United States Patent [19]

Chaney

[11] **3,756,387**

[45] **Sept. 4, 1973**

[54] **AMMUNITION PACKAGING**

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[22] Filed: **Aug. 2, 1971**

[21] Appl. No.: **168,437**

Related U.S. Application Data

[63] Continuation of Ser. No. 759,878, Sept. 16, 1968, abandoned.

[52] **U.S. Cl.**..... **206/3,** 206/45.34, 220/41

[51] **Int. Cl.**... **F42b 39/00,** B65d 25/54, B65d 43/12

[58] **Field of Search**..... 206/3, 42, 45.34; 220/41

[56] **References Cited**

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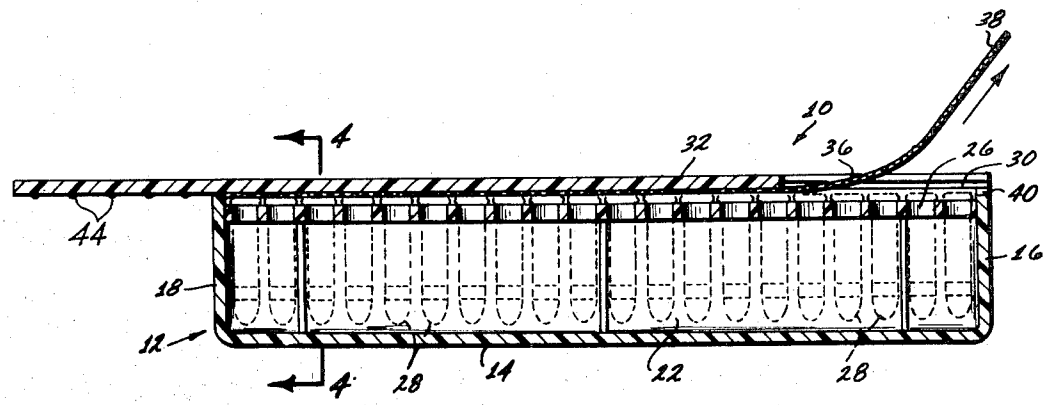
Primary Examiner—Leonard Summer

Attorney—Robert L. Harrington

[57] **ABSTRACT**

A rectangular container having transparent bottom, side and end walls including a removable tray supported by the walls of the container in which a number of cartridges are suspended by rows and columns. A transparent lid snaps into place over the container and is slidably removable to expose for removal successive rows of the cartridges. A card label having identification and advertising matter printed thereon fits under the transparent lid and a tab on the end of the card label protrudes from the container so that the package can be hung for storage and display.

4 Claims, 5 Drawing Figures



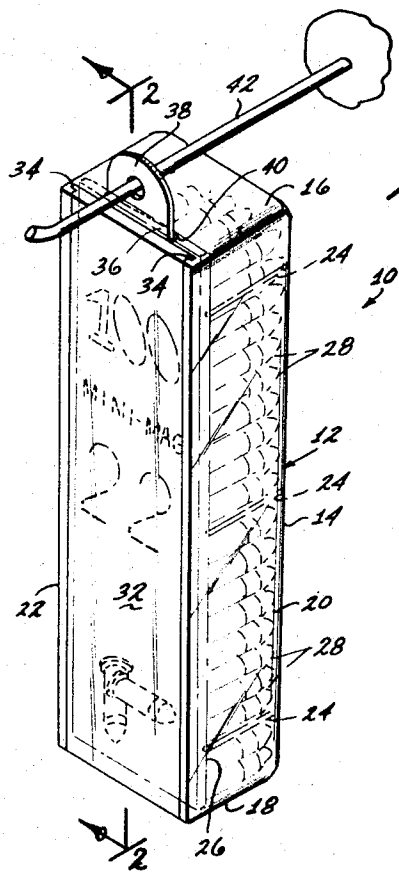


FIG. 1

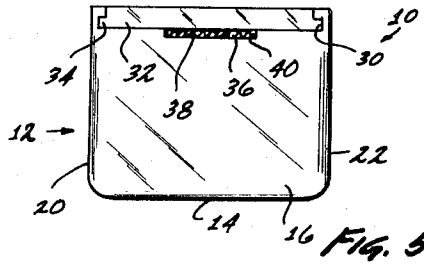
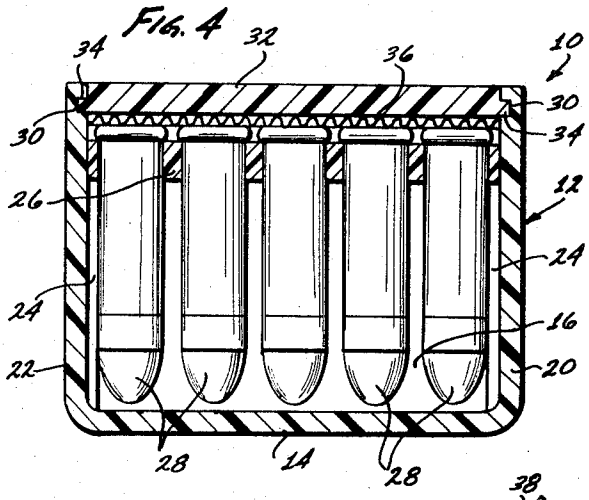


