Dec. 4, 1956 E. V. TAYLOR 2,772,772

TABLET DISPENSER

Filed April 29, 1954

Fig. 2.

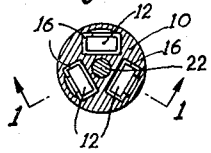


Fig. 1.

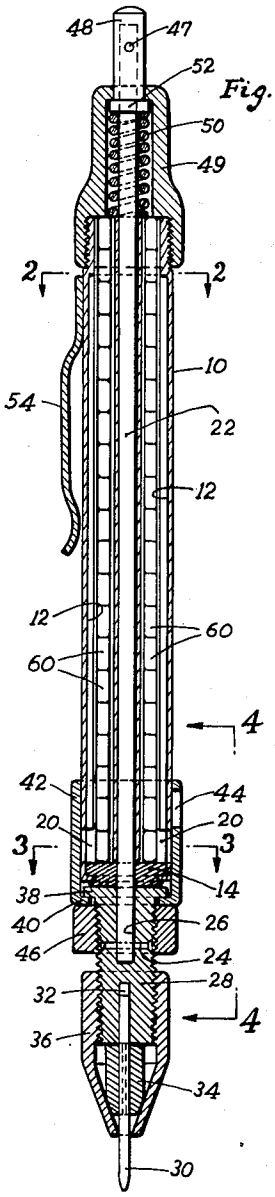


Fig. 6.



Fig. 5.

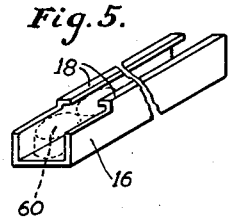


Fig. 3.

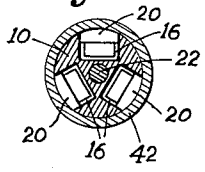
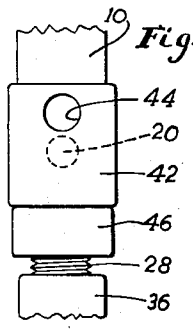


Fig. 4.



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TABLET DISPENSER

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2 Claims. (Cl. 206—42)

My present invention relates in general to tablet dispensers, and, more particularly, is concerned with a combined tablet dispenser and writing instrument.

Numerous people today regularly consume saccharin, vitamin and/or aspirin tablets because of various body deficiencies or ills. A number of these tablets are for use in, or are to be taken with, beverages and foods. When in public, it is extremely distasteful for most people to have to remove the necessary tablet or tablets from their purse or pocket and to place it by hand in the beverage or food which is before them in preparation for consumption.

It is an object of my present invention to provide means whereby tablets of medicinal nature and the like may be inconspiciously dispensed into beverages or foods.

In accomplishing the above object, I provide a small, elongated, tablet dispenser which may be conveniently carried in the purse or pocket. Due to the diminutiveness of the device of my present invention, it may be manipulated inconspicuously anywhere for dispensing a tablet into a beverage or food. It is a feature of my present invention that the tablet dispenser is further rendered inconspicious by fabricating it in the form of a writing instrument such as a pencil.

It is a further object of my present invention to provide a tablet dispenser as noted wherein a variety of tablets of different medicinal content may be carried simultaneously, and a single tablet of the desired variety selected as required.

I accomplish the foregoing object by forming the dispenser with a plurality of columns each of which is adapted to receive a plurality of tablets. The tablets within any given column should generally be of the same medicinal content, but as between different columns, the tablets need not be of the same type. The dispenser is further provided with a single dispensing head which may be rotated into alignment with the column containing tablets of the desired type and then actuated for permitting one tablet of the selected column to drop out of the dispenser.

It is a further feature of my present invention that the tablets are loaded into the dispenser in magazine-type channel members. With this arrangement, a magazine containing tablets of one type may be conveniently replaced by a magazine containing tablets of another type. Moreover, this arrangement in no way prohibits the supply of tablets within any given channel member from being replenished as required.

Now in order to acquaint those skilled in the art with the manner of constructing and using tablet dispensers in accordance with the principles of my present invention, I shall describe in connection with the accompanying drawing a preferred embodiment of my invention.

