Jan. 27, 1948. H. V. DWYER 2,434,993

TABLET DISPENSER

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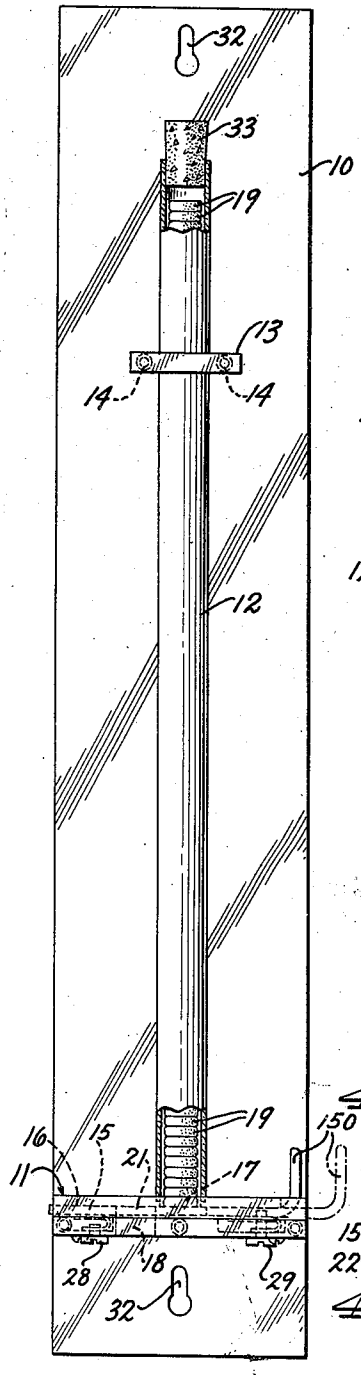

Fig. 1

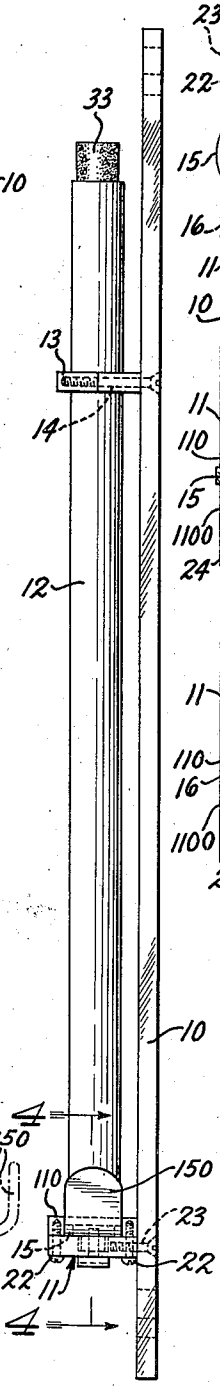

Fig. 2

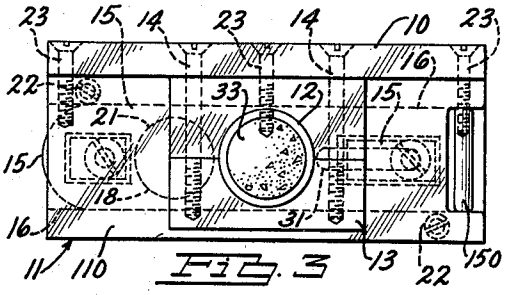

Fig. 3

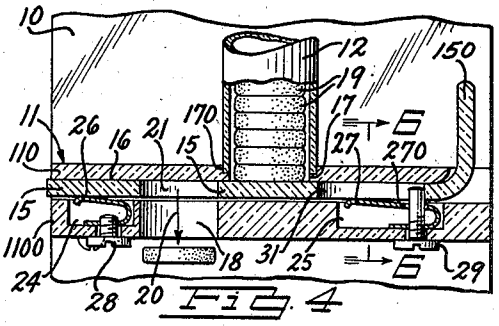

Fig. 4

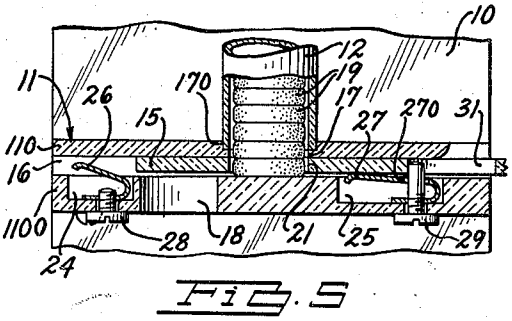

Fig. 5

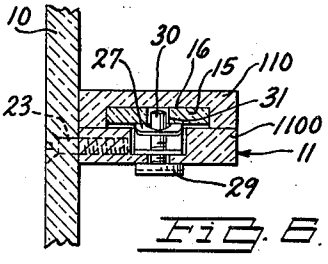

Fig. 6

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TABLET DISPENSER

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2 Claims. (Cl. 312—47)

