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[54] **DOSAGE TIME INDICATOR CONTAINER**

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[52] **U.S. Cl.** **116/121,** 215/41
[51] **Int. Cl.** **A61j 1/00**
[58] **Field of Search** 215/7, 41; 116/121

[56] **References Cited**

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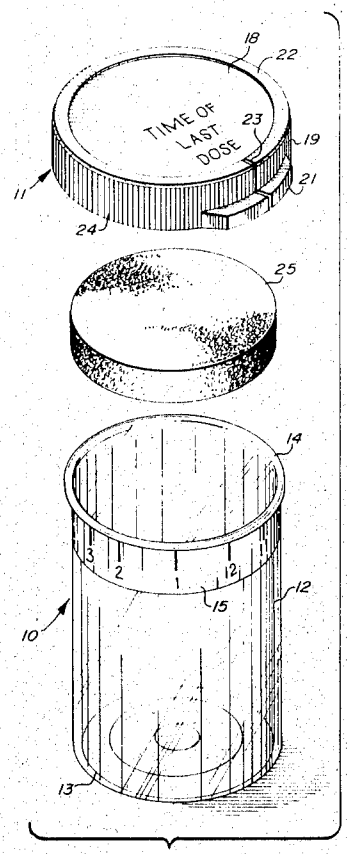
[57] **ABSTRACT**

This specification discloses a conventional container from which doses of pills are intended to be taken from time to time, and which container includes a main body portion and a cap removably secured on the main body portion by a snap action fastening device. About the open end of the main body portion is a scale indicating hours and inscribed on the cap is a line which cooperates with this scale. A foam plastic pad is secured to the underside of the cap and cooperates with the upper end of the main body portion to hold the cap in an angularly adjusted position thereon.

