

March 21, 1967

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3,310,164

PACKAGE

Filed July 7, 1964

2 Sheets-Sheet 1

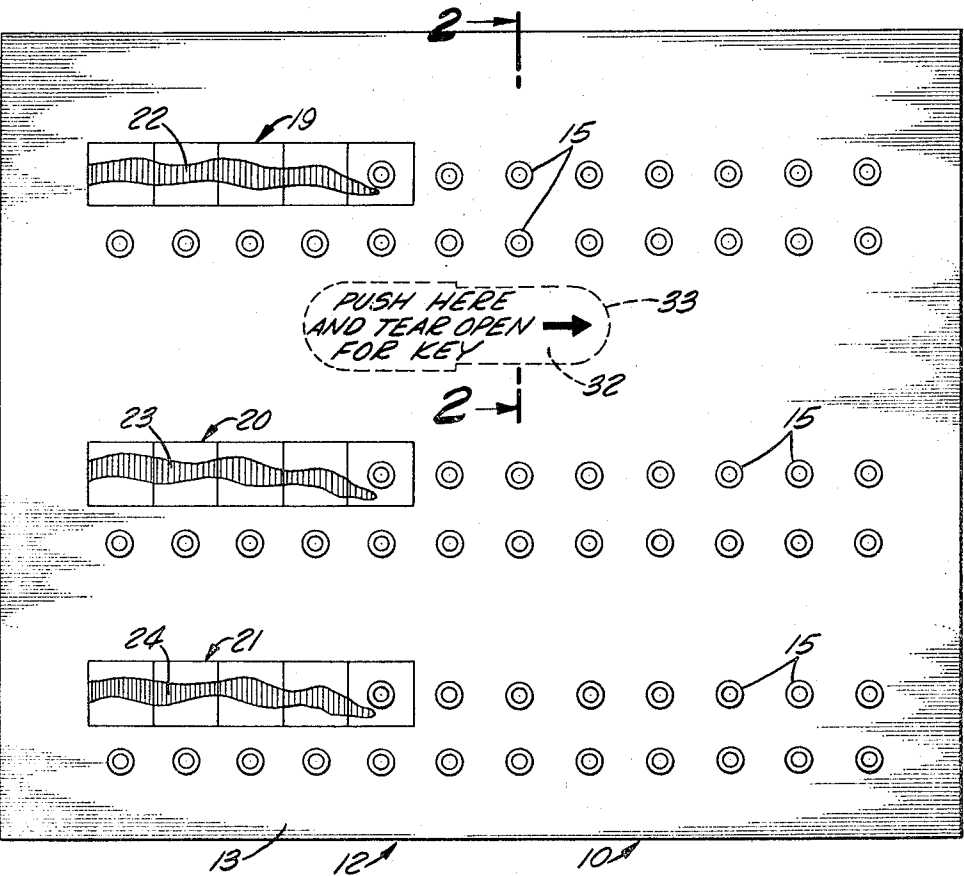


FIG. 1.

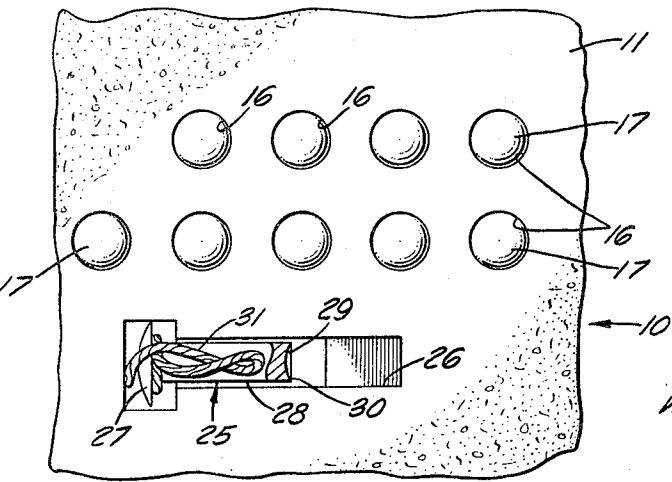


FIG. 3.

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3,310,164

PACKAGE

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Filed July 7, 1964, Ser. No. 380,861

3 Claims. (Cl. 206-42)

This invention relates to the packaging art, and more particularly to a package for several relatively small bodies.

Although the device of the present invention may have a great many uses other than those disclosed herein and should not be limited to this disclosure for that reason, the invention has been found to possess exceptional utility as a container of oral contraceptives for women.

In the past, memory devices have been incorporated in drug packages, for example, to remind a person to take a daily tablet or capsule. However, all of such prior art devices have had a complicated construction. Further, they have not been foolproof.

In accordance with the device of the present invention, the above-described and other disadvantages of the prior art are overcome by providing a drug package including a plurality of bodies containing a drug, and a punchboard having a plurality of holes therethrough, the punchboard being constructed to retain the bodies releasably within the holes.

