Feb. 5, 1957 G. C. TORNBERG 2,780,349

MEDICINAL TABLET CONTAINER AND DISPENSER

Filed Sept. 20, 1954

Fig. 1.

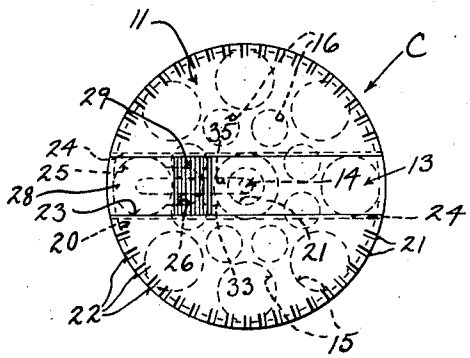


Fig. 2.

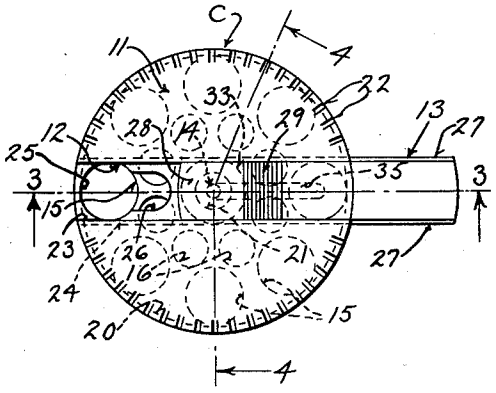


Fig. 3.

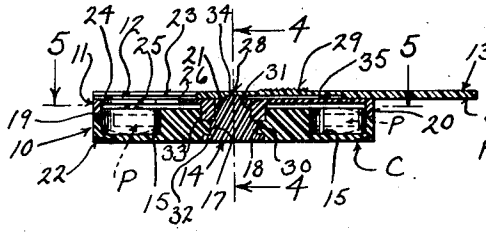


Fig. 4.

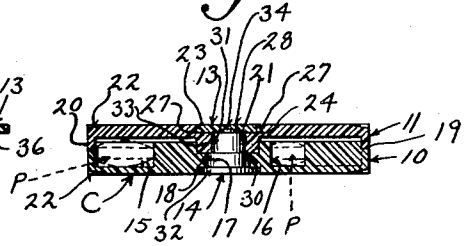


Fig. 5.

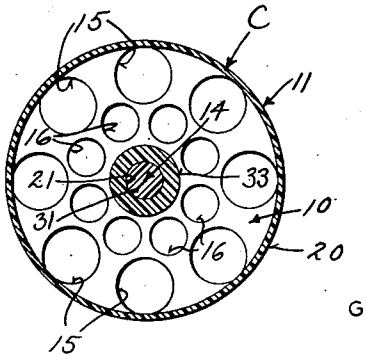
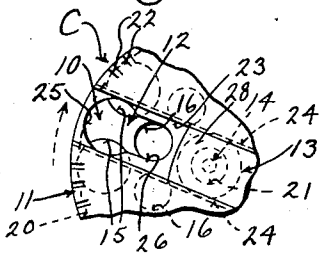


Fig. 6.



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MEDICINAL TABLET CONTAINER AND DISPENSER

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Application September 20, 1954, Serial No. 456,945

1 Claim. (Cl. 206—42)

My invention appertains to a container and dispenser for medicinal tablets and more particularly to a device of the type that is adapted to be carried on the person of an individual.

Today, with the large portion of people taking vitamin pills of various sizes and shapes and with another large number of people suffering from various illnesses such as heart disease, diabetes, etc., requiring certain types of medicinal tablets and pills to be close at hand at all times it is most desirable that a portable device be available for conveniently carrying and dispensing such pills and tablets as may be required in a given case.

Attempts have been made in the past to solve such problems by providing portable pill containers which may be carried on the person of an individual. However, all prior devices have been impractical in that they do not provide adequately for the carrying of the many sizes and shapes of tablets now on the market and in that they are either too complicated and expensive to manufacture or are bulky and difficult to carry and use.

Therefore, a primary object of my invention is to provide a container that can be used for conveniently carrying and dispensing tablets, pills and capsules of various sizes and shapes.

Another object of my invention is to provide my container with dispensing means which obviates the necessity of a person touching the tablets with his hands, which, of course, can be harmful to a certain extent, particularly when the hands are moist or unclean.

