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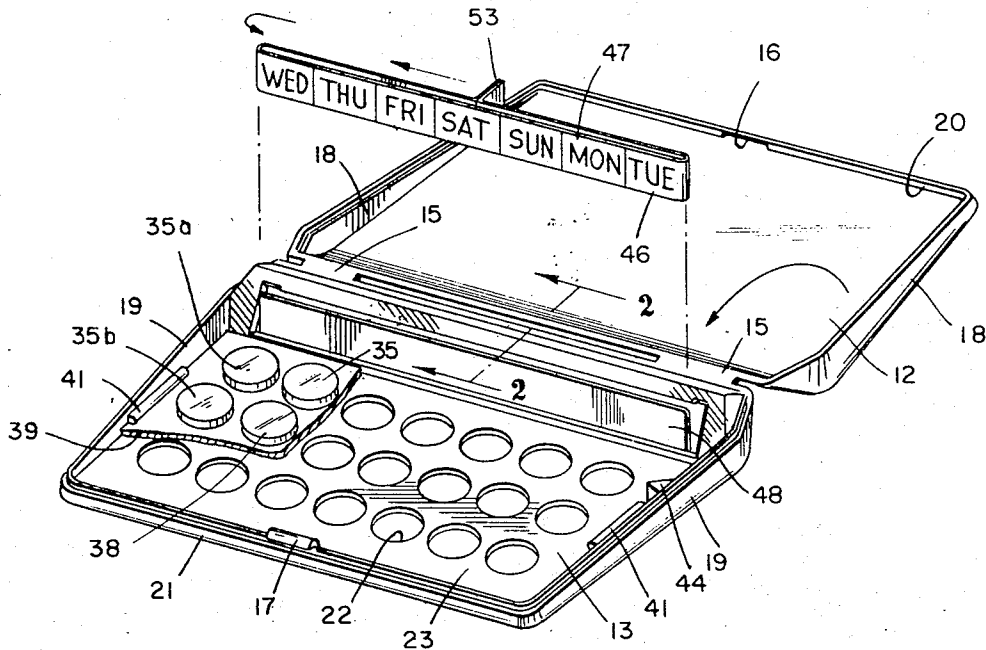
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[54] **PILL DISPENSER WITH INDICATING MEANS**
6 Claims, 4 Drawing Figs.

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116/121
 [51] Int. Cl. **G09f 9/00**
 [50] Field of Search **40/118,**
107; 206/42

ABSTRACT: A pill dispenser with indicating means in the form of a flexible strip having a plurality of day indicia which are selectively adjustable to align any set of a predetermined number of successive indicia with a like number of columns of pills, thereby providing an indication of when each pill is to be taken.



