

United States Patent

[11] 3,561,592

[72] Inventor **Dorothy M. McCool**
118 20 N. W. Thompson Road, Portland,
Oreg. 97229
[21] Appl. No. **798,011**
[22] Filed **Feb. 10, 1969**
[45] Patented **Feb. 9, 1971**

Primary Examiner—Joseph R. Leclair
Assistant Examiner—John M. Caskie
Attorney—Eugene M. Eckelman

[54] **PILL DISPENSER**
4 Claims, 7 Drawing Figs.

[52] U.S. Cl. 206/42
[51] Int. Cl. B65d 83/04
[50] Field of Search 312/295;
206/42, 56A

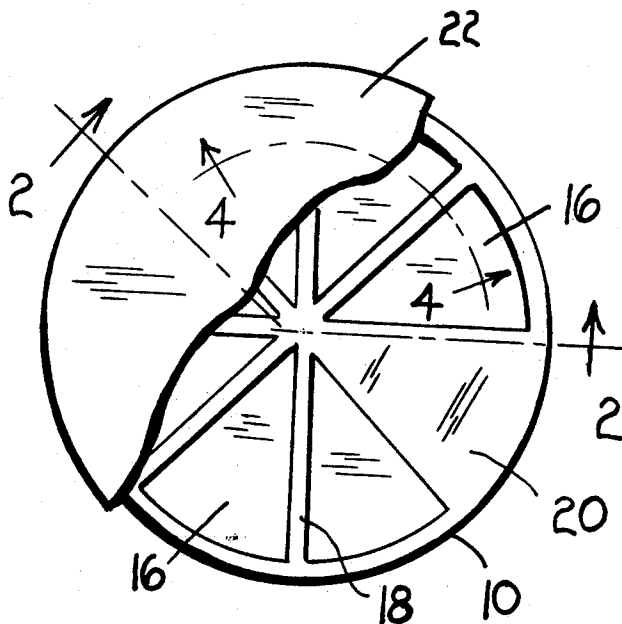
[56] **References Cited**
UNITED STATES PATENTS

2,426,883 9/1947 Kautyshai 312/295X

FOREIGN PATENTS

299,873 9/1954 Switzerland 206/42
64,010 5/1955 France 312/284

ABSTRACT: A container portion has a number of dividing walls to form sector-shaped compartments and a similarly shaped false compartment. A cover is rotatably mounted on the container portion and has an outlet aperture arranged to be aligned with one of the compartments at a time for removal of a pill therefrom. Each of the compartments has an identifying inscription designating the time that a pill is to be taken, whereby a patient can preload the compartments with pills and then take the pills as designated on the compartments. When the pill dispenser is not in use, the cover is turned such that the outlet aperture therein is in registry with the false compartment. The cover has a down-turned flange and is held rotatably on the container portion by a rib and groove connection. In some embodiments the aperture in the cover may extend partly into the flange to form a window at the side of the container portion in which case the identifying inscriptions are provided on the side surface of the container.



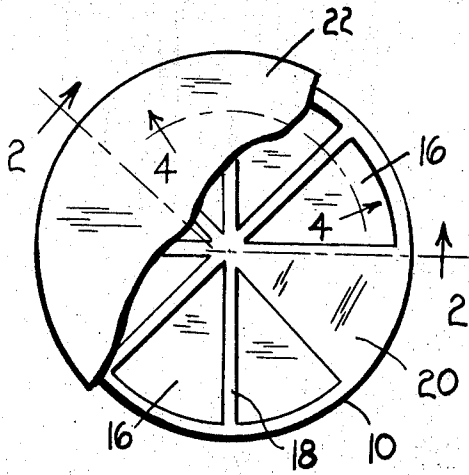


Fig. 1.

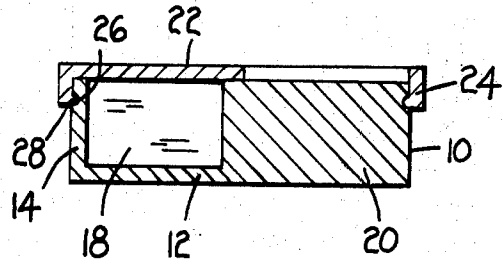


Fig. 2.

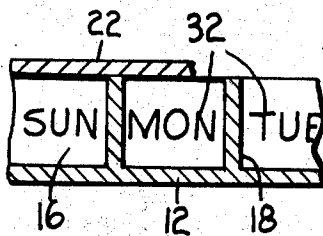


Fig. 4.