FIG. 5

FIG. 4



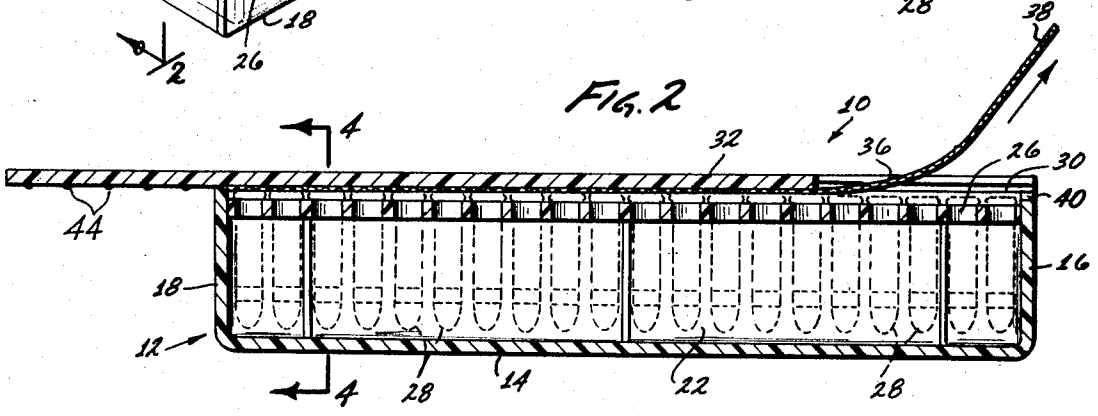


FIG. 2

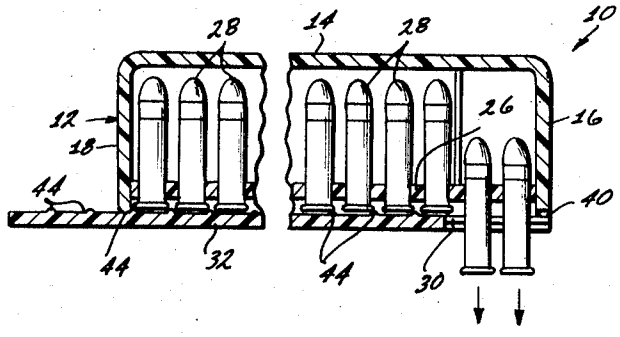


FIG. 3

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AMMUNITION PACKAGING

This is a continuation of applicant's copending application Ser. No. 759,878, filed Sept. 16, 1968, now abandoned.

HISTORY OF THE INVENTION

This invention relates to a storage and display package for Ammunition such as .22 caliber cartridges and the like.

Cartridges such as used in .22 caliber rimfire are commonly packaged in a small cardboard or paper box. A first layer of Cartridges is placed with nose end up in rows and columns on the bottom of the box and a second layer of Cartridges is placed with nose end down interspersed with the first layer. The Cartridges are jammed together and therefore difficult to remove other than by dumping an undetermined portion of the box. When a number of Cartridges are removed, the remaining Cartridges are no longer supported in an upright position. The box has very little display appeal and is inconvenient for storage. It is therefore an object of this invention to provide a package that is more convenient to the user, more attractive to the purchaser, has greater advertising appeal, and is more adaptable to automated assembly line packaging.

SUMMARY OF THE INVENTION

In general the preferred embodiments of the invention are comprised of a transparent rectangular container having supporting ribs that support therewithin a removable tray. The tray height and configuration is designed to hold cartridges in an oriented manner in rows and columns suspended on the tray by the rim of the head of the cartridge. The tray while separated from the container is easily loaded with the desired number of cartridges in an automated assembly line process. Thereafter the tray, while containing the cartridges, can be readily positioned on the supporting ribs within the container. A card label is placed over the tray with a tab protruding through a cut out portion in either end wall of the container. A transparent lid snaps into place in recesses or grooves provided in the side walls of the container. With the lid in place, the card label cannot be removed and the tab which protrudes from the container can be used to hang the package on a wall hook or peg board such as commonly provided in retail stores. The lid can be slid off either end of the container and with the card label removed, any number of selected rows of cartridges can be exposed for easy removal.

