the article is removed from the package. Commonly, a plastic bubble, cup or pocket is attached to a display card, either by heat sealing to the face of an adhesive-treated card or by being held within a folded card containing an aperture which permits the bubble to protrude from the face of the card while gripping it by its flange. More recently, articles have been packaged by skin packaging where an article is placed on a card and a film is then vacuum drawn down over the article and onto the card. The film is bonded to the face of the display card by an adhesive or by heat sealing. These and other containers of this type are often difficult to open and, when opened, are rendered useless as containers.

In a great many instances, particularly where a number of individual articles are to be packaged together, but which will not all be used at once, it is desirable to provide a reusable package. For example, it is becoming quite common to market small numbers of hardware items, such as nuts, bolts, screws, nails, hooks, etc. for household use. In the past, such items have been put up in small boxes or plastic vials to provide containers for unused quantities of the items sold. Such containers do not lend themselves to attractive displays, are often costly, and seem to either completely conceal the article being sold or else provide little or no space for labeling, advertising, or indicating specifications or prices.

The package of the present invention, once opened, becomes a dispensing container for the contents. The package also visibly and attractively displays the contents of the package, is inexpensive to manufacture, and provides for convenient labeled storage of the unused portion of the contents. This package is formed of a display card of the fold-over type and a plastic film for providing a pouch in a product receiving aperture of the fold-over card, so as to embody the many advantages inherent in card-type packages. At the same time, the package is constructed and arranged to be conveniently opened without destroying the usefulness of the package as a container for the articles within the pouch. Once opened, the container is constructed to facilitate dispensing the packaged items and is thereafter readily closed and can be conveniently hung on a wall or apertured board for storage.

One embodiment of the package of the present invention is formed of a display card having a large central aperture. A transparent plastic film is adhered to one side of the card and extends across the large central aperture. The film is preferably a formable and heat sealable film, such as polyethylene. The sheet of plastic is adhered to the surface of the card with either an adhesive or by heat sealing. The film is normally formed to a suitable degree in the area across the central aperture of the card to

provide a flexible pocket. The card and plastic film are then folded in half to sandwich the film between the two folded portions of the card, forming a pouch-like container or pocket for the products. The card borders the pocket or pouch on three sides and is heat sealed or otherwise adhered together along the two sides of the pocket and the top. The seal at the top is confined to a strip along the top. Perforations are provided so that this strip may be readily torn off to open the package.

In another embodiment two apertures are formed in panels of a display card, one on each side of a fold line to be superimposed when the card is folded. A transparent film is secured over the apertures to form a pocket when the two panels are in face-to-face relationship. This embodiment provides card portions about the entire periphery of the pocket. In all other aspects it is the same as the first embodiment.

A hole is provided through both thicknesses of cardboard forming the top of the package, below the top strip. This allows the card to be hung on a hook both before the card is opened, when it is being displayed for sale, and after the card is opened, so that the puchaser may store the card on hooks if he desires. Even though opened, the pouch effectively retains the contents when the package is suspended from the hole at the top of the package.

An important feature of the invention is the provision of score marks or partial cuts in the outer surface of the card above the pouch, on both sides of the card. Preferably, these are three parallel partial cuts that extend from the pouch to the top of the package, i.e. to the edge that includes the tear-off strip. One partial cut is located at each side of the pouch and one is located midway between these two, at the center of the top of the pouch. With this construction, the two side edges of the package adjacent the top may be squeezed, and the top of the package will open wide to receive or dispense the contents of the pouch.

These and other features of this invention will be readily appreciated as the same become better understood by reference to the following detailed description when considered in connection with the accompanying drawings in which:

FIGURE 1 is a plan view of a packaging device constructed in accordance with the present invention showing the outside surface of a card adapted to be folded in half to form overlying card portions that in part surround a folded plastic pouch;

FIGURE 2 is a plan view of the other side of the packaging device shown in FIGURE 1 illustrating the manner in which the plastic pocket material covers the entire inner surface of the card in a preferred embodiment;

FIGURE 3 is a perspective view of a package formed from the packaging device shown in FIGURES 1 and 2, illustrating the manner in which the construction of the packaging device provides an opening to the package for convenient loading and dispensing;

FIGURE 4 is a front elevational view of a closed package formed from the device shown in FIGURES 1 and 2, illustrating the placement of a staple to hold the package closed;

FIGURE 5 is a diagrammatic perspective view of another embodiment of the package of the present invention and also illustrates the manner in which a plurality of packaging devices may be displayed for sale; and

FIGURE 6 is a diagrammatic front elevational view of a package constructed in accordance with this invention, illustrating the manner in which the package may be stored on a perforated wall board after the package has been opened and the contents partially used.

Referring now to the drawings and to FIGURES 1 and 2 in particular, a card **10** of cardboard or card stock is shown. The card **10** is rectangular in shape, having a surface **12** that forms the outside or face of the package and a second surface **14** that is the back and will be located inside the package. A large central aperture **16** forms a window area in the card. As shown, the aperture is also rectangular. A plastic film **18** is adhered over the inside surface **14** of the card **10** as best shown in FIGURE 2, and extends across the aperture **16**. The preferred film is a transparent, flexible, inexpensive, thermoplastic film, capable of bonding both to itself and the card without any adhesive, although in many instances adhesive may be applied to bond the film to the card. Polyethylene film has all of these and other desirable characteristics.