5 Claims, 4 Drawing Figures



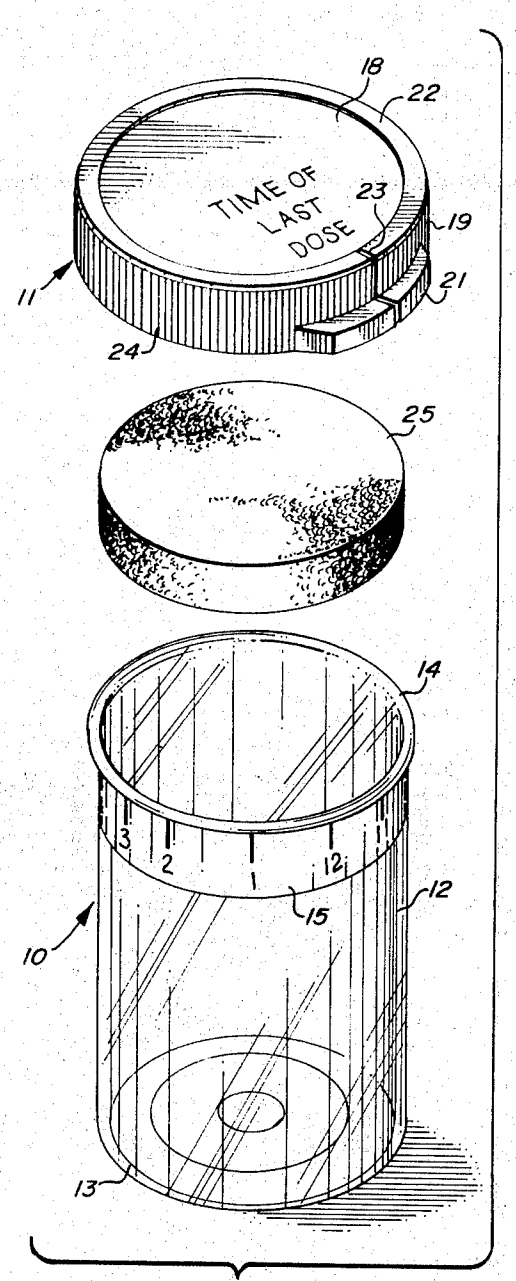


Fig. 1

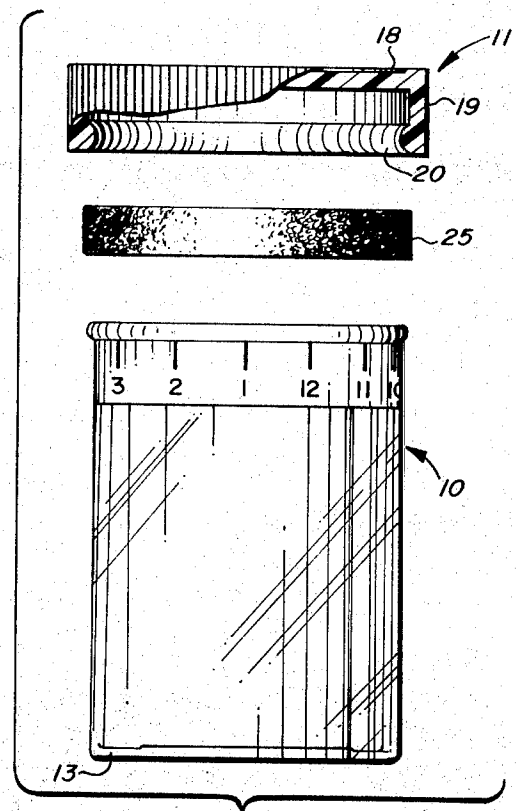


Fig. 2

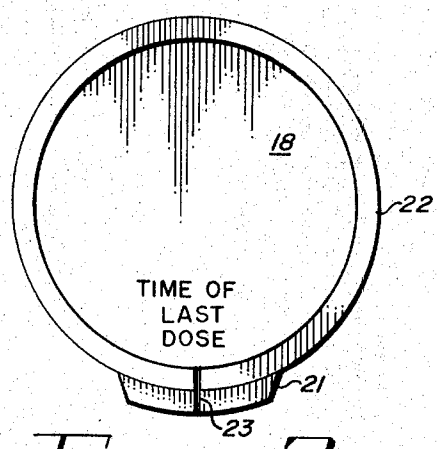


Fig. 3

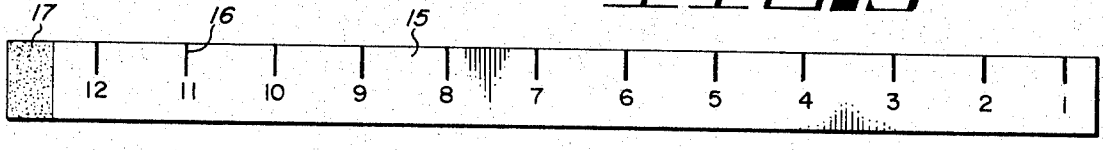


Fig. 4

DOSAGE TIME INDICATOR CONTAINER

The present invention relates to pill containers including dosage time indicators, and is concerned primarily with improvements in a pill container of the type which is now meeting with widespread use in the distribution of drugs to the ultimate users.

BACKGROUND OF THE INVENTION

At the present time, it is common practice for a doctor in prescribing the taking of pills or tablets by a patient to indicate that a dose be taken at periodic intervals. Thus, by way of example, the prescription will call for the patient taking a dose every three hours.

The memory of patients is not always reliable and there are many conditions under which they forget when the last dose was taken and, therefore, are uncertain as to when the next dose is to be ingested. This undesirable condition has long been recognized, and many dosage indicator devices have been developed in an attempt to remedy this condition. However, it is believed that none of these known devices have met with any appreciable public acceptance. While it is impossible to pinpoint with any degree of certainty the exact reasons for this lack of public acceptance, it is believed that it may be attributed to any or all of the following reasons.

The conventional container which it is believed now is most widely used by druggists in filling a prescription comprises a cylindrical body having a closed bottom and an open top defined by an edge which is formed with an outwardly projecting bead. Cooperating with this main body is a cap comprising a flat top from which depends a cylindrical skirt. The lower end of this cylindrical skirt is formed with an inwardly projecting bead. The body and cap are of a plastic having the properties of resiliency and elasticity which permits the cap to be placed in closing position by snap action in which the bead on the cap passes and snaps over the bead on the body to achieve the assembled relation.

