Sept. 4, 1951 T. P. WALSH 2,567,089

DISPENSER

Filed Sept. 1, 1949

Fig. 1.

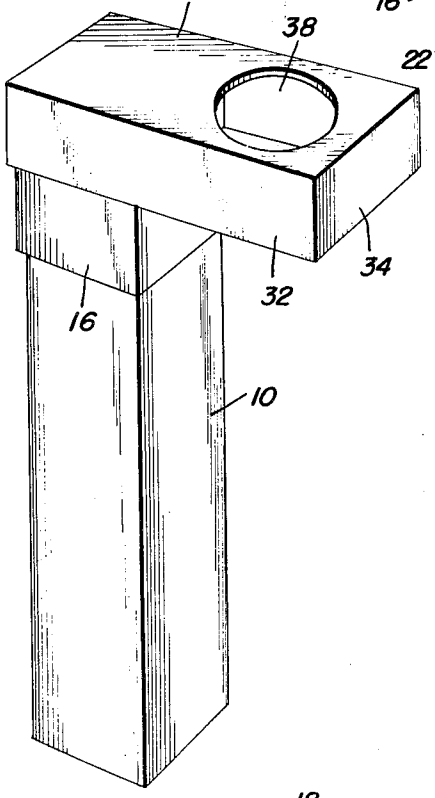


Fig. 2.

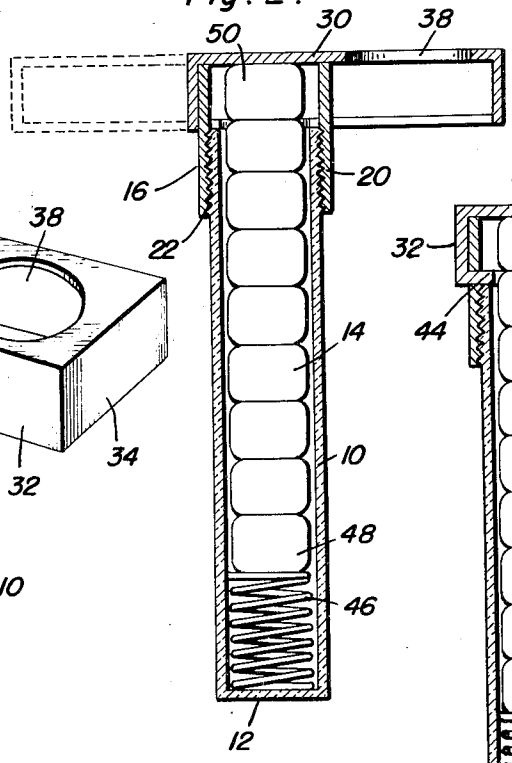
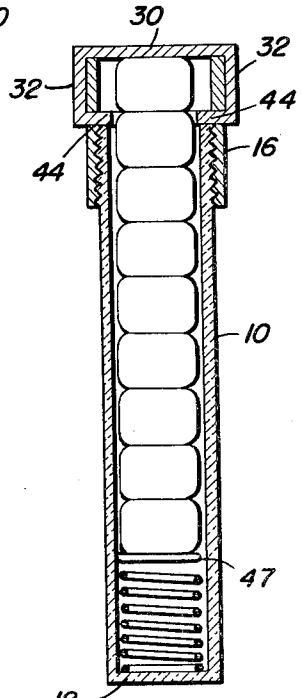


Fig. 3.



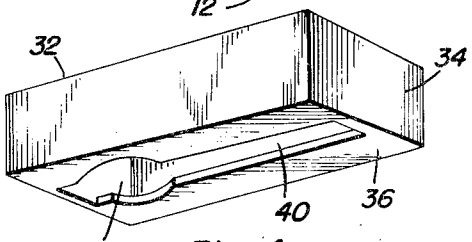


Fig. 4.

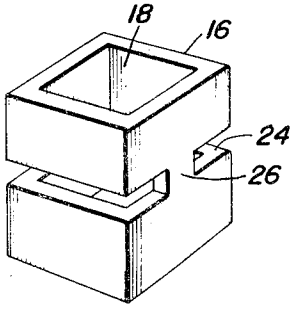


Fig. 5

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DISPENSER

Thomas P. Walsh, Garrett, Ind.

Application September 1, 1949, Serial No. 113,611

1 Claim. (Cl. 206—42)

1

This invention relates to a device for dispensing units of merchandise, such as tablets, capsules, perles, lozenges, etc.

The primary object of this invention is to provide a tablet dispenser which is relatively simple in design and construction and easily manipulated in such a manner that by sliding a cap, one tablet at a time can be dispensed from the container. The construction is such as to prevent the delivery of more than one tablet when the sliding cap is in an operative or unloading position.

A further object of this invention is to provide a dispenser of the character described which will effectively prevent spilling of the contents of the container, can also be used effectively for counting the tablets removed from the container, and which is effectively operated by means of a sliding cap member, thus avoiding the troublesome, sticking conventional screw cap.

A further object of this invention is to provide a tablet dispenser comprising an elongated open-ended container for retaining a column of tablets, a hollow dispensing cap, means for slidably and guidingly retaining said cap on said container at its open end, tablet receiving ports in said cap selectively registrable with the open end of said container, and resilient means normally urging the tablets towards said cap.

