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MEDICAL TABLET CONTAINER AND DISPENSER

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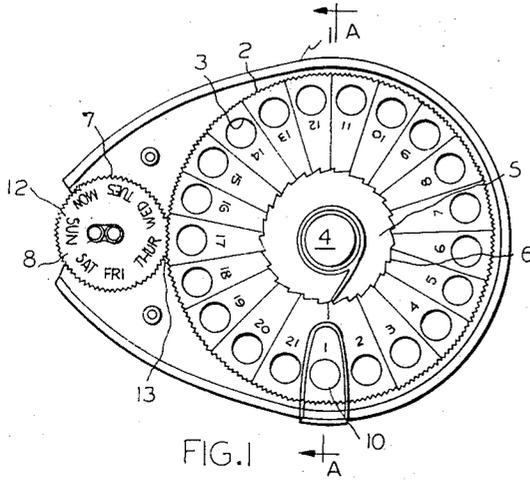


FIG. 1

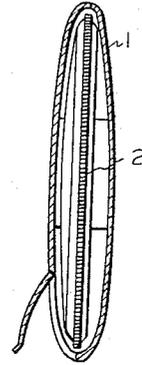


FIG. 2

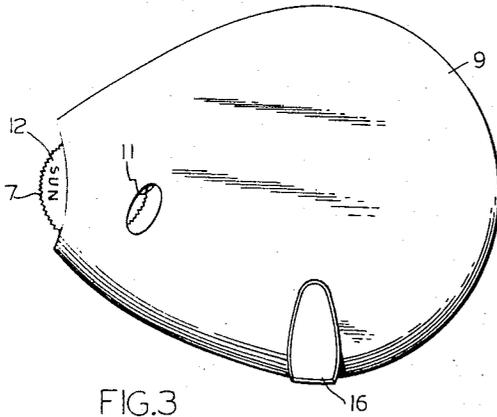


FIG. 3

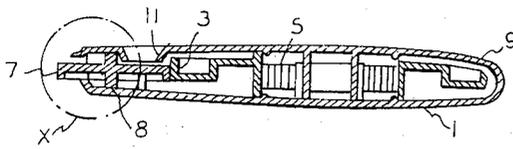


FIG. 4

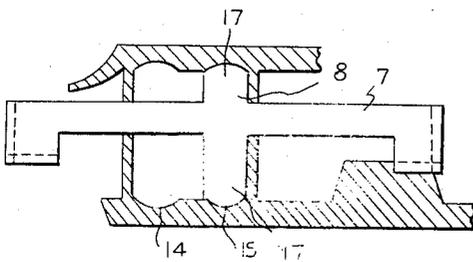


FIG. 5

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**MEDICAL TABLET CONTAINER
 AND DISPENSER**

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ABSTRACT OF THE DISCLOSURE

A container for dispensing tablets or pills comprising a rotatable magazine mounted on an axis within removable upper and lower housings, the magazine being operatively connected by gear teeth or the like, to the gear teeth or the like of a rotatable driving wheel which may be snapped in or out of contact with said magazine and which rotatable wheel bears different units of time on its upper surface which may be observed on the upper surface of said wheel when it is not in contact with said magazine or only through a window in said upper housing when said wheel is operatively connected to said magazine.

The present invention relates to containers for medical tablets or pills and, more particularly, relates to a container adapted for accurately controlling the dispensing and counting of such articles with a high degree of reliability.

The objects and advantages of this invention will be apparent from the following detailed description and appended claims when read in conjunction with the accompanying drawings, in which:

FIGURE 1 is a plan view of the container of the present invention, with the top half of the housing removed;

FIGURE 2 is an elevation in cross-section along line AA of FIGURE 1;

FIGURE 3 is a plan view of the container showing the top housing in place;

FIGURE 4 is an elevation in cross-section along line BB of FIGURE 1; and

FIGURE 5 is an enlarged cross-section of area X of FIGURE 4.

Referring now to the drawings, the lower housing portion 1 contains a rotatable, disc-shaped pill or tablet magazine 2 having a plurality of pill-storage spaces or recesses 3, preferably numbered counter-clockwise as shown and, according to a preferred embodiment, comprising twenty-one spaces. The magazine 2 is mounted on an axis 4 in operative relationship with a ratchet-type means 5 so arranged, such as in conjunction with grooves 6, that the magazine 2 may rotate in only one direction, e.g., clockwise, as shown. In use, the magazine 2 is in operative relationship with a cogwheel 7 by way of cogs, grooves, or gear teeth 13 arranged so that, according to a preferred embodiment, there is in effect a gear ratio of 3:1 between the cogwheel 7 and magazine 2. The cogwheel 7 is integral with or firmly mounted on an axis or spindle 8 which, because of the different seating areas 14, 15 for the spindle ends 17, allows the cogwheel to be snapped or pulled away from or snapped or pushed into operative relationship with the magazine 2.