These and other advantages will be more clearly understood by reference to the following detailed description and drawings wherein:

FIG. 1 is a perspective view showing an ammunition package in accordance with the invention;

FIG. 2 is a sectional view as taken on line 2 — 2 of FIG. 1 but showing the card label being removed therefrom;

FIG. 3 is a side view showing the manner of removing a selective number of Cartridges from the package of FIG. 1;

FIG. 4 is a sectional view taken on line 4 — 4 of FIG. 2; and

FIG. 5 is an end view of the Ammunition Package shown in FIG. 1.

Referring to the drawings, a storage and display package 10 comprises a rectangular box-like container

12 of molded transparent plastic having a bottom wall 14, end walls 16 and 18, and side walls 20 and 22. Each side wall 20 and 22 has three vertical supporting ribs 24 molded therein. A plastic rigid tray 26 has openings therein arranged in rows and columns holding cartridges 28, e.g. 100 cartridges arranged in 12 rows and five columns. The tray 26 is adapted to fit inside the container 12 and is supported on the six supporting ribs 24. The supporting ribs are of a height so that the cartridges 28 are held in the tray 26 spaced from the bottom wall 14 as shown in FIG. 4.

Longitudinal grooves 30 are formed on the inside and near the top edge of each of the side walls 20 and 22. A rigid plastic lid 32 has flanges 34 on each side edge which mate with the grooves 30. The end walls 16 and 18 are lower than the side walls by an amount sufficient to allow the cover to slid on and off the container 12. The top of the side walls, i.e. above the grooves 30 are unsupported by the end walls. Because of the resiliency of the plastic, the upper edges of the side walls can be spread slightly outwardly. Thus during assembly the cover can be snapped into place by merely forcing the cover down onto the side walls. The side walls are sprung until the flanges 34 are positioned in the grooves 30 whereupon the walls spring back and securely hold the cover against removal other than by sliding it along the grooves.

Whereas the transparency of the container and lid are attractive to the prospective purchaser and user, it is important to the retailer that the package be provided with identifying trademarks and other printed information. Thus as shown in the Figures, a display card 36 is adapted to fit over the top of the cartridges and under the transparent lid 32. A tab 38 on the end of the card 36 protrudes through a relief 40 in the top edge of the end wall 16. The tab 38 and relief 40 are narrower than the width of the card and thus the card is securely held inside the container so long as the lid 32 is in place. An opening in the tab enables the package to be hung on a display hook 42 or the like, as illustrated in FIG. 1. Although the relief 40 is shown in end wall 16, it will be understood that a similar relief may be provided in end wall 18. The end walls as well as the side walls of the container 12 would then be identical and it will not matter in assembly which end is located to receive the tab 38 of the card label.

As shown in FIGS. 2 and 3, a column of small detents 44 are formed on the underside of the lid 32. The detents are in registry with the rows of cartridges so that as the lid is slid along the grooves 30, after each row of cartridges is exposed a detent 44 engages the end wall. The detent thus resists further sliding to hold the lid in position while the selected cartridges are removed. The cartridges can be easily removed by tipping the package upside down as shown in FIG. 3. The lid can be forced against the resistance of the indexing detents to expose a succeeding row of cartridges. The detents at each end of the column engage the end walls when the cover is completely closed to prevent unintentional opening.

It is believed that the invention of the above described ammunition packaging provides advantages never realized heretofore. The orderly arrangement of the cartridges as seen through the transparent container is appealing to the prospective purchaser. Also it enables the purchaser to determine at a glance that the container is full and how many cartridges it con-

tains. As the cartridges are removed by the purchaser he can readily see how many are left in the container.

The removable card label gives the retailer a very convenient and eye catching way of advertising the product whereas the purchaser can easily remove the label and retain the more attractive unmarked container. The tab on the card label enables thepackage to be conveniently displayed on the walls of the retailer's store but because it is removed with the card label, there are no hooks or similar extensions to catch on the purchaser's clothing, etc.

The removable tray is very easily loaded with the cartridges in an automated assembly line and the loaded tray is easily placed in the container. The card label is placed over the tray and the lid is quickly and securely snapped into place and the package is ready for shipment. Yet, the lid very conveniently slides off the container to expose the cartridge for removal by the purchaser with the indexing detents locating the lid in registry with the desired row of cartridges.

Although the above described article is the preferred form of the invention it will be understood that persons skilled in the art having knowledge of the invention will be able to make many modifications without departing from the scope of the invention. It is thus to be understood that the above described article is set forth to illustrate the invention and not to define the limits thereof. For example, in one embodiment of the invention the walls of the container may be other than transparent, i.e. translucent or opaque.

Having thus described the invention the following claims are set forth to define the scope thereof.

