March 24, 1936. J. G. REA 2,035,246

PACKAGE AND DISPENSER

Filed Oct. 12, 1935

Fig. 1.

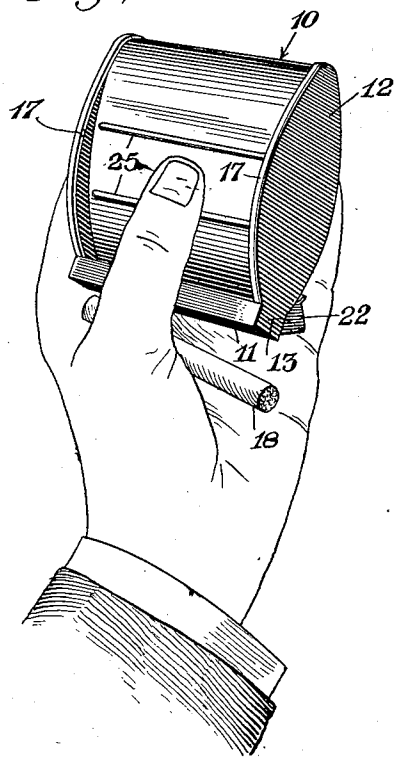


Fig. 2.

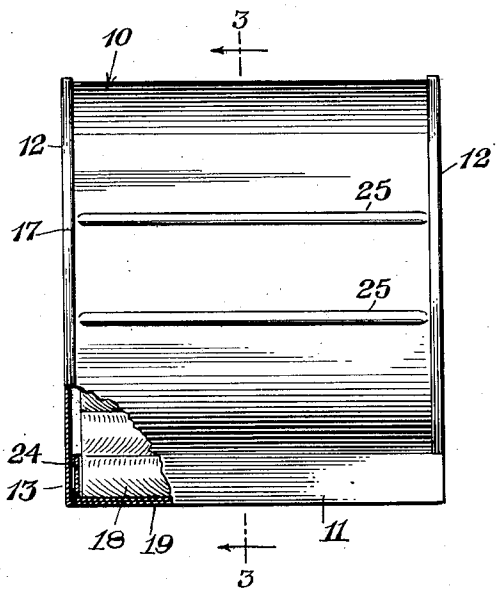


Fig. 3.

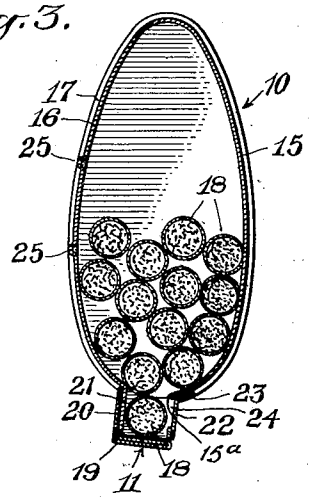
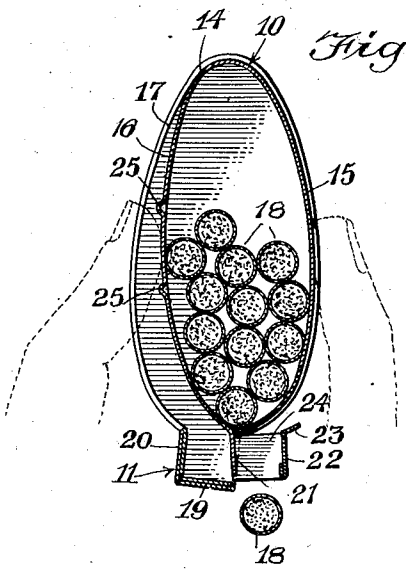


Fig. 4.



WITNESSES

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PACKAGE AND DISPENSER

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5 Claims. (Cl. 206—41)

This invention relates to improvements in packages, and has particular relation to a combination package and automatic dispenser for cigarettes and the like which may be used either as a commercial package or as a container for cigarettes after they have been removed from their commercial package.

It is an object of the invention to provide an improved package for holding cigarettes which will amply protect the cigarettes from being crushed or from excessive dehydration, and which will also automatically dispense the cigarettes when desired.