In the drawing:

Figure 1 is a vertical sectional view taken along the line 1—1 in Figure 2, looking in the direction indicated by the arrows, and shows the internal mechanism of the tablet dispenser of my present invention;

Figure 2 is a horizontal sectional view taken along the line 2—2 in Figure 1, looking in the direction indicated by the arrows, and shows the geometric arrangement of the tablet-storing columns of the dispenser of Figure 1;

Figure 3 is a horizontal sectional view taken along the line 3—3 in Figure 1, looking in the direction indicated by the arrows, and shows the dispensing apertures formed in the lower end of the dispenser body;

Figure 4 is a side elevational view of the portion of the tablet dispenser lying between the arrows 4—4 in Figure 1;

Figure 5 is a perspective view of a magazine-type channel member which is employed for carrying a group of tablets; and

Figure 6 is a perspective view of a typical tablet which is adapted to be carried and dispensed from the tablet dispenser shown in Figure 1.

Referring now to the drawing, the small, elongated, tablet dispenser of my present invention comprises a central body member **10** which is formed with at least one longitudinally extending opening or column **12**, spaced or offset from the central longitudinal axis thereof. By way of example and not limitation, the body member **10** may, as shown, be cylindrical and three circumferentially spaced, generally rectangular openings or columns **12** may be formed therein. The lower end of the body member **10** is flanged inwardly for securing a rubber or fiber grommet **14** thereat.

The body openings **12** are adapted to receive tablet receptacles or magazine-type channel members **16**. The tablet receptacles **16**, as shown in Figure 5, are formed of generally C-shaped channel members with the ends of the parallel sides being bent inwardly at **18** to confine tablets therewithin. The cross-sectional shape of the channel members may be varied to accommodate various shaped tablets, pills or capsules. The tablet receptacles **16** are supported at their lower ends on the grommet **14**. As shown in Figures 1 and 5, the inwardly bent portions **18** of the tablet receptacles **16** are cut away at their lower ends. The ends of the tablet receptacles **16** adjacent the cut away portions register with dispensing apertures **20** formed in the side wall of the body member **10**.

Although tablets might be stored directly in the openings or columns **12**, I have found it to be more convenient to load tablets into the dispenser in magazine-type channel members. Specifically, with this arrangement a magazine containing tablets of one type may be conveniently replaced by a magazine containing tablets of another type. Thus interchangeability of tablets is greatly facilitated through the use of the tablet receptacles **16**.

An actuator **22** is slidably mounted in, and extends axially through, the center of the body member **10** and the grommet **14**. The lower end of the actuator **22** is secured by means of a pin member **24** in the axial bore **26** of a base member **28** which serves to support the writing mechanism of a pencil or pen. In the specific embodiment of my present invention shown in the drawing, pencil writing mechanism is associated with the base member **28**. The inner end of a piece of lead **30** is received in the axial bore **32** of the base **28** which is aligned with the axial bore **26**. The lead **30** extends axially through the center of a split-cone expanding collet **34** which is adjustably maintained in gripping engagement with the lead **30** by means of a collar member **36** threaded onto the base member **28**.

The upper end of the base member **28**, which normally abuts the grommet **14**, is formed with a radially outwardly projecting flange **38**, the underside of which engages a radially inwardly projecting flange **40** of a sleeve member or dispensing head **42** that is arranged for sliding and rotary movement on the body member **10**. The sleeve member **42** is formed with a dispensing aper-

ture 44 in the side thereof. The flanges 38 and 40 are held together by a collar member 46 that is threaded onto the base member 28.

The upper end of the actuator 22 has secured thereon, by means of a pin 47, a cap member 48 the latter of which projects through a cover member 49 threaded onto the upper end of the body member 10. The actuator 22 further has disposed thereabout a coil spring 50 which extends between the radially projecting shoulder 52 of the cap member 48 and the top of the body member 10. The spring 50 serves to maintain the parts of the tablet dispenser in the relative positions shown in Figure 1. So that the combined tablet dispenser and writing instrument may be conveniently carried about in a pocket, a suitable spring clip member 54 is affixed to the side of the body member 10. Since the dispenser is diminutive, it may be manipulated inconspicuously anywhere for dispensing tablets into beverages and foods. The dispenser is further rendered inconspicuous by its fabrication in the form of a common article such as a writing instrument.

In assembling the combined tablet dispenser and writing instrument of my present invention, the grommet 14 is placed in the lower end of the body member 10 and the edge of the latter is flanged over for securing the grommet in position. At this point the cap member 48 may be placed over the actuator 22 and the pin 47 slid into place. Then the spring 50 may be disposed about the actuator 22 and the latter inserted through the central opening in the body member 10, with the cover member 50 being subsequently threaded into position.

The lower end of the device of my present invention may be assembled by inserting the base member 28 about the lower end of the actuator 22 and inserting the pin 24 through the latter. At this stage of assembly, the sleeve member or dispensing head 42 may be moved over the base member 28 and the collar member 46 threaded into position. Finally, the writing mechanism may be arranged on the base member 28 by holding the collet 34 at the lower end of the base member 28 while the collar member 36 is threaded into position.