The upper housing 9 is constructed with an outlet 10 with closing tab 16 which gives access to the individual pill storage spaces 3 and this housing is also constructed with a window 11 which is so positioned over the cogwheel 7 that when a given day of the week or abbreviation thereof is readable on the upper surface of the cogwheel 7 in the area 12 where it protrudes from the con-

tainer, another day of the week, preferably exactly five days later, will be readable through the window 11 when the cogwheel 7 is snapped into operative relationship with the magazine 2, the days of the week having been chronologically indicated at equal intervals on the upper surface of the cogwheel. Preferably, the inward travel of the cogwheel 7 is sufficient to effect concealment by the housing 9 of the day of the week or abbreviation appearing on the upper surface thereof 12 when the cogwheel 7 is snapped into operative relationship with the magazine 2. By reason of the preferred construction, the user of the device of this invention has but one significant day to read in one place when the device is in actual use, i.e., through the window 11, thus avoiding possible confusion.

The upper housing 9 is so made that it closely snuffs over the sides of the lower housing 1, preferably after the pill storage space 3 in the magazine 2 has been filled with the correct number and type of medical tablets, thus making the container ready for use.

In actual use of the container of this invention, which may be made from plastics such as polypropylene, polystyrene, or metal or other suitable material of construction, it is possible for the manufacturer or doctor, for example, to load the pill storage spaces with tablets or pills of the same or different medical formulae in the exact order of hours, days, or like intervals in which they are to be used, thus aiding or assuring the user in taking the course of medication at the specified intervals and in the correct order while also making it possible for the user or the doctor who prescribes the medication to know, provided correct cooperation by the user or patient is obtained, that the prescribed course of medication can be and/or has been achieved.

A specific example of the application of this invention is a situation in which one of the current contraceptive pill formulations is to be used and during the use of which the pill formula is varied in a definite pattern or order, normally requiring a plurality of pill bottles or containers for a given period of use of the pill treatment. Thus, by the use of the container of this invention, it is possible to provide, for example, sixteen pills of a given formula to be taken at the rate of one per day, followed by five pills of a different formula, at the same rate, all of the pills having originally been prearranged in the container of the invention according to the correct formulae and order. Furthermore, the relationship of the cogwheel 7, with its indications of the days of the week on the upper surface thereof, to the magazine 2 is such that when this upper surface shows a given day, such as Saturday, in the area 12 where the cogwheel protrudes from the container, another day five days later, Thursday, on which day the medication is to start, when the cogwheel 7 is snapped or pushed into operative relationship with the magazine 2, will show through the window 11 on the upper housing 9. Subsequently, on Thursday the first pill is removed from the outlet 10 of the upper housing 9 and upon removal of the pill by the user, the cogwheel 7 is moved one more day or notch so that Friday shows through the window 11 and so on through the course of medication.

Although one specific example has been outlined wherein the container of this invention is particularly suited, it will be obvious that by modifications of the number of pill storage spaces 3 and the gear ratio of the cogwheel 7 to the magazine 2, the hours, days, weeks, or like intervals for medication may be widely varied to meet a multitude of courses of medication and thus take advantage of the principles of the invention and without departing from the proper scope and meaning of the appended claims.

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What is claimed is:

1. A pill-dispensing device comprising a housing provided with a closable outlet in one part of the housing, a container rotatably mounted within said housing and having a multiplicity of compartments in said container adapted to be moved individually into registry with the outlet of said housing, a rotatable cooperating driving means mounted within said housing and adapted to be moved out of and into operative relationship with and adapted to rotate said container, and a window in said housing on the same side as the outlet of said housing and so positioned that when a unit of time can be read on said cooperating means and said cooperative driving means is thereafter moved into operative relationship with the container, said unit of time disappears and another unit of time on said cooperative means can then be read through said window, and means within said housing adapted to prevent rotation of said container in any but one direction.

2. The device of claim 1, in which the cooperative means and window in the housing are so positioned that when one day of the week can be read on said cooperative means and the said means is thereafter moved into operative relationship with said container, another day

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of the week, five days later, on said cooperative means can be read through said window.

3. The device of claim 1, in which the movement of the cooperative means is sufficient so that when it is in operative relationship with the container, the only unit of time which may be read on the surface of the cooperative means is that which may be read through the window.

4. The device of claim 1, in which there exists a gear ratio of 3:1 between the rotatable, driving means and the container.

5. The device of claim 1, in which, when a given day of the week is readable on the upper surface of the rotatable driving means, another day of the week five days later, is readable through the window of the housing when said rotatable means is placed in operative relationship with said container.

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