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This invention relates to dispensers and in particular to dispensers for use with deliquescent tablets and the like.

The primary object of the invention is to provide a dispenser in which tablets may be stored and dispensed under sanitary conditions, which dispenses tablets without being handled, which shows constantly the number of tablets stored therein, and which maintains the storage compartment thereof hermetically sealed whereby to permit the storage and dispensing of deliquescent tablets without absorption of moisture or deterioration.

Another object of the invention is to provide a convenient, sanitary and hermetically sealed dispenser for use in hospitals, infirmaries, doctor's offices and like places where airborne germs are apt to contaminate tablets used for medication or when the nature of the tablet requires that they should not be handled manually or be subjected to atmospheric moisture during storage.

Other objects of the invention will become apparent by reference to the following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a front elevational view of a tablet dispenser embodying the invention.

Fig. 2 is a side elevational view.

Fig. 3 is an enlarged top plan view.

Fig. 4 is an enlarged fragmentary sectional view of the tablet dispenser taken on the line 4—4 of Fig. 2 showing a tablet being dispensed therefrom and with the dispensing mechanism in its "dispensed" position.

Fig. 5 is a fragmentary transverse sectional view similar to Fig. 4 except that the dispensing mechanism is shown in its "retracted" position to which it is first moved when it is desired to dispense a tablet from the tablet dispenser.

Fig. 6 is a fragmentary sectional view taken on the line 6—6 of Fig. 4.

Referring now to the drawing wherein like numerals refer to like and corresponding parts throughout the several views, the particular dispenser disclosed for the purpose of illustrating the invention is preferably constructed of a clear plastic such as Lucite with a clear glass tablet reservoir and nickel plated metal parts comprises, in general, a back 10, a shelf 11 extending forwardly from the said back 10 near the bottom thereof, a tablet reservoir 12 supported on the said shelf 11 anchored thereon and simultaneously held in vertical spaced relationship to the back 10 by means of a two part bracket 13 clamped around the said tablet reservoir 12 and

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secured to the said back 10 near the top thereof by a pair of studs 14, a rectangular slide 15 reciprocatingly mounted in a rectangular slot 16 formed transversely through the said shelf 11 parallel to the said back 10, the said shelf 11 having an aperture 17 through the upper portion 110 thereof communicating between the said reservoir 12 and the slot 16 therethrough and an apture 18 through the lower portion 1100 thereof communicating with the said slot 16 therethrough laterally spaced from the said aperture 17 a distance greater than the diameter of the said aperture 17, which aperture 18 serves as a chute through the bottom of the said shelf 11 through which tablets 19 drop indicated by the arrow 20 in Fig. 4, and an aperture 21 in the said slide 15 located to receive a tablet 19 from the reservoir 12 when the said slide 15 is in its "retracted" position as indicated in Fig. 5 whereby to permit the slide 15 to carry a tablet 19 to the chute 18 in which "dispensed" position of the said slide 15 a tablet 19 drops through the chute 18, spring means adapted to maintain the slide 15 in hermetically sealed relationship under the aperture 17 when the said slide 15 is in its "dispensed" position as indicated in Fig. 4, and means for limiting the movement of the said slide 15 in one direction to its "dispensed" position and in the other direction to its "retracted" position.

The tablet reservoir 12 preferably fits tightly into a counterbore 170 above the aperture 17 as shown in Figs. 4 and 5 and is held in such position by the two part bracket 13 as hereinbefore described. The shelf 11 is preferably constructed of an upper portion 110 and a lower portion 1100 which are secured together by means of suitable studs 22, the said shelf 11 being secured to the back 10 by suitable studs 23. The upper portion 110 of the shelf 11 is formed channel shaped before assembly whereby to provide the rectangular slot 16 through the said shelf 11 when the upper and lower portions 110 and 1100 respectively thereof are assembled. The slide 15 is preferably upturned at one end as indicated by the numeral 150 to provide a convenient operating handle therefor.

