

Dec. 4, 1945.

W. C. MOELLER

2,390,448

DISPENSER

Filed May 25, 1944

Fig. 2.

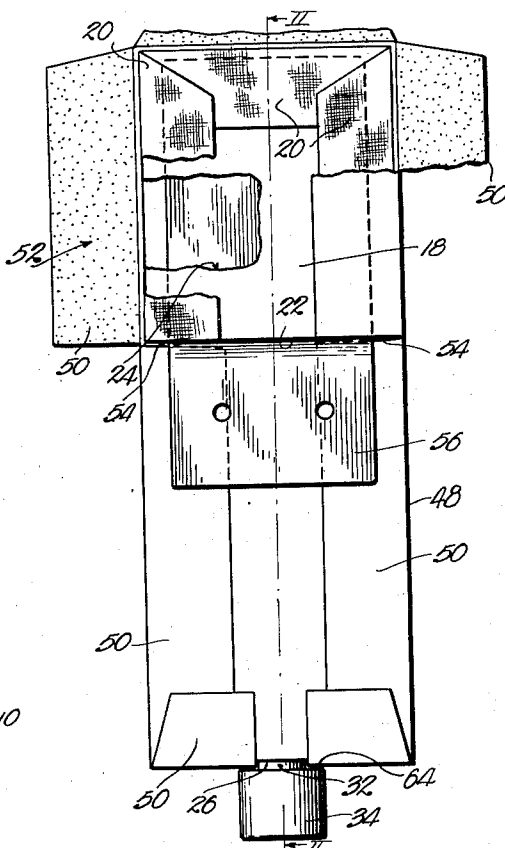
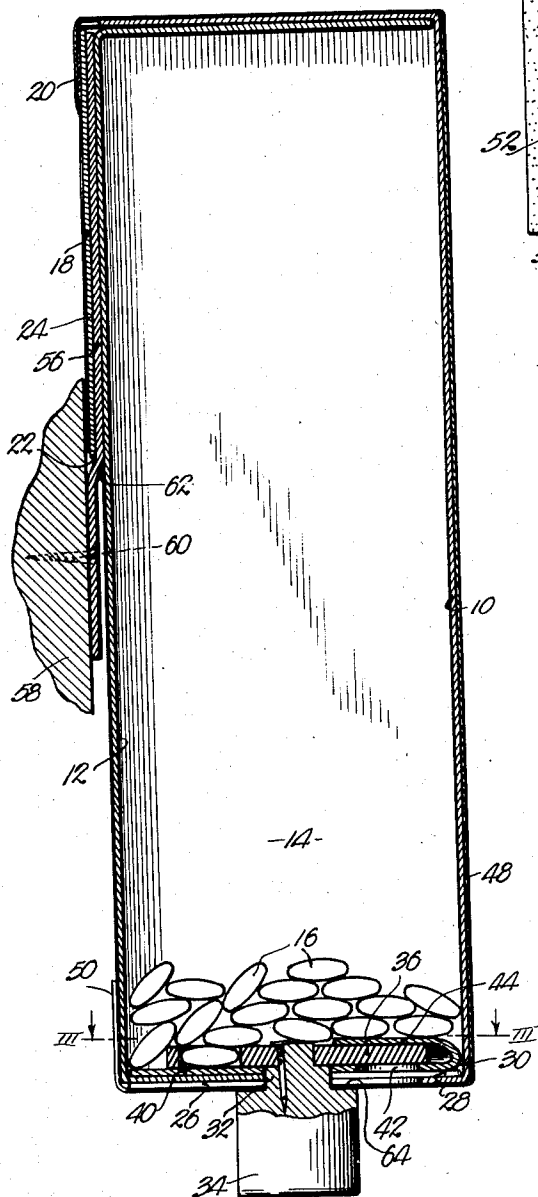


Fig. 1.

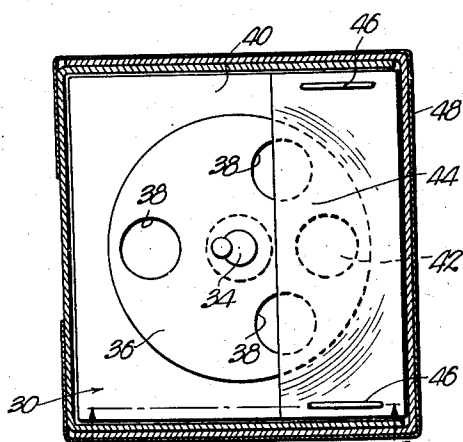


Fig. 3.