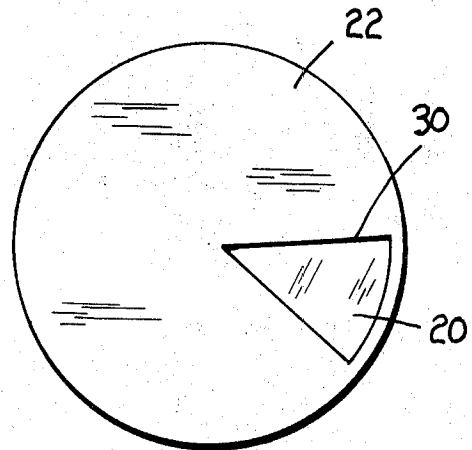


Fig. 3.

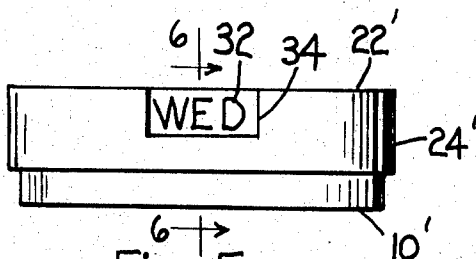


Fig. 5.

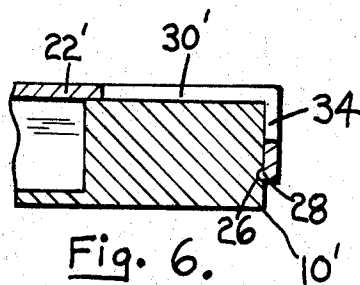


Fig. 6.

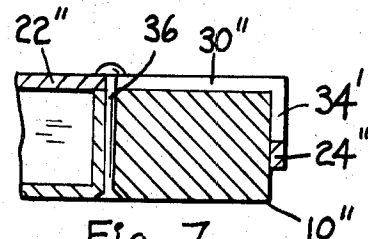


Fig. 7.

INVENTOR
DOROTHY M. MCCOOL
BY *Eugene W. Eichelman*
ATTORNEY

PILL DISPENSER

BACKGROUND OF THE INVENTION

This invention relates to new and useful improvements in pill dispensers.

It is a well-known fact that taking pills at selected intervals is a difficult thing to remember without some sort of indicating and recording means. Even with such recording and indicating means the patient may forget to enter his actions and it is very conceivable that he will forget whether or not he took a pill for a certain interval. Devices have been conceived to assist the patient in taking pills at various intervals but such devices have not been of such practical construction, considering both the cost thereof and the ease of operation, as to make them practical for widespread use.

SUMMARY OF THE INVENTION

The pill dispenser of this invention has as its primary objective to provide a simplified and inexpensive construction which serves in an efficient manner to assist patients in following a selected program of medication.

A more particular object of the invention is to provide a pill dispenser employing a plurality of identified compartments arranged to receive individual dosages, and also employing a false compartment arranged so as to be in registry with an outlet aperture on a cover of the dispenser when the latter is not in use.

Another object of the invention is to provide a pill dispenser having a rotatable cover with a down-turned outer flange and an outlet aperture which has an extension projecting down the flange to form a window for viewing interval identifying indicia provided on the outside surface of the container; and also to provide a novel rotatable groove and bead connection between the container and the cover.

The invention will be better understood and additional objects and advantages will become apparent from the following description which illustrates a preferred form of the device.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top plan view of a pill dispenser of the present invention a portion of this view being broken away for clarity;

FIG. 2 is a sectional view of such dispenser, taken on the offset line 2-2 of FIG. 1;

FIG. 3 is a top plan view of the dispenser;

FIG. 4 is a fragmentary sectional view taken on the line 4-4 of FIG. 1;

FIG. 5 is a side elevational view of a modified form of dispenser;

FIG. 6 is a fragmentary sectional view taken on the line 6-6 of FIG. 5; and

FIG. 7 is a fragmentary sectional view similar to FIG. 6 but showing another modification of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Reference is first made to FIGS. 1-4 which show a first form of the invention. The dispenser includes a container 10 having a bottom wall 12 and a peripheral sidewall 14. The container is divided into a plurality of sector-shaped compartments 16 by radially extending wall portions 18.

The number of compartments 16 may vary, according to intervals of medication desired, but in any case a false compartment 20 of similar shape to the other compartments is provided which as will be seen hereinafter is used as a closure portion for a cover. The false compartment 20 may assume any suitable construction but preferably it comprises a solid plug, as shown, in order that it will not be confused with a pill receiving compartment.