Another important object of my invention is to provide a containerof the character described, which will readily and easily fit in a suit pocket and which is circular in shape to fit the contour of the pocket and hand.

A further object of my invention is to provide the circular cover of my device with peripheral notches to facilitate the indexing and movement of the cover by the thumb as the container is held in the outstretched hand.

A still further object of my invention is to provide a slide for my cover which in one position completely closes my novel dispensing opening and may be quickly and easily moved to uncover the dispensing opening to the desired size pill or capsule. My novel slide is also provided with grooves or a roughened portion near the dispensing end thereof so that the direction of travel of the slide may be easily and quickly determined and the same operated by the thumb or finger.

Still another object of my invention is to provide a simple, practical and reliable construction that is economical to manufacture, easy to assemble and positive in its operation.

A more specific object of my invention is to provide a portable container for pills and/or capsules of different sizes and/or shapes having a circular bottom half containing the different size pills, a top cover movable around the bottom half, a novel dispensing opening in said cover for dispensing one tablet or capsule of a given size while

retaining the remaining tablets or capsules in the container and a slide to cover or uncover the dispensing opening, all of which are assembled and held together by press fit and my novel center retaining pin to give a dustproof and waterproof container.

A still further object of my invention is to provide a portable container for medicinal tablets of an attractive appearance and of a comparatively small size and one which can be placed upon the market at areasonable cost and one which will be durable and efficient in use.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated and claimed.

A preferred and practical embodiment of my invention is shown in the accompanying drawings, in which:

Figure 1 is a top plan view of my novel tablet container and dispenser in its closed position with the arrangement for the different size pills being shown in dotted lines;

Figure 2 is a top plan view similar to Figure 1 of the drawings but showing the slide in its open retracted position with the dispensing opening in alignment with one of the larger tablet holders;

Figure 3 is a longitudinal vertical sectional view through the container taken on the line 3—3 of Figure 2 and looking in the direction of the arrows;

Figure 4 is a transverse vertical sectional view through the container taken on the line 4—4 of Figure 3, looking in the direction of the arrows and also represented by the line 4—4 of Figure 2 of the drawings;

Figure 5 is a horizontal sectional view through the device taken on the line 5—5 of Figure 3 and looking in the direction of the arrows; and

Figure 6 is a fragmentary top plan view with the slide in the position illustrated in Figure 2 of the drawings but with the cover being moved in the direction of the dotted arrows so that the dispensing opening is now in alignment with a smaller pill or tablet holder.

Referring now to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the device "C" includes broadly, a bottom half **10** which receives the pills "P," a top half or cover **11** which includes the dispensing opening **12**, a slide **13** and the center retaining pin **14**.

The container "C" may be made from any desired material but in the preferred form, I utilize an opaque plastic for all parts with the exception of the slide **13** which is made of a transparent plastic. The bottom half **10** is provided with a number of relatively large recesses **15** arranged symmetrically about its center axis adjacent the outer periphery thereof. I also provide an equal number of smaller recesses **16** arranged symmetrically about its center axis and adjacent thereto. While the bottom half **10** of my novel container can be thus provided with any size or shape of pill or capsule recess, in the form illustrated the recesses are circular in shape and as previously indicated, the larger recesses are spaced adjacent the outer periphery and the smaller recesses are spaced adjacent the center axis. The recesses **15** are so arranged that a circle may be drawn connecting all of their centers and the same applies to the smaller recesses **16** and it is also to be noted that a smaller recess is arranged intermediate each larger recess in such a manner that a line may be drawn which will be tangent to any two adjacent smaller recesses and their respective intermediate larger recess. The lower half **10** is also provided with a central aperture **17** which is countersunk slightly from both the bottom and the top to provide a projecting shoulder portion **18**. The upper outer periphery of the lower half **10** is cut out

to form a peripheral groove **19**. The top cover portion is also molded to form a depending side or peripheral flange of a size and configuration to be received in the peripheral groove **19** of the bottom half **10**. The center portion of the cover **11** is also provided with a central bore **21** slightly smaller in diameter than the inner diameter of the projecting shoulder **18**. The portion around the bore **21** is reinforced and projects downwardly terminating even with the depending peripheral flange **20**. The cover **11** is also provided with a series of peripheral indexing notches **22**. Located centrally in the cover **11** and opening out on both sides thereof is a relatively wide groove **23** and the same is undercut on each side for its entire length as indicated by the numeral **24**. One end of the groove is provided with the dispensing opening **12** and in the preferred form illustrated, the opening is made by cutting out circular portions in the groove **23** corresponding to a large recess **15** and a smaller recess **16**. These circular portions are cut out so that a line drawn through their centers will pass through the center axis of the container and the circular portions of the openings are arranged tangent to each other with the smaller opening toward the center axis of the cover **11**.

