

[54] **TWO-PART TABLET DISPENSING RECEPTACLE**

3,120,879 2/1964 Warner..... 220/35 X

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[22] Filed: **Feb. 8, 1974**

[21] Appl. No.: **440,828**

Related U.S. Application Data

[62] Division of Ser. No. 300,487, Oct. 25, 1972.

[30] **Foreign Application Priority Data**

Nov. 9, 1971 Austria 9677/71

[52] U.S. Cl. **221/229, 220/35**

[51] Int. Cl. **B65h 1/12, B65d 43/16**

[58] Field of Search 221/228, 229, 249; 220/35

[56] **References Cited**

UNITED STATES PATENTS

2,853,206 9/1958 Uxa..... 221/229

[57] **ABSTRACT**

A two-part tablet dispensing receptacle comprises a housing having a dispensing end and a pivotal cover at the dispensing end. A stack of tablets in the receptacle is pressed towards the dispensing end, and a spring biases the pivotal cover into a closed position, the cover having a portion pushing the upper-most tablet and dispensing it from the receptacle when the cover is pivoted against the spring bias. The cover has side walls and the spring is an extension of one of the cover side walls.

2 Claims, 2 Drawing Figures

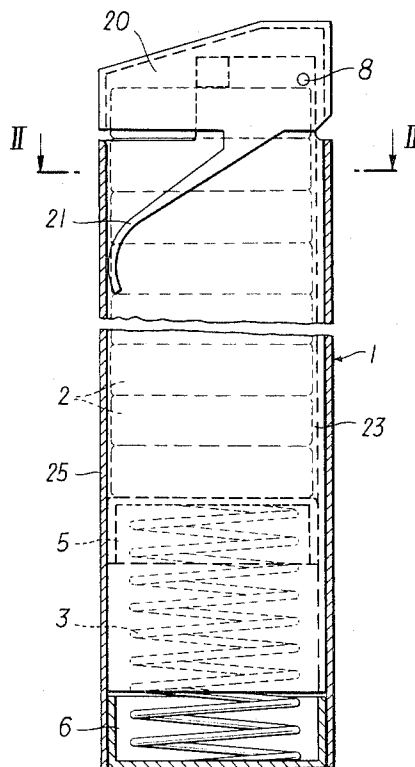


FIG. 1

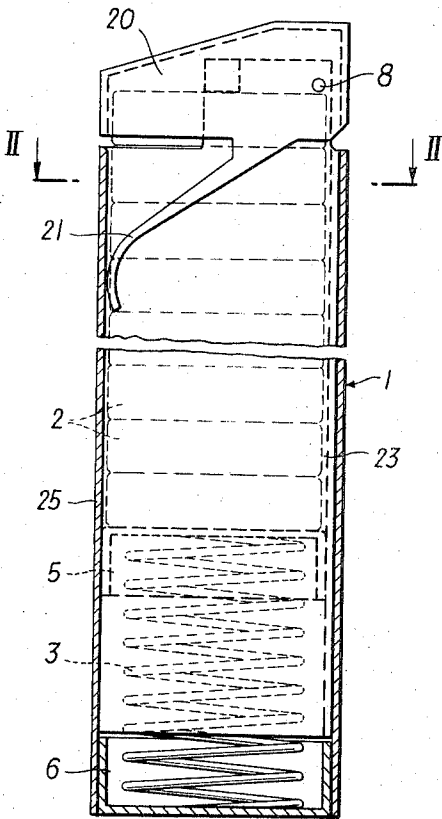
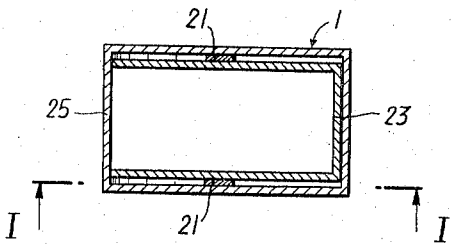


FIG. 2



TWO-PART TABLET DISPENSING RECEPTACLE

The present application is a division of my copending application Ser. No. 300,487, filed Oct. 25, 1972.

The present invention relates to improvements in receptacles for receiving and sequentially dispensing individual shaped bodies from a stack of like shaped bodies received in the receptacle.

Austrian Pat. No. 166,326 and corresponding U.S. Pat. No. 2,620,061 discloses a receptacle, one of the receptacle parts being a housing having a dispensing end and the other receptacle part being a pivotal cover at the dispensing end. Spring means in the housing presses the stack of shaped bodies, such as tablets, towards the dispensing end to place sequential uppermost shaped bodies of the stack into a dispensing position, a spring biases the pivotal cover into a closed position, and the cover has a portion pushing the uppermost shaped body and dispensing it from the receptacle when the cover is pivoted against the spring bias.

