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F. B. ASHTON

2,330,256

TABLET DISPENSER

Filed July 10, 1940

FIG. 1.

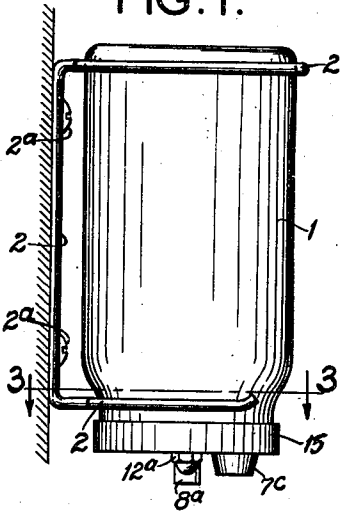


FIG. 3.

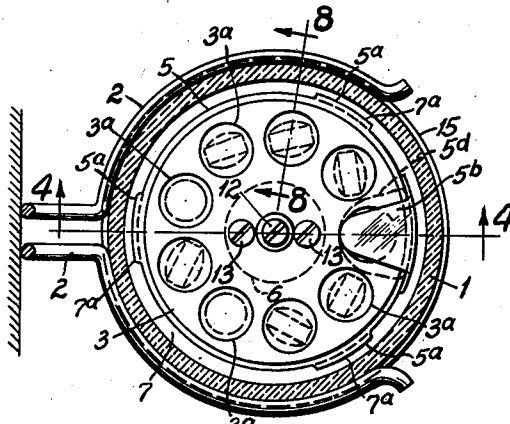


FIG. 2.

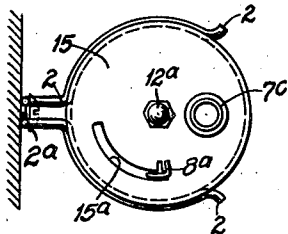


FIG. 4.

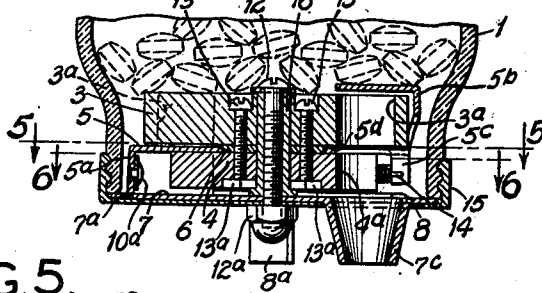


FIG. 5.

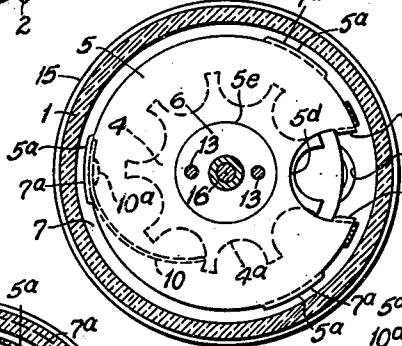


FIG. 6.

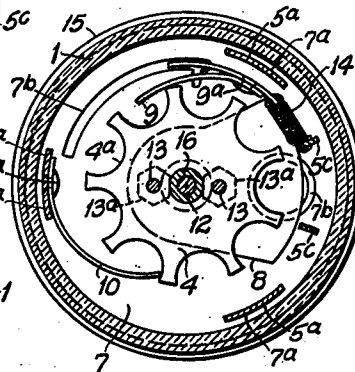


FIG. 7.

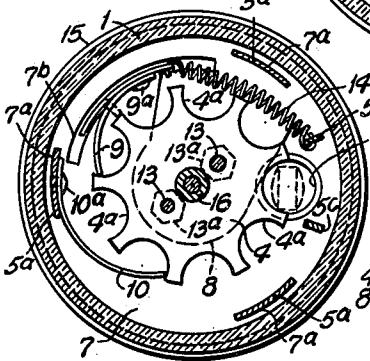
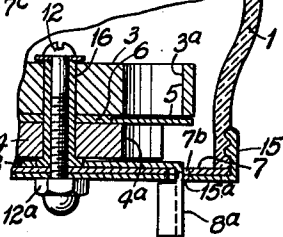


FIG. 8.



INVENTOR;
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UNITED STATES PATENT OFFICE

2,330,256

TABLET DISPENSER

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Application July 10, 1940, Serial No. 344,715

2 Claims. (Cl. 312-94)

This invention relates to an improvement in tablet dispensers. The objects of the improvements are: to provide an accurate dispenser; one that will be more simple in construction; and that can be manufactured at less cost.

The invention is illustrated in the accompanying drawing in which Figure 1 shows a glass jar used for this device, held to a wall by a wire bracket, and my invention housed in a threaded cap screwed to the bottom of the jar; Figure 2 is a plan view looking up toward the bottom of the jar as shown in Figure 1; Figure 3 is a horizontal sectional view on the line 3-3 in Figure 1; Figure 4 is a vertical sectional view on the line 4-4 in Figure 3; Figure 5 is a horizontal sectional view looking down on the line 5-5 in Figure 4; Figure 6 is a horizontal sectional view looking down on the line 6-6 in Figure 4; Figure 7 is the same as Figure 6, except with the lever moved in operation and the coiled spring fastened to it extended; Figure 8 is an enlarged partial vertical sectional view on the line 8-8 in Figure 3.