These, together with various ancillary objects and features of the invention which will later become apparent as the following description proceeds, are attained by the device, a preferred embodiment of which has been illustrated, by way of example only, in the accompanying drawings, wherein:

Figure 1 is a perspective view of the assembled dispenser;

Figure 2 is a longitudinal sectional view through the dispenser;

Figure 3 is a longitudinal sectional view through the dispenser taken at right angles to the view shown in Figure 2;

Figure 4 is a perspective view of the slidable dispensing cap; and

Figure 5 is a perspective view of the cap for slidably and guidingly retaining the dispensing cap on the container.

Specific reference will now be made to the drawings. In the several views, in the accompanying drawings and in the following specification, similar reference characters indicate corresponding elements throughout.

Indicated generally at 10 is an open-ended tubular container having a bottom wall 12, and

2

although the container is shown in the drawings as substantially rectangular, it will be understood that it could also be circular in cross-section or, for that matter, can be of any desired shape in configuration to accommodate a column of tablets 14. The container, like the remainder of the parts of the present device to be described hereinafter, is preferably fabricated of a suitably colored plastic but may also be fabricated of light-weight metals, wood, cardboard, and the like.

Removably retained upon the open end of the container 10 is a cap 16 which is of the same general configuration as the elongated container 10 and which is tubular in form and consequently provided with a central or axial bore 18. As shown in the drawings, the bottom of the cap 16 is provided with internal threads 20 which engage the externally threaded portion 22 of the container 10 adjacent its top end. Although a threaded connection is illustrated in the drawings, it will be readily understood that any other suitable means may be employed for removably retaining the cap 16 on the top or open end of the container 10. Intermediate the ends of the cap 16 is a peripheral or annular groove 24 intercepted at diametrical portions thereof by vertical lugs 26, for a purpose to be later described.

A dispensing cap 28 is provided which is hollow and includes a top wall 30, side walls 32, end walls 34, and a bottom wall 36. Adjacent one end of the dispensing cap, a port or aperture 38 is provided in the top wall, while the bottom wall includes an elongated slot 40 which is communicative with an enlarged aperture or port 42 disposed in the bottom wall adjacent the other end of the dispensing cap. The slot 40 forms with the bottom wall 36 of the dispensing cap a pair of opposed, longitudinal portions 44 which extend into the peripheral groove 24 in the cap 16 so that the dispensing cap is slidingly and guidingly retained on the cap 16 in a manner which will be readily understood with reference to the drawings. The dispensing cap is slidable laterally on the top end of the container 10, and when the lugs 26 in the peripheral groove 24 engage the ends of the slot 40, they limit the outward lateral movement of the dispensing cap on the container.

Positioned within the tubular container 10 is a coil spring 46 which is interposed between the bottom wall 12 thereof and the bottommost tablet 48 and is so tensioned as to normally urge the tablets upwardly and into the dispensing cap 28. A

spring cap 47, of plastic or the like material, is interposed between the spring and the bottommost tablet 48 to provide adequate support and to prevent any pressure erosion of the tablet by the spring.

In practical operation, the tablets are filled in the container 10 in a manner which will be readily understood with reference to the drawings. The cap 16 is then positioned on the top or open end of the container, and the dispensing cap 28 is then assembled for sliding movement on the cap 16. It will be noted that the ports or apertures 38 and 42 are selectively registerable with the axial or central bore 18 of the cap 16. When the dispensing cap 28 is moved into the position shown in solid lines in Figure 2, it will be noted that the topmost tablet 50 is urged through the port 42 into the dispensing cap and is shielded by the top wall 30 thereof. When the dispensing cap is moved to the left of Figure 2 to assume the position shown in dotted lines therein, the port or aperture 38 registers with the central or axial bore 18 while the longitudinal portions 44 of the bottom wall of the dispensing cap move in a position to partially close the central bore 18 and prevent the next adjacent tablet from being urged by the spring 46 into the dispensing cap 28. In this position, an inversion of the container will cause a tablet to be dispensed through the port or aperture 38 in such a manner that only the topmost tablet will be dispensed, while the remainder of the tablets will be confined within the container 10. It is only when the dispensing cap is moved again to the right of Figure 2 to assume the position shown in solid lines therein that the next topmost tablet is urged through the port or aperture 42 into the dispensing cap 28, and as long as the dispensing cap remains in this position, an inversion of the container will not allow the tablet to be dispensed through the aperture or port 38 which is out of registry with the tablet.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the

device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and within the scope of the appended claim.

Having described the invention, what is claimed as new is:

A tablet dispenser comprising an elongated tablet-retaining tube closed at its bottom end and open at its top end, a tubular cap removably retained on the open end of said tube and including a peripheral groove intermediate its ends, a substantially rectangular dispensing cap slidable laterally on said tubular cap, resilient means normally urging tablets towards said dispensing cap, said dispensing cap including top, bottom, side and end walls, said top wall including a tablet dispensing port adjacent one end wall, said bottom wall including an elongated seat terminating in an enlarged tablet receiving port adjacent the other end wall, said slot dividing said bottom wall into longitudinal opposed portions engaging said peripheral groove in said tubular cap, said longitudinal opposed portions adapted to extend inwardly of said tubular cap and restrict the top open end of said tube.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
977,583	Beardsley	Dec. 6, 1910
2,391,301	Dukehart, Jr.	Dec. 18, 1945

FOREIGN PATENTS

Number	Country	Date
799,589	France	Apr. 11, 1936