It is a further object to provide an improved package of the above character which is so constructed that by a simple manipulation of the package, such as compressing the sides thereof, cigarettes may be conveniently dispensed from the package one at a time without being crushed or in any way mutilated.

My package consists generally of a receptacle and a dispenser secured adjacent to or formed integral with the receptacle, one of the sides or a portion of one of the sides of the receptacle being operatively connected to the dispensing device and being shiftable from a normal position to a compressed position so as to cause the operation of the dispensing device to eject a cigarette. The shiftable side of the receptacle is preferably formed of a resilient or springy material so as to cause it to return to its normal position after it has been compressed to operate the dispensing device.

In the accompanying drawing:

Fig. 1 is a perspective view of a package embodying my invention, in which one side of the package has been compressed to cause the operation of the dispensing device;

Fig. 2 is a side elevation of a package of the type shown in Fig. 1, with a portion of the side broken away to reveal the contents thereof;

Fig. 3 is a sectional view in the direction of the arrows on the line 3—3 of Fig. 2; and

Fig. 4 is a view similar to Fig. 3, with the side of the package compressed to cause the operation of the dispensing device.

My package consists of a receptacle, indicated generally at 10, for holding the cigarettes and a dispensing device, indicated generally at 11, formed at the lower end of the receptacle for ejecting the cigarettes one at a time. The package should be formed of a relatively strong material for affording protection to the cigarettes, and as the shiftable side of the package should be formed of a resilient springy material, as will be later explained, the entire package may be made of metal, such as decorated tin plate and the like as is now commonly used in tobacco and some cigarette packages.

The two ends of the package are provided with oval portions 12 forming the ends of the receptacle 10 and with rectangular portions 13 formed integral with or secured to the lower end of the oval portions, the rectangular portions serving as the end walls for the dispensing device 11. Between the two end walls 12 and extending from one side of the rectangular projection 13 completely around the end walls to the other side of the rectangular projection 13 is a side member 14, one portion of which preferably extending over the top of the package, indicated at 15, is secured at its two sides as by solder or welding to the end walls 12, and the other portion of which, 16, is unfastened and free to shift inwardly, as shown in Figs. 1 and 4, from a normal position in engagement with beads 17 formed along the periphery of the end walls 12 throughout the extent of the free section 16 of the wall.

The segment 16 of the side wall should be formed of a springy metal so as to cause the wall to normally rest in engagement with the beads 17, as shown in Figs. 2 and 3, and so that it may be compressed under pressure, as shown in Figs. 1 and 4, but will return to its normal position when released. The end walls 12 and the side wall 14 should be of sufficient size and shape so that the receptacle 10 may conveniently hold a plurality of cigarettes 18, as shown in the drawing.

The dispensing unit 11 includes end walls formed by the substantially rectangular projections 13, and a bottom and one side wall 19 and 20, respectively, in the form of an angle strip connected between one side and the lower edges of rectangular projections 13. The vertical wall 20 should be disposed on the same side of the package as the shiftable portion of the wall 16. The dispensing unit should be of a size to receive as many cigarettes as it is desired to dispense at one time, and since I prefer to dispense a single cigarette at a time, in the accompanying drawing the dispensing unit has been illustrated as being of a size of receive but a single cigarette.

To cause the automatic operation of the dispensing unit by merely compressing the side 16 of the package, a vertically projecting strip or ejecting member 21 is formed integral with the side 16 of the package and extends downwardly

into the dispensing unit and normally rests against the inner surface of the vertical portion 20 thereof. A closure consisting of a vertical strip 22 of a sufficient height to close the open side of the dispensing unit, and having formed at the upper end thereof an arc-shaped lip 23 for contacting the side of the package, is secured to the member 21 by means of horizontal strips 24 at the two ends thereof. Compression of the side 16 results in the lower end of member 16 closing the passage between receptacle 10 and dispensing unit 11 and also causes closure 22 to open and the cigarette in the dispensing unit to be ejected by ejecting member 21. The members 15 and 16 taper inwardly towards the dispensing unit and taper gradually outwardly away from the unit. Due to this structure the cigarettes in the package will not be crushed when the package is compressed to operate the dispensing unit but will be caused to readjust their positions in the package. It will be seen that at 15—*a* the wall 15 is extended inwardly above the dispensing unit for a short distance so as to aid in separating the cigarette to be dispensed from the remaining cigarettes. The extension 15—*a* should, however, leave sufficient space for a cigarette to pass from the receptacle to the dispenser when in normal position. A plurality of horizontal ribs 25 are preferably provided in the member 16 to facilitate gripping of the package and to reinforce the package and prevent distortion when it is compressed.