To facilitate removal of the cap from the body, the former is formed with an outwardly projecting tab which is adapted to be engaged by the thumb of a user to apply sufficient pressure to cause the beads to ride over one another in removing the cap.

There is now no known dosage indicating means which is susceptible of being included in a container of the type above described at a cost which is so low as to be inconsequential to the manufacturers of the containers.

The art is also singularly lacking in a container of above type which includes means for holding the cap in an angularly adjusted position relative to the body of the container.

OBJECTS OF THE INVENTION

With the foregoing conditions in mind, the present invention has in view the following objectives:

1. To provide a conventional pill container comprising a cylindrical body having an open top and an outturned bead at said open top, and a cap including a cylindrical skirt with an inturned bead which cooperates with the bead on the body in securing the cap in closing position with means for indicating when the last dose of pills in the container had been taken by a patient.

2. To provide, in a container of the character aforesaid, a scale on the upper end of the body just below the bead which designates hours, and the cap with an indicating line which cooperates with said scale.

3. To provide in a container of the type noted which includes an outwardly extending tab on the cap, a line which is inscribed on the cap and extends over the tab to a point where it cooperates with the scale on the body.

4. To provide, in a container of the kind described, means for holding the cap in an adjusted angular position relative to the body and which means takes the form of a foam plastic pad secured to the underside of the cap.

Various other more detailed objects and advantages of the invention, such as arise in connection with carrying out the above ideas in a practical embodiment, will, in part, become apparent and, in part, be hereafter stated as the description of the invention proceeds.

SUMMARY OF THE INVENTION

The foregoing objects are achieved by providing a container comprising a cylindrical body of plastic having an open top with an outwardly projecting bead at the open top, and a scale in the form of a band including hourly designations which is applied about the cylindrical body beneath the bead, and a cap having a top wall with a cylindrical skirt depending from the top wall and having an inturned bead which cooperates with the bead on the body, and a tab projecting outwardly from the lower edge of the skirt with a line inscribed on said cap over said skirt and tab and which line cooperates with the scale, and a pad of foam plastic secured to the underside of the top wall of the cap and which, when the cap is in closing position, engages the top edge of the cylindrical body to maintain the cap in an adjusted angular position relative to the body.

For a full and more complete understanding of the invention, reference may be had to the following description and the accompanying drawing wherein:

FIG. **1** is a perspective view illustrating the elements of the dosage time indicator container of this invention in exploded relation;

FIG. **2** is a side view partly in section and partly in elevation, illustrating the elements of the container in exploded relation;

FIG. **3** is a top plan view of the cap, and

FIG. **4** is a plan view of the scale band in an extended flat position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawing, wherein like reference characters denote corresponding parts, and first more particularly to FIGS. **1** and **2**, the pill container of this invention is shown as including a main body which is referred to in its entirety by the reference character **10** and a cap which is designated generally **11**. The body **10** and cap **11** may be of any of the plastics now commonly used in containers of the type with which this invention is concerned.

Body **10** comprises a cylindrical wall **12** to the lower end of which is integrally joined a bottom **13**. Cylindrical wall **12** is formed at its upper end with an outwardly projecting bead **14** which defines an open top.

Referring for the moment to FIG. **4**, a band **15**, which may be of any appropriate flexible material, displays hourly designations **16** which constitute a scale. One end of band **16** is provided with an adhesive **17** which

is used in securing band **15** in position on the upper end of cylindrical wall **12** immediately beneath bead **14.**

Cap **11** comprises a top wall **18** from the periphery of which depends a cylindrical skirt **19** formed with an inturned bead **20.** Extending outwardly from the lower edge of skirt **19** is a tab **21** which is provided for manipulative purposes. Top wall **18** is formed with an upraised annular surface **22** at its periphery, in accordance with conventional practice, and a line **23** is inscribed on this surface **22,** the outer surface of skirt **19** and the top and outer edge surfaces of tab **21.** The outer surface of skirt **19** is roughened or serrated by forming ribs **24** therein. This roughened surface is provided for the purpose of facilitating rotation of cap **11** relative to body **10.**

