The present invention relates to the packaging of merchandise for sale, and more particularly to medicaments in the form of pills, tablets or pellets.

Among the objects of the present invention is to provide a novel merchandise package involving improvements which facilitate the ready removal of the merchandise therefrom, and which at the same time serves to fully display the said merchandise.

While it has been conventional practice to merchandise tablets in containers so constructed that the said tablets are opened by the user and inspection through the medium of transparent or translucent closure elements for said container, nevertheless where such material is in the form of cellulose acetate material or the like, such as the product sold under the name "Cellophane," a great deal of difficulty has been experienced in fracturing the package to remove the tablets or the like.

It is accordingly an object of the present invention to improve such packages by the provision of means which facilitates the fracturing or rupture of the closure elements to permit the ready removal of the said tablets or the like.

A further object of the present invention is to provide for packaging tablets or the like which are preferably retained in separate compartments or openings in the package to prevent damage to or injury of the same during their transportation from place to place, yet so exposed to view that the same can be used as desired.

The present invention is predicated upon a desire to form the said tablets or container with means which upon application of pressure in the vicinity thereof, causes one or more of the closure elements of the container to be fractured or ruptured, which procedure is extremely difficult to accomplish in packaged merchandise of the type under consideration.

A still further object of the present invention is to provide a novel article of manufacture in the form of a tablet having an abrupt and sharp edge formation which is adapted to cooperate with closure elements of the type above indicated, and upon application of pressure in the vicinity thereof to rupture or fracture the same. Other objects, features, capabilities and advantages are comprehended by the invention, as will later appear and are inherently possessed thereby.

Referring to the drawing—

Figure 1 is a view in perspective of a container for merchandise involving the improvements according to the present invention.

Figure 2 is a view in section taken in the plane represented by line 2—2 of Figure 1 of the drawing:

Figure 3 is a view in perspective of a pill or tablet embodying the improved structure adapting the same for use in a container such as shown in Figure 1:

Figure 4 is a view in perspective of a tablet or pill adapted for use in the package assembly of Figure 1 of the drawing:

Figure 5 is a view in perspective of a further alternative form of construction for a tablet embodying improvements according to the present invention and adapting the same for use in conjunction with the container shown in Figure 1:

Figure 6 is a fragmentary view in section of a further modified construction in a merchandise package and incorporating novel features according to the present disclosure:

Figure 7 is a fragmentary top plan view of the device represented in Figure 6 of the drawing; and

Figure 8 is a fragmentary view in section of still another modification of the invention.

Referring now more in detail to the drawing, an improved merchandise package selected for the purpose of illustrating one form of the present invention is shown in Figure 1, as comprising a package or container which may be of any desired size or shape comprising the central body portion and formed of fibrous or other material and substantially rigid in its formation to prevent destruction or injury to the container, and which element is provided with a plurality of openings therethrough which are aligned to form substantially parallel rows extending in spaced relation longitudinally of the member 2.

Disposed within the openings 4 are a plurality of tablets or pills 6 which are held in position within the package formed by the openings 4 as by means of the outer closure elements 8 and 10 which may be formed of any suitable material. In the illustrative example of the invention as shown in Figures 1 and 2, the closure elements 8 and 10 are formed preferably of "Cellophane," although the invention contemplates other similar transparent or translucent closure elements for the container herein disclosed, or if desired the said closure elements may be of opaque material. As is very well recognized, "Cellophane" has particular and desirable advantages as an element in a merchandise package because of its transparency, its resistance to moisture and be-
cause of its frangible characteristics which permits its rupture for removal of the merchandise disposed in the said container. One, however, that while "Cellophane" can be ruptured, it is often times difficult to accomplish because of the inability to apply a tearing or pulling force to cause such rupturing or fracturing thereof. Accordingly, the present invention takes advantage of the desirable characteristics of such a material and provides means adapted to cooperate therewith to facilitate the rupturing and fracturing of the same for removal of the contents from the container.

As one illustrative form of such means, the tablets or pills 6 may be formed, as shown in Figure 3, to include a protrusion 9 projecting from one of the surfaces thereof and being shaped in the form of a pyramid in which the surfaces converge to form a sharp point or cutting edge, with well defined sloped edges which readily penetrate the "Cellophane" or other material forming the closure elements of the container upon application of pressure in the vicinity thereof, as might be effected by the user's thumb or finger when the user desires to remove one of these tablets from the package. The "Cellophane" or other material embossed in the closure elements 8 and 10 is, of course, sufficiently pliable to yield under the pressure of the user's thumb or finger. In addition to fracturing or rupturing the closure elements, the said protrusion 9 has the further function of facilitating the removal of the said pills or tablets from the receptacle. Other forms of protrusions are contemplated by the invention.

If desired, the said tablets may be formed as shown in Figure 5 of the drawing, where the same further includes a projection corresponding to the projection 8 of the tablet shown in Figure 3, shown from the other side of the said tablet. This formation may be desired to assure fracture of either of the closure elements 8 and 10, and readily lends itself to the assembly of such packaged merchandise at relatively low cost for the reason that in assembling the merchandise in the container it is unnecessary to selectively arrange the tablets as shown in Figure 1, which might be desirable from the standpoint of merchandising displays.