This type of dispensing receptacle has found wide commercial acceptance for use with a great variety of tablets. The receptacle disclosed in the indicated patents carries a laterally open drawer within the receptacle housing, a spring-biased bottom for the drawer which presses the stack of tablets towards the dispensing end of the housing, and the side walls of the receptacle housing have extensions at the dispensing end which supports the cover. Another part of the receptacle is the cover spring. All the parts of the receptacle are assembled manually. Considering the steady increase in wages for manual labor, this has made the manufacture of these receptacles correspondingly more expensive.

It is the primary object of this invention to overcome this disadvantage in the manufacture of receptacles of the indicated type and to simplify the assembly of the receptacle parts, more particularly by doing away with a separate cover spring whose assembly involved an especially time-consuming operation.

The above and other objects are accomplished in accordance with the invention by making the spring which biases the pivotal cover into a closed position integral with the cover of the receptacle.

According to a preferred embodiment of the present invention, the receptacle part integral with the spring is an injection molded thermoplastic resin body, for instance of polystyrene.

According to this invention, the spring is an extension of one of the side walls of the cover.

The above and other objects, advantages and features of the present invention will become more fully understood by reference to the following detailed description of certain now preferred embodiments thereof, taken in conjunction with the accompanying drawing wherein

FIG. 1 is a longitudinal section along line I—I of FIG. 2 of a receptacle according to this invention; and

FIG. 2 is a transverse section along line II—II of FIG. 1.

Referring now the drawing, the receptacle is shown to comprise a housing 1 receiving a stack of like tablets 2 which are sequentially dispensed from the receptacle. A spring means constituted by compression spring 3 is mounted in the receptacle housing 1 between a fixed bottom 6 and a movable tablet stack support bottom 5 for pressing the stack of tablets 2 towards the dispensing end of the receptacle housing to place sequential

uppermost tablets of the stack into a dispensing position.

The assembly of the housing with the cover is very simple. The side walls of the cover are slightly spread to fit the bearing bores thereof over the pivot pins 8 of the housing side wall extensions. This is all that is required and no extra spring assembly is involved. This makes the manufacture of the receptacle so inexpensive that it may be offered as a disposable receptacle for dispensing tablets. The spring 21 certainly remains operable for such limited use but experiments have shown that this type of receptacle will continue to function without spring failure even when refilled a number of times.

The illustrated embodiment is particularly useful in connection with the known type of receptacle wherein a laterally open drawer is in the housing. In this embodiment, at least one of the side walls of the pivotal cover 20 has an extension 21 which constitutes the spring which biases the cover into a closed position and which is integral with the cover.

As shown in FIG. 2, the spring 21 extends into a space between the drawer 23 and the housing 22 and engages the front wall 25 of the housing (see FIG. 1). Thus, the spring biases the cover counterclockwise into its closed position and is deformed when the cover is opened by clockwise pivoting in the direction of the arrow, the spring material being chosen to be of such elasticity as to function in the desired manner. The longer the spring the longer lasting its operating life. Thus, this embodiment provides receptacles having a long life while still doing away with a separate wire spring, with its attendant assembly problems.

While it may be most economical to make at least that part of the receptacle which is integral with the cover spring of thermoplastic resin of required rigidity, since injection molding is inexpensive, other suitable materials, such as sheet metal, may be used. As to thermoplastic resins, all those may be used which are rigid under ambient temperatures but permit of some elastic deformation without breaking. Since most thermoplastic resins are commercially available in various forms of rigidity, the proper material may be readily selected by those skilled in the art.

The particular cross section of the receptacle may be freely chosen although a rectangular cross section has been illustrated.

What is claimed is:

1. A two-part receptacle for receiving and sequentially dispensing individual shaped bodies from a stack of like ones of said bodies received in the receptacle, one of the receptacle parts being a housing having a dispensing end and the other receptacle part being a cover having side walls at the dispensing end, pivot means connecting said housing and said cover, spring means in the housing for pressing the stack of shaped bodies towards the dispensing end to place sequential uppermost ones of the shaped bodies of the stack into a dispensing position, a spring contacting said housing at a position remote from said pivot means, and being constituted by an extension of one of the cover side walls biasing the pivotal cover into a closed position, and the cover having a portion pushing the uppermost shaped body and dispensing it from the receptacle when the cover is pivoted against the spring bias.

2. The two-part receptacle of claim 1, further comprising a laterally open drawer in the receptacle housing, the cover extension constituting the spring extending into a space between the drawer and the housing and engaging the wall of the housing.

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