The operating mechanism is intended to be assembled within a threaded cap 15, which screws onto a container, which in the drawing, for illustrative purpose is a glass jar. The frame 5, for this mechanism is made of one piece of metal with a guard lip 5b bent over collector disk 3, intended to prevent more than one tablet being delivered at one time; with an opening 5d immediately below for the tablet to drop through; and three lugs 5a, 5a, 5a bent at right angles from the frame for fastening in slots 7a, 7a, 7a in base plate 7. This frame 5 has a large circular hole 5e (Fig. 5) in the center of the horizontal portion in which a washer 6 rotates in operation.

A collector disk 3, having a series of holes 3a near the periphery to collect tablets is mounted over frame 5, under guard lip 5b. A cog disk 4 is mounted under frame 5, and washer 6 is mounted in the hole 5e in frame 5. Collector disk 3, cog disk 4 and washer 6 are firmly fastened together and made integral by rivets or bolts 13, 13, and nuts 13a, 13a, as illustrated. Washer 6 is made of thicker material than frame 5, so that the integral unit composed of collector disk 3, cog disk 4 and washer 6 may rotate on stud 16 by the movement of lever 8 in frame 5 while the latter remains stationary. Lever 8 is rotatably mounted on the lower end of stud 16. It has one end bent at right angles 8a, the bent end extending through slot 7b in base plate 7 and slot 15a in threaded cap 15 to the bottom

outside of the whole assembly for propulsion, the movement being limited by slots 7b and 15a.

Attached by rivet 9a to lever 8 is a flat spring 9 which engages with cogs 4a on cog disk 4 and rotates it and integral parts the exact distance between holes 3a in collector disk 3 so as to line up the next tablet for delivery. Coiled extension spring 14 then returns lever 8 to the starting position. To prevent the reverse rotation of the disk assembly by flat spring 9 dragging over cogs 4a in cog disk 4, another flat spring 10 is fastened by rivet 13a to one of the lugs 5a on frame 5, and snaps in place behind cog 4a on cog disk 4.

Frame 5 has two small lugs 5c, 5c bent down at right angles which guide the tablet through to base plate 7. One of these lugs 5c acts as a post to which coiled spring 14 is attached.

Base plate 7 has a chute or spout 7c pressed downward immediately under hole 5d and guard lip 5b on frame 5, which extends through an opening in threaded cap 15 to guide the tablet to delivery.

Stud 12 extending from the top of collector disk 3 to the bottom outside of the threaded cap 15, secured by cap nut 12a, holds the entire mechanical assembly together for screwing onto tablet container.

I do not limit myself to the particular shape, size, material or arrangement of the parts as specifically shown, as these are employed merely to describe the device of my invention.

I claim as my invention:

1. In a tablet dispenser, in combination, a frame upon which to assemble other mechanical parts, with three lugs (or legs) formed from it for fastening to a base plate, a large circular opening in the center adapted to receive a washer for rotation, and with a guard lip formed from the frame to prevent more than one tablet being delivered at one time; a washer slightly smaller than the opening and thicker than the material in the frame for free rotation; a collector disk with evenly spaced holes near its periphery mounted above the washer; a cog disk with semi-circular cogs spaced like the holes in the collector disk mounted below the washer; a base plate with slots for the reception of the three lugs on the frame, an arcual slot for the operation of a radial lever for rotation of the assembly; an arcual and radial lever pivoted on a stud through the center of the assembly for rotation of the assembly, by means of a flat spring; with another similar spring attached to the frame to prevent reverse rotation.

2. In a tablet dispenser, in combination, a con-

tainer for tablets having a threaded opening; a cap or closure correspondingly threaded for attaching thereto with an opening through which tablets may be delivered, a hole for a stud by means of which to fasten it to the other parts of the device, and arcual slot for the operation of a radial lever to actuate the mechanism; a radial lever pivoted to a stud in the center of the mechanism, having a flat spring for the movement of a cog disk a definite distance to permit the discharge of a tablet; a cog disk with open spaces corresponding to a collector disk above which collects the tablets; a collector disk having arcuately spaced on its periphery, holes for collecting tablets; a washer between the cog

5 disk and collector disk to space the two disks, all being fastened together with bolts or rivets into a unit; a frame upon which to mount the unit, with a lip formed up and over the periphery of the collector disk to prevent more than one tablet being discharged at one time, and with three legs or lugs formed down to fasten in slots in a plate to provide space for the rotation of the cog disk and the arcual operation of a lever; and 10 a plate fastened to the three legs of the frame with slots therein to receive the legs, a hole through which a stud upon which the lever is pivoted may extend through the threaded cap, and a spout to guide the tablets to delivery.

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