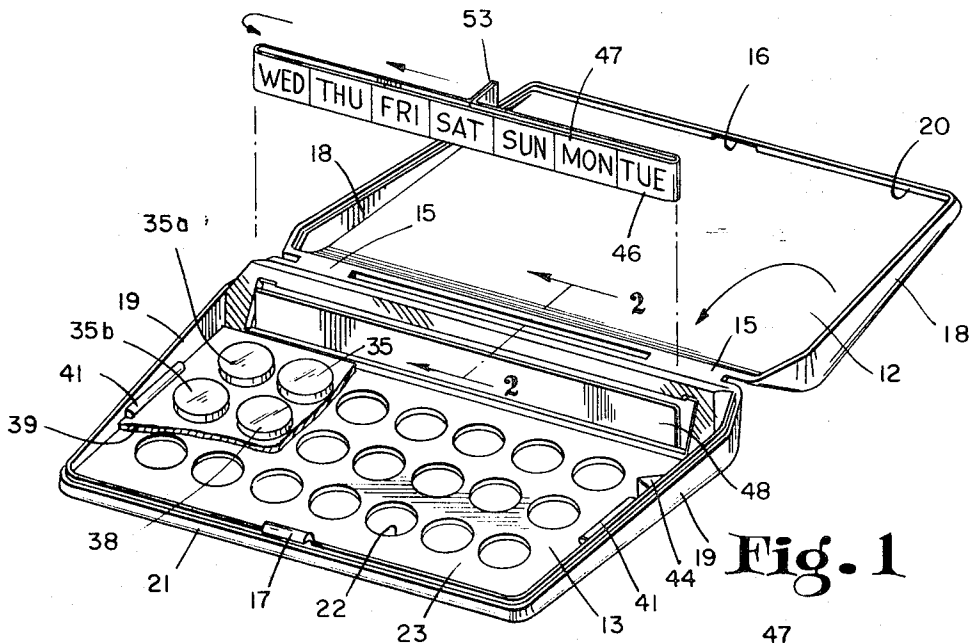


Fig. 1

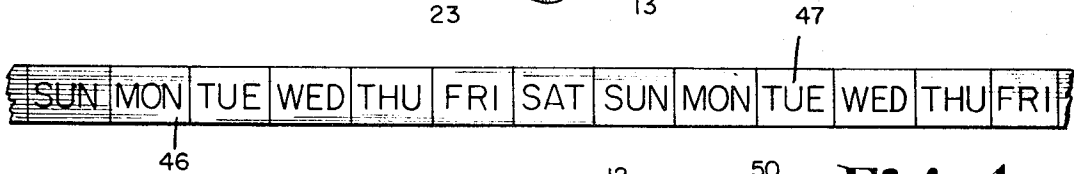


Fig. 4

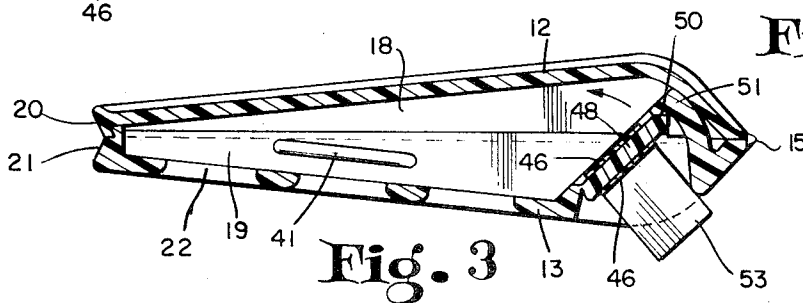


Fig. 3

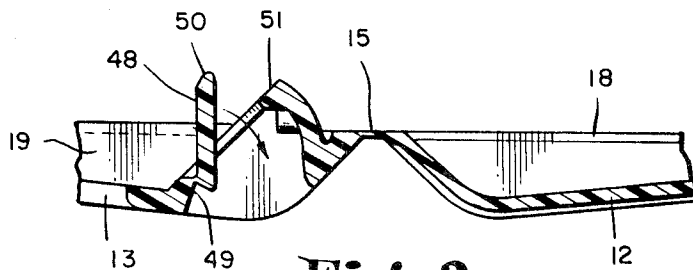


Fig. 2

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PILL DISPENSER WITH INDICATING MEANS

BACKGROUND OF THE INVENTION

This invention relates to a pill dispenser and in particular to a pill dispenser having means for automatically indicating the removal of each pill from the dispenser.

In writing out prescriptions it is generally the practice of physicians to state that a pill should be taken at prescribed intervals. The intervals may be only a matter of hours, or, on the other hand, may be on the basis of 1 per day, or perhaps one every other day. In any event, it is essential that the user be able to determine whether or not he has taken a pill for that interval since it is quite possible that his memory will fail him. Various devices have been contrived in which the user, upon taking a pill from the dispenser or container, will, in a separate physical action, record this fact. For those persons who are always able to remember to make a recording mark or other similar act, such a procedure is sufficient. However, many a person has tended to forget entering on his own personal record the fact that he has taken a pill for a specified day. Thus, he is confronted with the problem of trying to remember whether or not he actually took a pill for that interval.

Various dispensers have been designed with automatic indicating means coordinated with specially arranged pills. For example, pills have been spring loaded in tubes or disposed in a unique pattern to provide accurate coordination with an adequate indicating means. In such dispensers of the prior art it has been necessary to develop suitable equipment for efficiently and quickly loading the dispenser with pills. In addition, such equipment has had to provide means for assuring sanitation of the pills during loading of the dispenser. Furthermore, the dispenser necessarily had to be designed to readily receive the pills; and, consequently, the pills in some instances were not fully sealed from the atmosphere. Thus, the pills could be affected by moisture in the atmosphere as well as being subjected to possible contamination.

SUMMARY OF THE INVENTION

In general, the pill dispenser of this invention comprises a receptacle for receiving pills in a plurality of rows and columns. An indicating means in the form of an adjustable strip is mounted on the dispenser. The adjustable strip bears a linear pattern of indicia, such as 13 days. Seven of these days are positioned over seven columns of pills thereby establishing the day for which each pill is to be taken.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of the dispenser of this invention with the indicating means shown in an exploded position;

FIG. 2 is a view in cross section taken along line 2-2 of FIG. 1;

FIG. 3 is a view in transverse cross section of the dispenser in its closed position with its mounted indicating strip; and

FIG. 4 is a front elevation of the adjustable strip broken to illustrate it in its extended position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, a pill dispenser is illustrated having a cover 12 and a base 13. The cover and base may be made of a plastic material such as polypropylene and formed integrally by conventional injection molding techniques. As shown in FIG. 1, cover 12 and base 13 are hinged together by a pair of integral thin webs 15. Cover 12 has a latch element 16 which cooperates with a complementary element 17 on a base 13. The cover and base may be provided with mating sidewalls 18 and 19 and front walls 20 and 21 to provide an enclosed compartment thereon.

Base 13 is formed with a plurality of apertures 22 through its bottom wall 23. In the particular embodiment there are three rows of apertures forming seven columns. Thus, the dispenser is capable of holding 21 pills 35.