In the embodiment shown, the heat softenable transparent film **18** has been heated and formed somewhat in the area of the aperture **16** so as to have a greater surface area than the area of the aperture. The film **18** is adhered to the inside surface **14** of the card **10** by the application of heat and pressure (heat sealing) or with an adhesive. Forming of the film may be accomplished by applying heat to soften the film and then either allowing the film to sag or by establishing a differential pressure from one side of the card to the other such as taught in United States Patent No. 3,053,023 issued Sept. 11, 1962, to me under the title, "Package and Method of Making Same."

Two longitudinally aligned and spaced central transverse scores **20** divide the card **10** into halves. Additional transverse scores **22, 24** are provided adjacent end edges **26, 28**, respectively parallel to the central transverse scores **20** in the embodiment shown. As will become more clear subsequently, the scores **22, 24** are preferably in the form of perforations and they provide an end tear strip **29**. The score lines **22, 24** should be spaced inwardly from the respective edges **26, 28** a distance of at least one-quarter inch to provide ample area for sealing the package closed as well as for gripping the tear strip to open the package. The two score lines **22, 24** are spaced an equal distance inwardly from the adjacent end edges so as to register with each other when the card is folded about the scores **20**.

Two holes **30, 32** are formed in the card **10** and film **18**. The hole **30** is formed adjacent the end edge **26**, between the transverse score line **22** and the aperture **16**. Similarly, the hole **32** is formed adjacent the end edge **28**, between the transverse score line **24** and the aperture **16**. Both are spaced an equal distance from the adjacent end edge so as to be aligned or registered when the card is folded. In the embodiment shown, the holes **30, 32** are centrally located so the package will hang neatly.

As shown in FIGURE 1, there are six longitudinally extending score lines **34–39** in the outside surface **12** of the card **10**. As shown, these score lines preferably consist of cuts extending part way through the card **10**. Alternatively, they may consist of spaced perforations of the same type as the score lines **20** already described or they may be impressed fold lines. The three score lines **34, 35, 36** are parallel to each other and extend from the aperture **16** to the end edge **26**. Each of the lines **34** and **36** extend from a corner of the aperture **16** and the line **35** extends from a midpoint across the aperture **16**. Similarly, the three score lines **37, 38, 39** extend from the aperture **16** to the end edge **28**. The lines **37** and **39** extend from corners of the aperture **16** and the line **38** extends from a point midway across the width of the aperture.

The score lines **34–39** are all located on the same surface **12** of the card **10** and cause the package to form a top opening, as shown in FIGURE 3. The location of the score lines **34–39** on the same, outside, surface is not only convenient in manufacture, but also has functional significance. The center score lines on each side of the package readily part at the outer surface so that the upper edges of the package separate. The score lines at the corners of the aperture **12** provide a weakened area to also facilitate forming the opening but, as the top opens, the side score lines **34, 36**, and **37, 39** are compressed while the inside surface of the card behind the score lines is stretched. As a result, the top opening is urged closed when forces opening the package are released.

To form a package **40** from the card shown in FIGURES 1 and 2, the card **10** is folded in half on the central transverse scores **20** so that the inner surface **14** of each card half is in facing relationship with the other. The central transverse score lines **20** and the folded transparent film **18** form the bottom of the package, and the portions of the card **10** extending alongside the window area **12**, between the central transverse score line **20** and the end edges **26, 28** form the sides of the package. These sides are designated by reference numerals **42, 43** in FIGURE 3 of the drawings. The sides **42, 43** inward to the aperture **16** of the card and inward to the score lines **34, 37** and **36, 39** are adhered together in overlying folded relationship. This may be conveniently accomplished by heat sealing the edges, in which case the film **18** bonds to itself, adhering the halves of the card together along the sides. This forms a pocket or pouch **45** of the transparent film **18**, closed on three sides. See FIGURE 3. By virtue of the score lines **34–39**, and the absence of a card portion below the pouch restricting movement of the sides **42, 43**, the top portion of the card extending between the sides **42, 43** can be easily opened by squeezing the side edges toward each other at the top of the package. The card folds along score lines **34–39** to form a diamond-shaped opening (FIGURE 3). Because the film **18** forming the pocket **45** is adhered to the card across the top of the package, the opening between the folded card provides direct access to the pouch **45**. Parts to be packaged, such as the nuts and bolts **46** shown by way of illustration in the drawings, are dropped into the pouch **45**. When the force squeezing the edges **42, 43** toward each other at the top of the package is removed, the resiliency of the card restores the top portion to the original shape. The package is then sealed along the strip **29** above the transverse score lines **22, 24** as by a staple **48** (FIGURE 4) or by applying heat and pressure or an adhesive. This maintains the package closed during shipment and marketing.