The upper side of the lower portion 1100 of the shelf 11 is preferably provided with a pair of rectangular wells 24 and 25 which accommodate laterally disposed V-shaped springs 26 and 27 secured to the said lower portion 1100 of the said shelf 11 by suitable studs 28 and 29 threaded to the lower side of the said springs 26 and 27. The spring 27 has an aperture 270 therethrough through which the upper unthreaded portion 30

of the said stud 29 extends and serves as a stop which fits into a longitudinal slot 31 provided in the slide 15, which slot 31 is of the proper length to permit the movement of the said slide 15 from its "dispensed" position shown in Fig. 4 to its "retracted" position shown in Fig. 5 and back to its "dispensed" position shown in Fig. 4, which movement of the said slide 15 accomplishes the dispensing of one tablet 19 from the reservoir 12. The springs 26 and 27 are wider than the longitudinal slot 31 provided in the slide 15 whereby to permit the upper side of the said springs 26 and 27 to contact the slide 15 and constantly urge it against the upper portion 110 of the shelf 11 and hermetically close the aperture 17 communicating with the reservoir 12 when the said slide 15 is in its "dispensed" position.

The back 10 is preferably provided with bayonet type apertures 32 near the top and bottom thereof which cooperate with suitable headed screws not shown, screwed partly into a wall, cabinet or other structure onto which the dispenser may be mounted. A cork 33 or other suitable sealing means is provided at the top of the tablet reservoir 12. Tablets to be stored and dispensed by dispensers embodying the invention may be packaged in sealed rolls or tubes and readily transferred into the reservoir 12, thus tablets which are highly deliquescent or which are harmful to the skin of a person handling them or which need to be kept from airborne germs can be stored and dispensed in the dispenser without damage or contamination to the tablets and dispensed without harm to the skin on the hands of the person dispensing the same.

Although but a single embodiment of the invention has been disclosed and described in detail, it is obvious that many changes may be made in the size, shape, arrangement and detail of the various elements of the invention without departing from the spirit and scope thereof as defined by the appended claims.

I claim:

1. A dispenser for tablets comprising a back adapted to be removably secured to a wall, a shelf extending forwardly from said back having a slot transversely therethrough, a tubular tablet reservoir mounted on the said shelf and fixed in hermetically sealed vertical relationship thereto, the said shelf having an aperture through the upper portion thereof communicating between the said tablet reservoir and the said slot and an aperture serving as a tablet chute through the lower portion thereof spaced along the said slot with respect to the said aperture through the upper portion of the said shelf, and a slide in the said slot having an aperture therethrough adapted to be reciprocated from a "dispensed" position to a "retracted" position and back to the "dispensed" position in the said slot whereby to receive a tablet from the said tablet reservoir and transport the same to the said chute, a pair of springs fixed in the lower portion of the said shelf adapted to urge the said slide against the upper portion of the said shelf whereby to hermetically seal the said aperture communicating between the said tablet reservoir and the said slot when the said slide is in a "dispensed" position, and means for limiting the movement of the said slide between its "dispensed" position and its "retracted" position.

2. A dispenser for tablets comprising a back adapted to be removably secured to a wall, a shelf extending forwardly from said back having a slot transversely therethrough, a tubular tablet reservoir mounted on the said shelf and fixed in hermetically sealed vertical relationship thereto, the said shelf having an aperture through the upper portion thereof communicating between the said tablet reservoir and the said slot and an aperture serving as a tablet chute through the lower portion thereof spaced along the said slot with respect to the said aperture through the upper portion of the said shelf, and a slide in the said slot having an aperture therethrough adapted to be reciprocated from a "dispensed" position to a "retracted" position and back to the "dispensed" position in the said slot whereby to receive a tablet from the said tablet reservoir and transport the same to the said chute, a pair of springs fixed in the lower portion of the said shelf adapted to urge the said slide against the upper portion of the said shelf whereby to hermetically seal the said aperture communicating between the said tablet reservoir and the said slot when the said slide is in a "dispensed" position, one of the said springs being in contact with the said slide at all times and the other spring engaging the said slide only when the slide is in its "dispensed" position, and means for limiting the movement of the said slide between its "dispensed" position and its "retracted" position.

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