

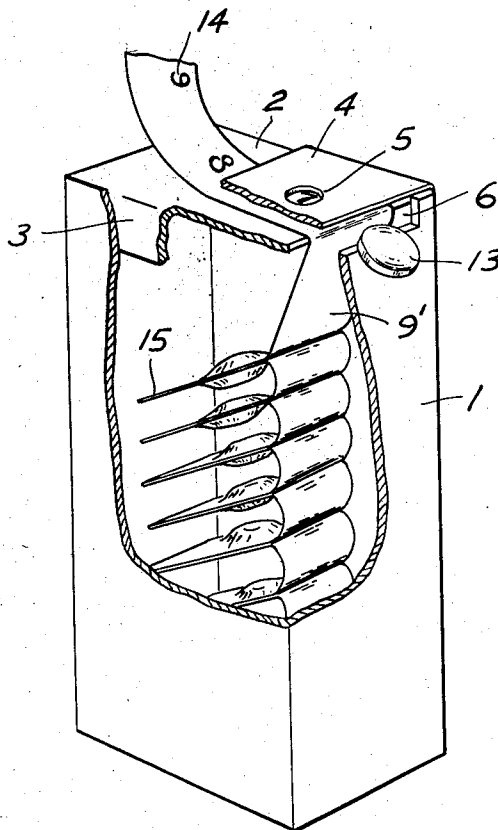
June 9, 1959

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2,889,958

DISPENSING DEVICE FOR DISPENSING ARTICLES IN UNIT FORM

Filed April 20, 1955



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DISPENSING DEVICE FOR DISPENSING ARTICLES IN UNIT FORM

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Application April 20, 1955, Serial No. 502,713

Claims priority, application Sweden April 26, 1954

5 Claims. (Cl. 221—25)

The present invention relates to apparatus for dispensing articles or units such as tablets or measured quantities of powder packaged between protective layers.

There is known a packaging system, the so-called uni-pack system, according to which all the articles or units are disposed, singly or side-by-side, in a row, or parallel rows between two protective strips or bands detachably joined by a suitable adhesive to form pockets, or between folds of a single strip or band folded in accordion fashion. There is further known a dispenser for articles thus packed, which comprises a storage receptacle for the packaged articles, and from which the same are dispensed by withdrawing through a slot in the receptacle a length of the strip including the desired quantity of articles or units. The length of the strip withdrawn from the receptacle is then separated from the supply strip remaining within the receptacle and the article or articles are obtained by opening the pockets or folds.

The afordescribed manipulation of the strips and the dispenser as heretofore known, require the use of both hands of the user. This often is inconvenient and necessitates that the user must lay aside the dispenser when opening the pockets or folds.

Accordingly, one of the objects of the present invention is to provide a novel and improved apparatus for dispensing articles or units of the general kind above referred to, which greatly facilitates the dispensing of the articles or units and the removal thereof from the pockets or folds formed by the protecting strip or band material.

Another object of the invention is to provide a novel and improved dispensing device for articles or units of the general kind above referred to, which permits removal of articles or units from the pockets or folds in a convenient manner, and without requiring the use of both hands.

Still another object of the invention is to provide a novel and an improved dispensing device which permits separation of the pocket forming protective layers, or of the protective folds of the length of strip withdrawn from the dispensing device simultaneously with such withdrawal.

A further object of the invention is to provide a novel and improved dispensing device which upon withdrawal of a selected length of strip presents the articles or units included therein, exposed and ready for removal thereby eliminating the need of further manipulation.

A further object of the invention is to provide a novel and improved dispensing device equipped with indicating means for indicating the supply of articles or units still contained in the receptacle.

Other and further objects, features, and advantages of the invention will be pointed out hereinafter and set forth in the appended claims forming part of the application.

In the accompanying drawing a preferred embodiment of the invention is shown by way of illustration and not by way of limitation.

In the drawing, the figure is an isometric view, partly

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in section, of a preferred form of the dispensing device according to the invention.

The dispensing device according to the present invention comprises a storage receptacle 1, of general rectangular shape. The receptacle may be made of any suitable material, such as plastic or sheet metal. The open top of the receptacle is closed by a cover 2 which is retained within the receptacle by any suitable means such as a flap 3 and can be conveniently opened to load the receptacle with a supply strip as hereinafter described. The cover defines in conjunction with the upper edge of the respective side wall of the receptacle a narrow slot or gap 6. Above cover 2, a guide member 4, in the form of a plate is provided, the respective edge of which extends into alignment with the edge of cover 2 defining slot 6. Guide plate 4 and cover 2 form a narrow guide slot therebetween. The guide plate includes one or several windows 5. It may be formed by bending over an appropriate extension of cover 2, or the respective wall of receptacle 1.