In loading tablets into the dispenser, the cover member 49, pin member 47, cap member 48, and spring 50 are removed from the upper end of the actuator 22. Then tablet receptacles 16, with a supply of tablets, are placed in the columns or openings 12, after which the spring 50, cap member 48, pin 47 and cover member 49 may be reassembled. The receptacles 16 are adapted to carry saccharin, vitamin and/or aspirin tablets, capsules or pills, such as for example as shown at 60 in Figure 6. The receptacles or cartridges 16 are, of course, adapted to be sold in loaded form ready for use.

It should be recognized that each of the three tablet receptacles 16 may be filled with a group of tablets of medicinal content different than the group of tablets contained in the other receptacles. Consequently a variety of tablets of different medicinal content may be carried simultaneously and a single tablet of the desired variety selected as required.

Tablets 60 contained within the tablet receptacles 16 may be dispensed therefrom as follows. The sleeve member or dispensing head 42 is first rotated until the dispensing aperture 44 is aligned with one of the openings 12 immediately above one of the apertures 20 formed in the side of the body member 10. Thereupon, the upper end of the actuator 22 may be depressed for moving the latter downwardly relative to the body member 10. This action on the actuator 22 causes the base member 28 and dispensing head 42 to move downwardly relative to the body member 10 whereupon the dispensing aperture 44 in the dispensing head 42 is moved into register with the adjacent aperture 20 in the side wall of the body member 10. Then the dispensing unit need only be tilted at an angle to permit the lowermost tablet 60 aligned with the apertures 20 and 44 to drop from the selected opening and magazine in the dispenser.

After the tablet 60 has dropped from the dispenser, the upper end of the actuator 22 may be released and the spring 50 will cause the actuator 20 and dispensing head 42 to move back to the positions shown in Figure 1. Simultaneously the group of tablets 60 within the column from which one tablet had just been removed, will move downwardly as soon as the tablet dispenser is returned to a substantially vertical position. The dispensing operation then may be repeated until the desired number of tablets have been ejected.

Now while I have shown and described what I believe to be a preferred embodiment of my present invention, it will be understood that various rearrangements and modifications may be made therein without departing from the spirit and scope of my invention.

I claim:

1. A tablet dispenser comprising a cylindrical body member having a plurality of longitudinal openings formed therethrough with the axes of the latter being spaced from the central axis of the body member, closure means at the lower end of said body member, each of said longitudinal openings being adapted to receive a plurality of tablets, said body member having apertures in the wall thereof communicating respectively with the longitudinal openings, a tubular dispensing head slidably and rotatably mounted on the lower end of said body member and having an aperture therein, an actuator member extending through the longitudinal center of said body member and said closure means, means connecting the lower end of said actuator member to said dispensing head, spring means mounted between said body member and said actuator for normally maintaining said dispensing head in a position where the aperture therein is out of register with the apertures in said body member, said actuator and dispensing head being manually rotatable relative to said body member so as to permit the aperture in the latter to be brought into alignment with any one of the longitudinal openings, and said actuator when manually depressed serving to shift said dispensing head axially relative to said body member for moving the aperture in the latter into register with the adjacent aperture in the body member so as to permit a tablet to drop from the selected opening in the body member and through the apertures in register upon tilting of the tablet dispenser.

2. A tablet dispenser comprising a cylindrical body member having a plurality of longitudinal openings formed therethrough with the latter being spaced from the central longitudinal axis of the body member, closure means at the lower end of said body member, a replaceable magazine-type tablet carrying channel member disposed in each of said longitudinal openings, each of said channel members being adapted to carry a plurality of tablets, said body member having apertures in the wall thereof communicating respectively with the longitudinal openings and the magazine-type tablet carrying channel members, a tubular dispensing head slidably and rotatably mounted on the lower end of said body member and having an aperture therein, an actuator member extending through the longitudinal center of said body member and said closure means along the central longitudinal axis of the latter, means connecting the lower end of said actuator member to said dispensing head, spring means mounted between said body member and said actuator for normally maintaining said dispensing head in a position where the aperture therein is out of register with the apertures in said body member, said actuator and dispensing head being manually rotatable relative to said body member so as to permit the aperture in the latter to be brought into alignment with any of the longitudinal openings, and said actuator when manually depressed serving to shift said dispensing head axially relative to said body member for moving the aperture in the latter into register with the adjacent aperture in the body member so as to permit a tablet to drop from the selected magazine-type tablet carrying channel member and

through the apertures in register upon tilting of the tablet dispenser.

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