A foam plastic pad **25** is secured to the underface of top wall **18** within skirt **19.** It assumes a position above and within bead **20** which maintains the assembled relation of the pad in the cap. This function of bead **20** may, if desired, be supplemented by using an adhesive on the engaging surfaces of the pad **25** in cap **11.** It is important to note that the pad **25** has a diametric dimension which results in the outer peripheral portions on the underside of the pad engaging the upper surface of bead **14** when cap **11** is in closing position on body **10.**

OPERATION

While the manner of using and mode of operation of the subject dosage indicator container is believed to be obvious from the illustrations of the drawing and description of parts set forth above, it is briefly described as follows:

Cap **11** is secured in closing position on body **10** by merely forcing bead **20** over bead **14.** The plastic materials from which these members are formed will have the properties of resiliency and elasticity sufficient to accommodate this action. In this position, the outer peripheral portion of pad **25** is compressed between the upper surface of bead **14** and top wall **18** of the cap.

When a person is to take a dose of pills from the container, a thumb is applied to the underside of tab **21** and upward pressure exerted to first cause the portions of beads **21** and **14** at the tab and immediately adjacent thereto to pass one another and thus free the cap **11** from body **10.** The dose of pills is removed and taken by the patient. He then restores the cap to its closing position, at which time he brings the outer lower end of line **23** into alignment with the particular hour on the scale **15** at which the dose was taken. In achieving this relative position of cap **11** with respect to body **10,** cap **11** may be rotated by engaging the ribs **24** with the fingers and exerting sufficient force to rotate the cap against the frictional holding effect of the pad **25.** After the required angular adjustment has been made, the frictional holding effect of pad **25** maintains the adjusted relation. Thus, the container may be carried about on the person or in the handbag of a patient with assurance that the time of the last dose will be properly indicated. It is notable that the exposed surface of top wall **18** displays the designation "time of last dose" at the end of line **23.** It is believed that it is preferable to indicate the time of the last dose, rather than the time of the next dose.

It is evident that all that is required of the manufacturer of containers of the above noted type is to apply the band **15** to the body **10,** inscribe the line **23** on the cap and secure the pad **25** in position in the cap. Thus, it is believed that the changes necessary to incorporate into such containers the dosage time indicator means involves only a slight cost and should result in their meeting with public acceptance.

While a preferred specific embodiment is herein disclosed, it is to be clearly understood that the invention is not to be limited to the exact constructions, mechanisms and materials illustrated and described, because various modifications of these details may be provided in putting the invention into practice.

What is claimed is:

1. In a dosage time indicator container:

a. a main body of plastic comprising a cylindrical wall having a bottom integrally formed therein and an open top defined by an outwardly projecting bead;

b. an hourly scale on said cylindrical wall immediately below said bead and including angularly spaced hour designations;

c. a plastic cap comprising a top wall and an annular skirt depending from the periphery of said wall and formed with an inturned bead which cooperates with the bead on the cylindrical wall in holding said cap in closing position;

d. an outwardly extending tab integral with said skirt at the lower edge thereof;

e. an indicating line on said cap extending over said skirt and tab and cooperating with said scale, and

f. a foam plastic pad having a diametric dimension substantially the same as the diametric dimension of the bead on the body and secured in position in said cap

whereby when said cap is in said closing position, said pad is compressed between the upper surface of the bead on the body

and the underside of the top wall of cap to provide resistance against rotation of said cap relative to said body.

2. The dosage time indicator container of claim **1** in which the scale is provided in the form of a band which is applied to the outer surface of the cylindrical wall of the body beneath the bead thereon.

3. The dosage time indicator container of claim **1** in which the outer surface of the skirt is ribbed to facilitate rotation of the cap relative to the body.

4. The dosage time indicator container of claim **1** in which the top wall of the cap has a upraised outer peripheral area and the line on the cap extends over this area.

5. The dosage time indicator container of claim **4** in which the exposed surface of the cap displays the legend "time of last dose."

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