The pills to be contained in this dispenser may be individually packaged in blisters 38 formed from vinyl acetate or the like. Thus, each pill 35 is individually captured between a blister and the supporting card 39 which has an aperture directly beneath the pill. A thin layer of foil or other easily rupturable material not visible in the drawing covers the bottom of the card to prevent accidental discharge of the pill. The card 39 is retained in base 13 by means of a pair of retaining lugs 41 and is sufficiently flexible to permit a small amount of temporary deflection in order to position it underneath the lugs. Thus, pills 35 are positioned over individual apertures 22. In the event pills 35 comprise more than one type of pill requiring assurance that the several types of pills are consumed in a proper sequence, an indexing means 44 may be integrally formed in base 13. Thus, card 39 in such an instance would have a corresponding V-shaped cutout that may be registered with indexing means 44, thereby positioning the card of pills in the proper sequence for consumption.

The indicating means of this dispenser comprises an adjustable strip 46 which is preferably formed from a flexible material that is slightly elastic such as vinyl. Strip 46 is shown in a loop form but may be constructed from a linear length of material which is subsequently fastened together to form a loop. Inasmuch as the illustrated dispenser has been designed for taking one pill a day, the strip 46 bears a linear pattern of 13 consecutive days indicia 47 on its outer surface FIG. 4 of which only seven will be visible from the front for any one setting.

Strip 46 is positioned over a flat support element 48 which may be formed integrally with base 13 and cover 12. As shown in FIG. 2, support element 48 is hinged to ledge 49 on base 13. The dispenser may be molded with support element 48 in an upright position.

The support element 48 is maintained in an upright position while the adjustable strip 46 is positioned over it. Strip 46 is of a dimension to require maintaining it in a slightly stretched condition while positioned in flush contact with support element 48. The precise length for this strip will be a matter of simple experimentation with the primary factor being that the strip is not so tight as to prevent selective sliding of it about the support element 48. Once strip 46 is positioned over support element 48, the combination is deflected downwardly to an inclined position with upper edge 50 of support element 48 seated underneath a small flange 51 extending from the rear of base 13. The dispenser will now be in the form shown in FIG. 3.

Adjustable strip 46 which may be moved while element 48 is under flange 51, is adjusted until the desired day of the week appears over the first column of three pills, headed by pill 35a, the first pill to be taken. Thus, if the first day for a pill is Wednesday, the last (seventh) column of pills will be aligned with the indicium Tuesday on the strip.

In order to facilitate the adjustment of strip 46, a tab 53 may be formed on the back side of the strip. Adjustment of tab 53 from one side of the dispenser to the other side will effect a change in the indicia whereby the first day to consume pill 35a can be any of the 7 days of the week.

Each pill may be removed by pushing it through card 39 and aperture 22. After the first row of pills is taken, the second row is removed, again starting with the first column. It is noted that the first pill 35b in the second row is the eighth pill consumed and, therefore, is taken on the same day of the week as pill 35a. After all 21 pills are consumed, a new card of pills may be inserted under retaining elements 41 and 41 upon removal of the first card. Adjustable strip 46 is again moved to align the first pill with the desired day.

It is to be understood that adjustable strip 46 need not necessarily require a tab 53 in order to be moved since movement can be effected by gripping it between the thumb and forefinger. As a further alternative, strip 46 may be formed from paper and adjustably mounted about a rigid strip of cardboard. This combination can be inserted into a slot in the dispenser's base, thereby eliminating the need for integrally

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molding support element 48. More than 13 days on strip 46 may also be needed if it is mounted on a support element of significant depth instead of a relatively thin member such as element 48. In addition, the illustrated means for retaining pills in seven columns may be varied. Instead of a blister card, the pills can be positioned in small receptacles in base 13.

I claim:

1. A plastic pill container comprising: a cover in hinged connection with a base, said base defining a plurality of pill apertures arranged in a plurality of rows and columns, said base having retaining means adapted to receive and removably secure a card containing individual transparent blisters with pills therein and arranged in a pattern conforming to said aperture pattern, a flat elongated support element integrally hinged to said base parallel and adjacent to the first of said rows of apertures, said hinged support element having a first position whereby it assumes an upright position and a second

position whereby its upper edge is seated underneath a flange on said base, and a flexible loop strip slidably mounted about and in flush contact with said support element, said strip bearing a linear pattern of day indicia on its outer surface of which only a portion is aligned with said columns of apertures.

2. A pill dispenser as defined in claim 1 in which the number of said pill columns is seven.

3. A pill dispenser as defined in claim 2 in which said indicia comprises at least 13 successive days of the week.

4. A pill dispenser as defined in claim 3 in which a different day of the week is aligned with each of said seven pill columns.

5. A pill dispenser as defined in claim 4 in which said strip has a tab.

6. A pill dispenser as defined in claim 5 in which said tab is positioned on said strip at a point on the backside of said flat support element.

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