As a further illustration of a tablet suitable for a container as shown in Figure 1, reference may be made to the disclosure in Figure 4, in which the tablet 12 is formed with a groove 14 in one of the surfaces thereof, which groove is defined by relatively sharp and abrupt marginal edges at the surface in which the same is formed, so that when such tablets are disposed in the container of Figure 1, a user may readily fracture the closure elements 8 or 10 by running the thumb or finger nail over the same immediately above the groove 14 of the contained tablet. By such operation the said tablets can be removed without difficulty. As shown in Figures 6 and 7, equally desirable results may be obtained by providing a packaging element 16, substantially rigid in construction, and formed with a plurality of pockets or recesses 18 defined in part by the substantially vertical side wall 20 and the opposed sloping wall 22, which is capable in spaced relation to the bottom of the member 16 to provide pockets 24 for receiving a plurality of tablets or pills 26. In this type of container the pills 26 have their upper surface in spaced relation to the top of the container element 16, and said tablets or pills are sealed within said pockets through the medium of a closure element 28 of the type hereabove identified in the description of the container of Figures 1 and 2. By virtue of the disposition of the closure element 28, the closure element 26 is so secured to contain element 16 may be readily fractured or ruptured by applying pressure in the vicinity of the side walls 20, for example, as by means of the application of a thumb or finger nail to the closure element at the side walls 20. Removal of the pills 26 is further facilitated by the sloped walls 22 which permit movement of the thumb or finger into sliding side engagement with the tablets or pills to lift the same from their sockets 24.

Figure 8 is a further illustration of a modified construction for a container made in accordance with the present invention. In this form of construction the container comprises the centrally disposed element 30 having a plurality of pockets or recesses 32 conforming substantially to the pockets or recesses 18 of the modification shown in Figures 6 and 7 of the drawing. The centrally disposed element 30 of this embodiment, however, has the pockets or recesses 32 extending through the said member from top to bottom, and the pills 34 retained within the pockets or recesses 32 are contained therein by the bottom closure element 38 and by the top closure element 36. The said wall 40, defining in part the pockets 22 of this embodiment, is so disposed however that the pills 34 can be readily moved into the position as shown at the right in Figure 8, by applying pressure to the bottom closure element 38. The pills or tablets can then be moved along the slope 40 into engagement with the top closure element 36, at which time pressure can be applied to the closure member 38 adjacent the abrupt wall 42 to rupture the top closure element 36 to remove the tablets or pills from the package.

While the tablets or pills of the embodiments hereinafore described are shown as being of substantially cylindrical shape, it is to be understood that the same may be formed in various shapes, such as, for example, angular or square, without departing from the invention. If desired, the said pills or tablets may be plain or sugar coated.

While I have herein described and upon the drawing shown illustrative embodiments of the invention, it is to be understood that the invention is not limited thereto but may comprehend other constructions, arrangements of parts, details and features without departing from the spirit of the invention.

1. In a device of the character described, the combination of a container having a centrally disposed element formed with one or more openings therethrough, contained elements disposed in said one or more openings, and flangible closure elements secured to said first named element in closure relation to said openings, said one or more contained elements having at least one relatively sharp protrusion extending above at least one of the surfaces thereof which face the flangible elements and in substantial engagement therewith to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

2. In a device of the character described, the combination of a container having a centrally disposed element formed with one or more openings therethrough, tablets disposed in said one or more openings, flangible closure elements secured to said first named element in closure relation to said openings, said one or more tab-
In combination, a container element having a socket therein, a tablet disposed in said socket and having a relatively sharp wedge-like projection extending from at least one surface thereof, a frangible closure element for said socket mounted on said container element on one side thereof and in substantial engagement therewith to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

In combination, a container element having a socket therein, a tablet disposed in said socket and having a relatively sharp projection extending from at least one surface thereof, a frangible closure element for said socket mounted on said container element on one side thereof and in substantial engagement therewith to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

In combination, a container element having a centrally disposed element formed with one or more openings therethrough, tablets disposed in said one or more openings, frangible closure elements secured to said first named element in closure relation to said openings, said one or more tablets having at least one wedge-like projection extending above at least one of the surfaces thereof which face the frangible elements and in substantial engagement therewith to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

In a device of the character described, the combination of a container having a centrally disposed element formed with one or more openings therethrough, tablets disposed in said one or more openings, frangible closure elements secured to said first named element in closure relation to said openings, said one or more tablets having relatively sharp projections extending from the opposite surfaces thereof which face the frangible elements and in substantial engagement therewith to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

In combination, a container element having a socket therein, a tablet disposed in said socket and having a relatively sharp projection extending from at least one surface thereof, a frangible closure element for said socket mounted on said container element on one side thereof and in substantial engagement with said projection, and a second closure element mounted on the other side of said container element and being flexible whereby said projection may be forced against said first-mentioned closure element to puncture said first-mentioned closure element by application of pressure on said second-named closure element.

In combination, a container element having a socket therein, a tablet disposed in said socket and having a relatively sharp wedge-like projection extending from at least one surface thereof, a frangible closure element for said socket mounted on said container element on one side thereof and in substantial engagement with said projection, and a second closure element mounted on the other side of said container element and being flexible whereby said projection may be forced against said first-mentioned closure element to puncture said first-mentioned closure element by application of pressure on said second-named closure element.

In a device of the character described, the combination of a container having a centrally disposed element formed with a plurality of sockets therein, a tablet disposed in each of said sockets, and a frangible closure element secured to said first named element in closure relation to said sockets, said sockets being defined in part by a marginal edge abruptly disposed with respect to said closure element to facilitate rupturing thereof upon application of pressure in the vicinity of said marginal edge, each of said tablets being provided adjacent to the margin thereof with a relatively sharp projection for engaging said frangible closure element and for rupturing the same upon application of said pressure.

In a device of the character described, the combination of a container element formed with a plurality of compartments characterized as having at least one frangible closure element, and a contained element disposed in each of said compartments, the surface of said elements facing the frangible element having at least one relatively sharp protuberance extending above the surface of said element and in substantial engagement with said frangible element to facilitate rupturing of the same upon application of external pressure in the vicinity thereof.

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