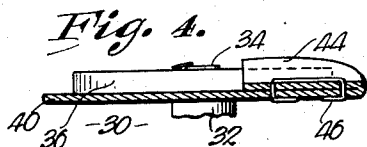


Fig. 4.

BY

INVENTOR.
WILLIAM C. MOELLER
Paul Young
ATTORNEY.

UNITED STATES PATENT OFFICE

2,390,448

DISPENSER

William C. Moeller, Kansas City, Mo., assignor to
A. F. Parmalee, doing business as United States
Safety Service Co., Kansas City, Mo.

Application May 25, 1944, Serial No. 537,229

6 Claims. (Cl. 206—56)

This invention relates to dispensers for unitary articles in the nature of tablets or the like, and has for its primary aim the provision of an inexpensive means for packaging the articles to be dispensed for ease in transportation and handling, and to render the articles accessible one at a time, at the point of use.

Heretofore it has been customary to ship quantities of tablets in cartons, from which the tablets are emptied into vending machines, that entailed objectionable handling and exposing the tablet to possible contamination. This conventional practice also necessitated the employment of packaging and relatively expensive dispensing equipment. It is one of the important aims of this invention to obviate the necessity of emptying the tablets from a shipping carton into a dispenser and to provide a shipping case for the articles that is conveniently and quickly convertible to a dispenser which may be discarded when emptied, due to low cost of manufacture and desirability of keeping the tablets sealed in the carton throughout the time extending from manufacture to the period of delivery to the ultimate consumer.

Other objects of the invention include the provision of a dispenser of the aforementioned type, which has as an integral part thereof a bracket engaging pocket built into one of two telescoping sections; a unique unitary means for feeding the articles from the magazine that is made of the same substance as that from which the body of the dispenser is produced, i. e. cardboard; and a feeding means having parts adaptable for ejecting the tablets or the like, one at a time.

Other objects of the invention will appear during the course of the following specification, referring to the accompanying drawing, wherein:

Fig. 1 is a rear elevational view of a dispenser made in accordance with the present invention, having parts broken away for clearness.

Fig. 2 is an enlarged vertical central sectional view through the dispenser showing the same mounted upon a support.

Fig. 3 is a transverse sectional view through the dispenser taken on line III—III of Fig. 2; and

Fig. 4 is a fragmentary sectional view taken on line IV—IV of Fig. 3.

To fulfill the foregoing objects of this invention, it is necessary not only to embody in the dispenser simple structure for producing a combined package and dispensing machine, but structure that may be formed of cardboard, chipboard or other conventional substance, from which it is now common practice to manufacture

shipping cartons of the type capable of containing a number of tablets.

In practice the tablets that have been handled through the use of the dispenser about to be described, have been coated salt tablets, and the manner of constructing the preferred embodiment of the invention is as illustrated.

A pair of fully telescoped sections 10 and 12 are tray-like in form with one open side. When the section 12 is moved into section 10, a closed magazine 14 for tablets 16 is created.

The bottom of tray-like section 12 has a wall 18 overlying a portion of one end thereof and extending inwardly to a line intermediate the ends of the body. This wall 18 is secured around three sides thereof to bottom of section 12 by reinforcing material 20, leaving one edge to cooperate with the bottom of section 12 in establishing a mouth 22 for a pocket 24. Each section 10 and 12 has a notch 26 and 28 respectively, extending inwardly from the free edge of one end wall, and when the sections are telescoped, these notches 26 and 28 are in register.

A unitary feeding means, broadly designated by the numeral 30, is positioned within section 10 with the neck 32 of operating knob 34 resting within the registered notches 26 and 28. The inner end of knob 34 is secured to rotor 36 wherein is provided a series of stalls 38, each capable of receiving a tablet 16.

Rotor 36 lies upon a sheet of flat material 40 provided with a discharge opening 42 in register with both notches 26 and 28. This said sheet of material 40 is rebent upon itself to present an overlying marginal edge 44 bearing against the upper face of rotor 36, as illustrated in Figs. 2, 3 and 4.

Staples 46 serve as means for securing this marginal edge 44 in place, and since it overlies discharge opening 42, no tablet 16 may enter any of the stalls 38 after they have passed beneath this marginal edge 44. It is from this position beneath said marginal edge 44 that tablets 16 drop from the stalls 40 through discharge opening 42 and thence to the hand of the consumer through registering notches 26 and 28.