What is claimed is:

1. A package for storing and displaying cartridges of the type having a body portion and a rim, said package comprising: a box like container including a bottom and end and side walls, certain of the walls provided with inwardly projecting protrusions having support surfaces spaced from the bottom of the container, an upper portion of each side wall separated from both end walls, a groove on the inner side of each upper portion, and at least one end wall of the container having its upper edge spaced lower than the grooves of the side walls, a cartridge holding tray consisting of a flat rigid plate having openings larger than the body portion and smaller than the rim of the cartridges, said tray with cartridges supported on said support surfaces on the protrusions with the cartridges suspended from the bottom of the container, a lid for the container having end and side edges and a flange along each side edge adapted to slide in the grooves over said one end wall, said lid with flanges having a width slightly greater than the distance between the side walls of the container and means for resiliently spreading the upper portions of the walls outwardly in response to a forcing of the lid, and detents on the underside of the lid that engage the end wall to resist free sliding of the lid for holding the lid in place, and a relief portion in one end wall under the lid, a card label having a tab placed under the lid with the tab protruding through the relief portion, and the lid being transparent through which the card can be observed.

2. A package for storing and displaying cartridges of the type having a body portion and a rim, said package comprising: a box like container including a bottom and end and side walls, certain of the walls provided with inwardly projecting protrusions having support surfaces spaced from the bottom of the container, an upper portion of each side wall separated from both end walls, a groove on the inner side of each upper portion, and at least one end wall of the container having its upper edge spaced lower than the grooves of the side walls, a cartridge holding tray consisting of a flat rigid plate having openings larger than the body portion and smaller than the rim of the cartridges and arranged in rows, and columns, said tray with cartridges removably supported on said support surfaces of the protrusions with the cartridges suspended from the bottom of the container; a lid for the container having end and side edges and a flange along each side edge adapted to slide in the grooves over said one end wall, said lid with flanges having a width slightly greater than the distance between the side walls of the container and means for resiliently spreading the upper portions of the walls outwardly in response to a forcing of the lid, and a column of detents on the underside of the lid arranged in registry with the rows of cartridges, each of said detents sequentially engaging the upper edge of said one end wall as the lid is slid over said end wall whereby further sliding is resisted to selectively expose for dumping the row of cartridges in registry with the engaged detent, a removable card label bearing printed information placed under the lid, and the lid being transparent through which the printed information can be observed.

3. A package for storing and displaying cartridges of the type having a body portion and a rim, said package comprising: a flat rigid rectangular plate having openings larger than the body portion and smaller that the rim of the cartridges and arranged in rows and columns: a box like container including a bottom and a pair of opposed parallel end walls and a pair of opposed side walls, the side walls and the end walls defining a rectangular receptacle of substantially the same size as the plate for receiving the plate therein, and inwardly projected protrusions on at least one pair of the walls adjacent the upper edge, and said rectangular plate supported on said protrusions, and the side walls having slideways along their upper edges, a rectangular cover for said container, said cover including slideways cooperatively engaging the slideways of the side walls for sliding removal of the cover, and said cover and container including means to permit the slideways of the cover to be resiliently forced over and into engagement with the slideways of the side walls with the cover in close proximity to the rectangular plate and to the top of the cartridges carried by the plate, and detents on the underside of the lid that engage the end wall to resist free sliding of the lid for holding the lid in place, a removable card label bearing printed information placed under the lid, and the lid being transparent through which the printed information can be observed.

4. A package for storing and displaying cartridges of the type having a body portion and a rim, said package comprising: a flat rigid rectangular plate having openings larger than the body portion and smaller than the rim of the cartridges and arranged in rows and columns: a box like container including a bottom and a pair of opposed parallel end walls and a pair of opposed side walls, the side walls and the end walls defining a rectangular receptacle of substantially the same size as the plate for receiving the plate therein, and inwardly projected protrusions on at least one pair of the walls

adjacent the upper edge, and said rectangular plate supported on said protrusions, and the side walls having slideways along their upper edges, a rectangular cover for said container, said cover including slideways cooperatively engaging the slideways of the side walls for sliding removal of the cover, and said cover and container including means to permit the slideways of the cover to be resiliently forced over and into engagement with the slideways of the side walls with the cover in close proximity to the rectangular plate and to the top of the cartridges carried by the plate, and a column of detents on the underside of the cover arranged in registry with the rows of the cartridges, each of said detents sequentially engaging the upper edge of the end wall as the cover is slid over said end wall whereby further sliding is resisted to selectively expose for dumping the row of cartridges in registry with the engaged detent, and a relief portion in one end wall under the cover, a card label having a tab placed under the cover with the tab protruding through the relief portion, and the cover being transparent through which the card can be observed.

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