In accordance with a feature of the present invention, an oral contraceptive package is provided including a block of foamed polystyrene of a uniform rectangular cross section. The block is provided with a plurality of identical holes which extend through it. A cover sheet is then fixed relative to the block on each side thereof. The sheets cover each end of each of the holes. The other sheet has a hinged tab also in registry with each block hole. An oral contraceptive capsule is positioned in each of the holes. A key is also provided having a shank of a size to fit in any one of the holes. Means are also provided to fix the key to the block. The key has a construction including a recessed end defined by a sharp edge in a shape of a closed curve the size of the cross section of each of the holes.

In accordance with the foregoing, it will be appreciated that the construction of the present invention is uncomplicated. Further, the present invention, in accordance with a feature thereof, may be made foolproof by making the body or styrofoam holes of a size only slightly smaller than the end of a woman's finger. Thus, the oral contraceptive package of the present invention may be kept in the bedroom and if the light is out, the package may be checked to determine whether a capsule should be taken simply by touching the capsule holes in the package.

The above-described and other advantages of the present invention will be better understood from the following description when considered in connection with the accompanying drawings.

In the drawings, which are to be regarded as merely illustrative:

FIG. 1 is a front elevational view of a drug package constructed in accordance with the present invention;

FIG. 2 is a vertical sectional view of the package taken on the line 2-2 shown in FIG. 1;

FIG. 3 is a partial sectional view of the package taken on the line 3-3 shown in FIG. 2; and

FIG. 4 is a portion of a rear elevational view of the package.

In FIG. 1, a drug package is generally indicated at 10. Package 10 is also shown in FIG. 2. Package 10 includes a foamed polystyrene core or block 11. Block 11 is surrounded on all six sides by enclosing means having a general configuration similar to a conventional rec-

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tangular telescoping box. The enclosing means is indicated generally at 12 having a cover 13 and a receptacle 14. Although cover 13 may be opaque or transparent, for the purposes intended, it is preferable that the strength and character of cover 13 be that of newsprint.

Preferably, receptacle 14 is made from very firm paper or light cardboard.

Cover 13 has a series of sixty embossed circles 15 of a size which may be felt by the sense of touch. Embossed circles 15 are located in registry with sixty corresponding holes 16 in block 11.

Sixty oral contraceptive capsules 16 are snugly fitted in corresponding holes 16.

On the rear surface of block 11, receptacle 14 has tabs 18 in registry with block holes 16. The shape of tabs 18 are best shown in FIG. 4. Tabs 18 are defined between a series of three cuts 18' for each tab.

As shown in FIG. 1, five block grids 19, 20 and 21 are associated with each of a series of twenty embossed circles 15. A red line 22, 23 and 24 on each of grids 19, 20 and 21, respectively, indicates menstruation. Thus, it will be appreciated that the oral contraceptive supply for the package 10 is a three cycle supply.

From the foregoing, it will be appreciated that the drug package 10 is arranged in some ways similar to a conventional punchboard. For this reason, a key 25 is provided in a T-shaped recess 26 in block 11, as shown in FIG. 3. Key 25 has a head 27 and a shank 28. The end of shank 28 is recessed at 29, which recess 29 is surrounded by a circular, relatively sharp edge 30. A string 31 is attached to block 11 by cement or otherwise and is attached to key shank 28.

A capsule shaped cover 32 is positioned over recess 26. Access to key 25 is made by tearing key cover 32 from block cover 13 at a perforated line 33.

As shown in FIG. 4, receptacle tabs 18 will be bent on lines 34 when capsules 17 are pushed out of block holes 16 to the left, as viewed in FIG. 2.

Although the device of the present invention has been described as an oral contraceptive package, it will be understood that this package may be used for a great many other purposes and for any purpose where a serial dosage is desired or needed. For example, the package 10 may be employed to hold vitamin or any other drug where a record of consumption is important.

Along this same line, it would be appreciated that grids 19, 20 and 21 may be changed according to the manner of use of package 10. That is, it may be changed when the package 10 is employed to carry vitamins or other drugs.

From the foregoing, it will be appreciated that embossed circles 15 provide means for locating shank end 29 over a hole 26 so that a capsule 17 therein may be punched from block 11. Thus, it may be possible to punch a capsule 17 from block 11 even though no light is available in the room.

From the foregoing, it will also be appreciated that one or more menstrual cycles may be represented when the package 10 is used for oral contraceptive capsules.

Although tabs 18 occupy some of the space of the surface of the rear panel of receptacle 14, it will be appreciated that instructions for operation may be printed between each set of twenty tabs corresponding to the three sets of twenty embossed circles 15 on cover 13.

Capsules 17 will contain medication inside of them. However, pills, tablets and any other doses not enclosed in capsules may also be located within block holes 16. The same is true of placebos, if these are required by the dosage scheme.

In general, cover 13 and receptacle 14 will be everywhere cemented to block 11. However, if cover 13 and

receptacle 14 are simply cemented to each other, sufficient structural integrity may also be achieved.