When it is desired to open the package **40** and remove part or all of the contents, the strip **29** above the transverse score lines **22, 24** is then torn off. The sides **42, 43** may then be squeezed toward each other at the top of the package to form an enlarged opening, and the contents of the package **45** poured out. Where only a portion of the contents is to be used and the remainder to be stored, the package may be suspended from the holes **30, 32** which are below the portion torn off. The transparent pouch **45** displays the contents and the label on the card portions identifies the contents. FIGURE 6 illustrates the manner in which the package may be suspended from an apertured wall board **50** to provide orderly labeled storage of small items.

A package **40'** of modified form is shown in FIGURE 5, and illustrates the manner in which the packages of this invention may be effectively displayed. The package **40'** includes a card portion **55** beneath a flexible pocket **45'**. This construction is achieved by providing two spaced apertures in the card, one on each side of a fold line indicated at **20'**. A plastic film is secured over each aperture and the pocket **45'** is formed within the superimposed apertures when the card is folded and sealed together. The pocket is bordered on all sides by the card. In all other respects, the package **40'** is the same as the package **40**.

Although the invention has been described in its preferred forms with a certain degree of particularity, it is understood that the present disclosure of the preferred

forms has been made only by way of example and that numerous changes in the details of construction and the combination and arangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What is claimed is:

1. A packaging device comprising a rectangular card with a single large rectangular central aperture; two fold lines in the card aligned with each other perpendicular to and on opposite sides of the rectangular aperture along a line that bisects the aperture; a perforated score line across the card from one side to the other at each of two opposite ends of the card extending in a direction parallel to the last mentioned fold lines that bisect the card, each of said perforated score lines being located between an adjacent end edge of the card and the central aperture; three parallel scored fold lines at each end of the card, extending between the central aperture and the end edge in a direction at right angles to the perforated score line across the end of the card, two of the scored fold lines at each end extending from the corners of the central aperture and the third score line being spaced midway between the other two and all on the same side of the card; and a transparent, flexible, plastic film adhered to the opposite side of the card from the side containing the parallel score lines and having an area within the central aperture greater than the area of the central aperture.

2. A package comprising: opposed card panels; a flexible pocket secured between the opposed card panels and bounded by the panels about a portion of the periphery of the pocket, including at least a top portion; said pocket having closed side and bottom portions and an unsealed top portion, the unsealed top portion being adhered to the card panels between overlying portions of the panels; a perforated score line across the top portion of the card panels; and means sealing the overlying top portions of the card panels together only above the perforated score line.

3. The package of claim 2 wherein portions of the card panels extend along the sides of the pocket and are sealed together.

4. The package of claim 2 including a hole through the card above the pocket and below the perforated score line across the top portion.

5. The package of claim 2 wherein the entire periphery of the pocket is bounded by the card.

6. A package which comprises a card of two overlying portions, said card at least in part surrounding a flexible pocket for holding a packaged article, said pocket being adhered to the card between the two portions, and sealed together about a part but not all of the periphery so as to provide an opening to the pocket between the two overlying portions of the card from an edge of the package; a perforated score line across the card near the said edge of the card; and a plurality of score lines extending along overlying portions of the card from the pocket to the said edge of the card.

7. A package for selectively dispensing articles therefrom comprising:

(a) first and second card panel portions each having inner and outer surfaces;

(b) one of said panel portions including an aperture therein;

(c) a piece of plastic film adhered to said one card portion inner surface and including a formed, pliable, pocket projecting through said aperture;

(d) said panel portions defining a top opening;

(e) said panel portions and film being adhered together other than at said opening around said aperture such that the panel portions and film together define a product receiving receptacle;

(f) said panel portions having sections disposed between the aperture and the opening and extending the width of the opening;

(g) said sections having a normally closed position substantially in abutment with one another and being flexible away from one another to an open position upon compressive force being applied to the side edges of the panel portions; and,

(h) said sections having inherent resiliency returning them to the normally-closed position upon release of such compressive pressure.

8. The device of claim 7 wherein both of said portions having apertures and the apertures are aligned when the panels are secured together around the aperture.

9. The device of claim 7 wherein said sections are scored to facilitate opening of the package and return to the normal position.

10. A reusable article for packaging, displaying and dispensing a plurality of items, said article comprising: two opposed card panels sealed together in part to form a flat card portion of the package and with a section where opposed panel portions are not joined and are unsealed; a formed, pliable, plastic pocket secured between the card panels and bounded about at least a major portion of its periphery by said card panels, said plastic pocket being constructed and shaped to loosely contain a plurality of items; an opening into the plastic pocket; portions of the plastic pocket forming the opening being between and adhered to the unsealed sections of the card panels; said sections having a normally closed position substantially in abutment with one another and being scored to facilitate flexing apart to an open position to form a passageway to the flexible pocket.

11. The article of claim 10 wherein the opposed card panels include a sealed portion at the edge of the card panels adjacent the unsealed section retaining the unsealed section in closed position, and perforations in the opposed card panels extending between the said sealed portion and the pocket so that the article can be conveniently opened.

12. The article of claim 10 including, in combination, a plurality of parts loosely contained within the plastic pocket and individually smaller than the opening and passageway to the plastic pocket.

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