The dispensing device is first loaded by opening cover 2 and inserting a supply strip 9' in the receptacle. After closing the receptacle, the outer end of the strip is threaded through slot 6 and is fitted in the slot formed between guide plate 4 and cover 2.

This device is designed to dispense articles such as tablets 13 which are packaged in the strip 9'. This strip is formed with a plurality of folds 15 by folding a single layer strip in accordion fashion. The marginal edges of adjacent folds are fastened together, such as by adhesive, to define an individual pocket for each article 13.

As is apparent, several articles may be disposed in a fold side-by-side, and the dispensing device may be designed for dispensing several strips.

The operation of the device will now be apparent from the previous description. It suffices to state that when the strip is pulled over the bending edge formed by the respective edge of cover 2, folds 15 are successively forced open and the articles 13 will be discharged through slot 6. The digits 14 on the strip become successively visible through the windows 5 thereby indicating the number of article storage pockets still remaining in the receptacle.

While the invention has been described in detail with respect to a preferred embodiment of the invention it will be understood by those skilled in the art after understanding the invention, that various changes and modifications may be made, and it is intended, therefore to cover all such changes and modifications in the appended claims.

What is claimed as new and desired to be secured by Letters Patent is:

1. A dispensing device for successively dispensing articles in unit form comprising, in combination, a continuous series of article receiving compartments each defined by intermittent facing surfaces of spaced folds of a pliable strip folded in accordion fashion, releasable fastening means sealing the marginal edges of adjacent pairs of folds together to define individual article receiving pockets therebetween, a receptacle having a side wall and a top closure wall defining an interior compartment, said accordion folded strip being confined within said compartment, said side wall of said receptacle defining a slot, one end of said closure wall defining an edge in communication with said slot, the leading end of said accordion folded strip extending through said slot and around said edge, guide means secured to the exterior side of said closure wall in the vicinity of said slot and extending parallel to the direction of the opening of said slot, said guide means being secured to said closure wall adjacent to said edge and defining a guide slot therebetween, said leading end of said strip extending around said edge and through said guide slot, a longi-

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tudinal pull upon said leading end of said strip being operative to open the forwardmost fold of said strip in proximity with said slot in said side wall to uncover the article contained therewithin and for discharging the same outwardly through said slot in said side wall.

2. A dispensing device for successively dispensing articles in unit form comprising, in combination, a continuous series of article receiving compartments each defined by intermittent facing surfaces of spaced folds of a pliable strip folded in accordion fashion, releasable fastening means sealing the marginal edges of adjacent pairs of folds together to define individual article receiving pockets therebetween, a receptacle having side walls and a top closure defining an interior housing, said accordion folded strip being confined within said housing one of said side walls of said receptacle defining a slot contiguous with one edge of said closure wall, said one edge of said closure wall comprising a bending edge, a guide directing the leading edge of said strip around said bending edge toward said opposite end of said closure wall, each succeeding foremost compartment in said series being movable into proximity with said slot in response to an outward pull upon the leading end of said strip toward said opposite end of said closure wall, and a continued pull thereon being operative to open said foremost compartment adjacent to said slot to discharge said article contained therein outwardly of said compartment and said housing.

3. A dispenser for sequentially and singly dispensing articles in unit form comprising, in combination, a receptacle having at least a side wall and a closure wall defining an interior housing, a continuous pliable strip folded in accordion fashion enclosed in said housing, the marginal edges of intermittent facing surfaces of adjacent folds of said strip being secured together to define a continuous series of isolated compartments in stacked interconnected form within said housing, an article enclosed within each one of said compartments, one end of said side wall defining a slot, one end of said closure wall comprising a bending edge contiguous with said slot, a guide defining a passageway extending longitudinally from said one end of said closure wall to the opposite end thereof, said guide being secured to said one end of said closure wall in communication with said slot, the leading edge of said strip extending out-

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wardly of said housing through said slot around said bending edge and through said guide toward said opposite end of said closure wall, each succeeding foremost compartment in said series being movable into proximity with said slot in response to an outward longitudinal pull upon the leading end of said strip, and a continued pull thereupon being operative to open said foremost compartment to discharge said article contained therein outwardly within said slot.

4. A dispenser as set forth in claim 3, wherein the marginal edges of said intermittent facing surfaces of adjacent folds of said strip are releasably secured together, said marginal edges of said adjacent folds of the foremost compartment being separable in response to said longitudinal pull upon said leading edge of said strip to expose said article contained therewithin.

5. A dispensing device as set forth in claim 4, wherein the marginal edges defining said slot engage with the foremost one of said compartments in response to the initial pull upon the leading edge of said strip to prevent movement of said compartment outwardly through said slot, said slot being at least as large as the article contained within said compartment for discharging it outwardly from the interior of said compartment and said housing in response to said continued pull upon said leading edge of said strip.

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