Note will be taken that cord or nylon thread or otherwise, may be substituted for string 31.

The recessed portion 29 may conveniently fit at least a portion of the curvature of the right end of capsules 17, as shown in FIG. 2.

Block 11 may be made of any kind of plastic foam, such as an expandable polystyrene. However, block 11 may also be made of papier-mache or pressed wood pulp.

Holes 16 may be drilled through block 11 or formed in any other way. Holes 16 may be of such a size and number as may be required by the dosage scheme.

Block holes 16 preferably are sufficiently deep to permit the capsules 17 to be located therein in the orientation, as shown in FIG. 2. Otherwise, holes 16 should be sufficiently deep to accommodate pills or tablets or other doses not enclosed in capsules. Note will be taken that any series of holes of any number of columns and ranks may be employed according to dosage requirements. Note will be taken that the package of the present invention provides measured doses in a certain serial order, so that the prescribed consumption rate of a drug may be encouraged and more easily attained. Key 25 may be operated to eject capsule 17 from block hole 16 as indicated at 25 in FIG. 2.

Note will be taken that package 10 may be used under conditions of darkness. Further, it generates its own record of consumption. A visual record is provided in that it will be evident from empty holes 16, that certain doses have already been taken. Embossed circles 15 which have not been punched out provide symbols for doses not yet consumed. A tactual or haptic record of doses which have been taken and those which have not been taken is provided so that the number and identity of the consumed doses and those not consumed may be felt in the dark. It may be, in the case of oral contraceptives, unusually convenient to keep package 10 convenient to the bed at night.

The interior of the embossed circles 15 are of a size and depth such that they can be felt by the fingertips. The deep indentations of an empty hole 16 may be easily perceived by the fingertips. Thus, an empty hole 16 signals that one should go on to the next embossed circle 15. The next embossed circle 15 then provides means for proper placement of key 25 thereover, in order to punch out the capsule 17.

Note will be taken that the package 10 of the present invention may be employed in many varying dosage requirements, including those for identical dosages, or those where dosages should differ in quantity or in ingredients. Graphic representations may be employed for occasions when no dose is to be taken, and/or the use of placebos when no regular dose is to be taken.

Note will be taken, from the foregoing, that the package 10 may be used by illiterate persons. The ability to read instructions is not necessary. The use of the package 10 may be easily demonstrated.

Although only one specific embodiment of the present invention has been described and illustrated herein, many changes and modifications will, of course, suggest themselves to those skilled in the art. This single embodiment has been selected for this disclosure for the purpose of

illustration only. The present invention should therefore not be limited to the embodiment so selected, the true scope of the invention being defined only in the appended claims.

What is claimed is:

1. An oral contraceptive package comprising: a block of foamed polystyrene of a uniform rectangular cross section, said block having a plurality of identical holes extending therethrough; a sheet fixed relative to each side of said block contiguous thereto in a position covering both ends of each of said holes therethrough, one of said sheets having an embossed edge in registry with said block holes, the other of said sheets having a hinged tab in registry with each of said holes; an oral contraceptive capsule snugly fitted in each of said holes; a key having a shank of a size to fit inside said holes; and means to fix said key to said block, said key shank having a recessed end defined by a sharp edge in the shape of a closed curve the size of the cross section of said holes.

2. An oral contraceptive package comprising: a block of foamed polystyrene of a uniform rectangular cross section, said block having a plurality of identical holes extending therethrough; a sheet fixed relative to each side of said block contiguous thereto in a position covering both ends of each of said holes therethrough, one of said sheets having an embossed edge in registry with said block holes, the other of said sheets having a hinged tab in registry with each of said holes; an oral contraceptive capsule snugly fitted in each of said holes; a key having a shank of a size to fit inside said holes; and means to fix said key to said block, said key shank having a recessed end defined by a sharp edge in the shape of a closed curve the size of the cross section of said holes, said holes being of a size only slightly smaller than the end of a woman's finger.

3. An oral contraceptive package comprising: a block of foamed plastic of a uniform rectangular cross section, said block having a plurality of identical holes extending therethrough; a sheet fixed relative to each side of said block contiguous thereto in a position covering both ends of each of said holes therethrough; and an oral contraceptive capsule snugly fitted in each of said holes.

References Cited by the Examiner

UNITED STATES PATENTS

1,309,349	7/1919	Brewer	273—139
1,834,572	12/1931	Brewer	273—139
2,006,620	7/1935	Barrett et al.	273—139
2,027,432	1/1936	Hirst	312—35
2,386,416	10/1945	Wilhelm	206—42
2,415,859	2/1947	Ancker	206—42
3,027,286	3/1962	Kurhan	206—46
3,054,503	9/1962	Hartman et al.	206—46
3,080,963	3/1963	Rothgart	206—42
3,127,302	3/1964	Bunting	206—56

FOREIGN PATENTS

170,094 1/1905 Australia.

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