For ease of assembly and formation of the dispensing opening **12**, the opening is actually cut away further along spaced parallel lines tangent to the smaller opening and parallel to the center line of the cover **11**. Thus, there are actually two dispensing openings formed, a larger outer opening **25** and a smaller inner opening **26**. Slidably received in the groove **23** is the cover slide **13**. The cover slide **13** is provided with longitudinal projections **27** which are of a size and configuration to be received in the undercut portions **24** of the groove **23**. The slide **13** is also of a size and configuration when fully received in the groove **23** to extend from one end of the cover **11** to the other. The slide **13** as previously stated, is formed from a transparent plastic and must fit a little tight or have a slight bow lengthwise so that it will remain in the position to which it may be moved. The upper surface of the slide **13** is provided with a series of transverse upstanding projections **29** forming a roughened portion to be used as a thumb grip, preferably adjacent the end **28** covering the dispensing opening **12**. The bottom half **10** and the top cover portion **11** are held together by a press fit with the center retaining pin **14**.

It is to be noted that the center retaining pin **14** is circular in shape and is provided with a series of reduced portions **30** and **31** and that the projecting portion **18** of the bottom half **10** is similarly held between the reinforced portion **33** of the cover **11** and the portion **32** of the pin **14**. The top surface of the pin **14** is provided with a small circular button **34** which is received within a longitudinal recess **35** cut in the undersurface **36** of the slide **13**. One end of the elongated recess **35** is at the central axis of the slide **13** and the recess extends longitudinally of the slide and terminates adjacent the end **28** over the dispensing opening **12**. The button **34** thus limits the travel of the slide within the groove **23** as shown by Figures 1 and 2 of the drawings.

It should be readily apparent from the above that with only slight accuracy in the manufacture of the device, it will be dustproof and waterproof, particularly since the various parts are assembled by a press fit.

In the operation of my novel container and dispenser, pills or tablets "P" are placed in the different size recesses **15** and **16** respectively and if, for example, a larger pill is desired from one of the larger recesses **15**, the dispenser is held in the out-stretched hand and the cover is moved or indexed by utilizing the thumb and the notches **22** until the larger portion **25** of the dispensing opening **12** is in alignment with one of the recesses **15**. The slide **13** of the cover **11** may then be moved rearwardly to its position as shown in Figure 2 of the drawings and the pill "P" may be easily removed from the recess, after which the slide may be returned to its position as indicated in Figure 1 of the drawings and the container returned to the pocket.

If, however, one of the smaller pills contained in one of the smaller recesses **16** is desired, the cover is moved in the direction of the dotted arrows (Figure 6) until the smaller portion **26** of the dispensing opening **12** is in alignment with one of the smaller recesses **16**. The slide **13** may then be moved to its open position and the pill removed from the smaller recess **16**. It is to be noted that with my novel arrangement, only one pill of a given size may be dispensed at one time, the remaining pills being held in the container until the cover is properly indexed to remove the rest of the desired pills.

Changes in details may be made without departing from the spirit or the scope of this invention, but what I claim as new is:

A medicinal tablet container and dispenser comprising, a circular disc-shaped body having a bottom container portion and an upper cover portion, said container portion including a series of spaced tablet recesses in its flat surface adjacent its outer periphery, a series of spaced relatively smaller tablet recesses arranged about its central axis adjacent said first outer series of recesses and offset therefrom, said upper cover portion adapted to be rotated with respect to said bottom portion, said cover including a dispensing opening adapted to be registered with anyone of said first series of recesses and a dispensing opening adapted to be registered with anyone of said second series of recesses, said dispensing openings having their centers in alignment with one another and with said central axis, said container portion having a central aperture therethrough with each end of said aperture being countersunk to provide an inner projecting shoulder, said cover having a central bore therethrough in alignment with said container aperture and having an inner diameter slightly less than the inner diameter of said projecting shoulder, and a center retaining pin received in said central aperture and central bore having a series of reduced portions in friction and press fit with said projecting shoulder and reduced central bore of said cover.

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