When the sections 10 and 12 are separate prior to loading of the magazine 14 at the factory, the unitary feeding means 30 is slipped into place by moving neck 32 into the notch of section 10. This neck is long enough to pass through both notches 26 and 28 when section 12 is fitted into position after tablets 16 are emptied into section 10.

After the two sections are telescoped a jacket

48 bearing appropriate and desirable printed matter, is fastened over the outer face of section 10 with flaps 50 extending around the corners formed by the free edges of the side walls of section 10 and the line of fold between the bottom and side walls of section 12. These flaps 50 extend over the strips 20 and are held in place by adhesive 52.

Flaps 50 are slit as at 54 at the mouth 22 of pocket 24—thus, when the assembled dispenser is delivered to location for use, the bracket of fibrous sheet material 56 may be housed within pocket 24 until it is removed for securement to a support 58 through the medium of screws or the like 60. This bracket lies flat against the wall and is offset as at 62 to have the major portion of its length enter pocket 24.

When the dispenser is filled with tablets 16 and used as a shipping container, no tablets can escape for knob 34 cannot accidentally rotate. If danger of such movement does present itself, the knob can be secured by a quickly removable tape, to the end that tablets 16 are shipped and rendered accessible one at a time without the necessity of emptying the tablets from a shipping carton into a separate dispenser. The cost of producing the shipping carton is likewise the cost of making a dispenser and since the cost of feeding means 30 is negligible, it is practical and desirable to use the dispenser but once. The same is discarded completely when the supply of tablets therein is exhausted.

The operation of the dispenser is obvious to those skilled in the art, it being necessary to merely mount the telescoped sections 10 and 12 upon bracket 56 and turn knob 34 to a point where rotor 36 carries a tablet in one of stalls 38 to a point of discharge over opening 42. Marginal edge 44 not only precludes the entrance of another tablet 16 into an empty stall 38, but insures that no vermin may enter the magazine 14 through discharge opening 42 because it is closed by the marginal edge 44, that serves the purpose of a guard, a bearing for rotor 36, and means for precluding the inward movement of the rotor. The shoulder 64 on knob 34 is in frictional engagement with the outer face of the end wall of section 10.

While the specific form shown and described is advantageous in practicing the invention, it is understood that changes and modifications might be made without departing from the spirit of the invention or scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A dispenser of the character described comprising in combination a pair of telescoped sections providing a magazine for articles to be dispensed; registering notches in adjacent ends of the sections; and unitary means for feeding the articles from the magazine through portions

of the said notches, said means having an operating knob slidably secured in the registered notches and movable with the feeding means from one of the notches when the sections are parted.

2. A dispenser of the character described comprising, in combination, a pair of telescoped sections providing a magazine for articles to be dispensed; registering notches in adjacent ends of the sections; and unitary means for feeding the articles from the magazine through portions of the said notches, said means including a rotor having a series of stalls successively registrable with a portion of the registering notches, and a manually manipulable knob extending through said notches and into engagement with the rotor.

3. A dispenser of the character set forth in claim 2, wherein the knob has a reduced length journaled in the registering notches to preclude inward displacement of the feeding means.

4. A dispenser of the character described comprising in combination, a pair of telescoped sections providing a magazine for articles to be dispensed; registering notches in adjacent ends of the sections; and unitary means for feeding the articles from the magazine through portions of the said notches, said means including a piece of sheet material having a discharge opening there-through and in register with the registering notches, a rotor having a series of stalls successively registrable with the discharge opening, and an operating knob secured to the rotor and extending outwardly through the piece of sheet material and registering notches of the telescoped sections.

5. A dispenser of the character described comprising in combination, a pair of telescoped sections providing a magazine for articles to be dispensed; registering notches in adjacent ends of the sections; and unitary means for feeding the articles from the magazine through portions of the said notches, said means including a piece of sheet material having a discharge opening there-through and in register with the registering notches, a rotor having a series of stalls successively registrable with the discharge opening, and an operating knob secured to the rotor and extending outwardly through the piece of sheet material and registering notches of the telescoped sections, said piece of sheet material having a rebent portion overlying that part of the rotor having the stall in register with the discharge opening of the said piece whereby to form a bearing for the rotor and to close the particular stall from which the article is being dropped through the discharge opening.

6. A dispenser as set forth in claim 5 wherein the piece of sheet material is substantially the same area as the notched end of the telescoped sections.

WILLIAM C. MOELLER.