The compartments 16 are open at the top and are normally closed by a cover 22 having an outer down-turned flange 24. The cover 22 is rotatably attached to the container 10, and for this purpose a peripheral groove 26 is provided on the outer or

side surface of the container and the down-turned flange 24 has an interned bead 28 engageable in the groove 26. Preferably, the parts are constructed of a semiresilient plastic or the like whereby in the assembly of the dispenser the cover can be forced down over the top of the container and distorted sufficiently enough to snap the bead 28 into the groove 26. The frictional engagement between the bead 28 and the groove 26 is such as to permit forced turning of the cover so that while the cover may be readily turned it will stay in the position at which it is turned.

Cover 22 has a sector-shaped aperture 30 having substantially the same dimension as the compartments 16 and the false compartment 20. For removing pills from a compartment 16 the cover is merely turned such that the aperture 30 is in alignment therewith. To close the container the cover is turned so that the aperture 30 is disposed over the false compartment 20.

Each of the compartments is inscribed with intervals of time 32 such as the days of the week. The inscriptions 32 may be provided on a defining sidewall of the compartments 16, such as on the peripheral wall 14 as shown, or they can be provided on the radial dividing wall portions 18 or even on the bottom wall 12. The compartments are first preloaded with the precise dosage, and the patient then merely takes the pills at the intervals designated by the inscriptions 32. It is to be understood that the inscriptions 32 may be intervals of time other than those shown, such as hours of the day, and the number of compartments 16 used in the construction would depend upon the number of intervals used.

FIGS. 5 and 6 show a slightly modified form of the invention. In this embodiment, the container portion 10' is substantially the same construction as the container portion in FIGS. 1-4 except that the flange 24' on the cover 22' extends a greater distance down over the container portion and the outlet aperture 30' in the cover has an extension or window 34 down the flange 24'. The inscriptions 32 in this latter embodiment are provided on the side surface of the container portion such that they appear in the window 34. Cover 22' has a rotatable connection on the container portion 10' in a manner similar to FIG. 1, employing a groove 26 and bead 28.

FIG. 7 shows another form of the invention wherein the cover 22'' is rotatably connected to the container portion 10'' by a central pin 36. This embodiment as in FIGS. 5 and 6 has an outlet aperture 30'' and a side window 34' in a down-turned flange 24'', and similarly has inscriptions arranged to appear in the window 34'.

According to the present invention, a patient preloads the compartments 16 with a particular dosage to be taken over the time designated by the inscriptions 32. With the pill dispenser in such preloaded condition the patient can readily determine the time the next pill is to be taken and of course be assured that he has taken the last prescribed dosage. The dispenser of the present invention is inexpensive to manufacture since it comprises simply a container and cover and the parts are readily molded from an inexpensive plastic or the like.

It is to be understood that the forms of my invention herein shown and described are to be taken as preferred examples of the same and that various changes in the shape, size and arrangements of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims. For example, the inscriptions 32 may be raised lettering for better viewing and furthermore such inscriptions could be braille for identification by touch.

I claim:

1. A pill dispenser comprising:

a. a container portion;

b. said container portion including a peripheral sidewall a bottom wall, and a plurality of radially extending walls on said bottom wall forming a plurality of sector-shaped compartments arranged to receive individual dosages of pills;

c. each of said compartments being open at the top to form discharge openings through which pills are arranged to be dispensed;

- d. a platelike cover member rotatably mounted on said container portion;
 - e. said cover member having an aperture arranged for alignment with any one of said discharge openings of said container portion upon selected rotation of said cover member and dimensioned such that pills may be dispensed from a single one of said compartments at a time through said aperture while the remaining compartments are covered by said cover member;
 - f. a false compartment in said container portion in alignment with the pill containing compartment over which the aperture in said cover can be located for closing all the pill containing compartments;
 - g. and indicia means on said container portion identifying each of said individual compartments;
 - h. said indicia means comprising intervals of time whereby a person can determine when next to take a pill.
2. The pill dispenser of claim 1 wherein:
- a. said container portion has a peripheral groove on its outer

- surface;
 - b. a down-turned flange on said cover member;
 - c. and an intumed bead on said flange slidably engaged in said groove whereby to hold said cover member rotatably on said container portion.
3. The pill dispenser of claim 1 wherein:
- a. said cover has a down-turned flange;
 - b. said aperture in the cover member extending partly down said flange to form a window at the side of said container;
 - c. said identifying means being provided on the outer surface of said container and arranged for viewing through the window in the flange.
4. The pill dispenser of claim 1 wherein:
- a. said indicia means are provided on an inner difining wall of each of said compartments; and
 - b. said cover member is transparent for viewing said indicia therethrough.