When the receptacle 10 is filled with cigarettes and held in upright position, as shown in the drawing, one cigarette is caused to drop downwardly by gravity into the dispensing unit 11. By simply gripping the package, as shown in Fig. 1, and compressing the side portion 16, the cigarette disposed in the dispensing unit is ejected from the package, as shown in Figs. 1 and 4. By my construction only the desired number of cigarettes are dispensed due to the fact that only one cigarette fits in the dispensing unit 11, and when the side of the package is compressed to eject a cigarette the lower end of the portion 16 of the package serves as a closure to prevent further cigarettes from entering the dispensing unit until the package has been released and has resumed its normal shape.

When the package is in normal position the portion 16 of the side, due to the resilience thereof, is in close engagement with the beads 17, and the closure 22 and the lip 23 tightly fit over the open side of the dispensing unit 11, thereby protecting the cigarettes from excessive dehydration. If desired, suitable lining material may be provided in the package to further prevent dehydration.

The package may be filled with cigarettes through the dispensing unit 11 or, if desired, a hinged opening may be provided at the top of the package for filling it with cigarettes. The filling of the package may, of course, be made a process continuous with the manufacture of the cigarettes by automatically disposing the empty packages in series at the point where cigarettes are discharged from the machines in which they are made. In this method, the dispensing device of the package would be disposed upwardly, and the filling would be in reverse of the method of dispensing a cigarette from the package. A simple reciprocal mechanism would operate the dispensing device in reverse direction as the cigarette was received into it from the cigarette machine. A counting device would shift the filled package and place another empty package in position to receive the cigarettes coming from the machine.

Another practical method would be to bunch the number of cigarettes the package is to contain and form the dispensing package around them as is now done with paper commercial packages of cigarettes.

It will be seen from the device herein described and illustrated that I have provided an improved cigarette package which will hold and protect cigarettes against crushing or excessive dehydration, and which will automatically dispense cigarettes as desired by the simple operation of compressing the side of the package. The package may be of inexpensive construction and used as a commercial package for cigarettes or may be of more elaborate construction and used for holding cigarettes after they have been removed from their commercial packages. When used as a commercial package it is expected that in practice each dispensing package will be marketed with a "cellophane" or similar wrapper about it to be removed by the purchaser. If desired, a small fenestra or opening may be provided in the package and covered with a sheet of transparent material such as "cellophane" or glass. The opening may be provided in any convenient place such as the sides 12 so as to permit inspection of the contents of the package.

I claim:

1. A package or container comprising a receptacle for cigarettes having a shiftable side portion formed of resilient material so as to be shiftable from normal position under pressure, a dispensing unit of a size to receive a cigarette disposed adjacent and communicating with said receptacle and provided with an outlet of a size to permit the passage of a cigarette, and means including a shiftable closure for said outlet connected to said shiftable side portion and cooperable to cause the ejection of a cigarette from said dispensing unit upon the shifting of said side member.

2. A package or container comprising a receptacle for cigarettes having an opening at its lower end of a size to permit the passage of a cigarette, and a shiftable side portion formed of resilient material and normally in position to leave said opening unobstructed but shiftable inwardly under pressure to close said opening, a dispensing unit of a size to receive a cigarette secured to said receptacle and communicating with the outlet thereof and provided with a dispensing opening of a size to permit the passage of a cigarette, and means including a shiftable closure for said dispensing opening connected to said shiftable side portion and cooperable to cause the ejection of a cigarette from said dispensing unit when the side portion is shifted to close the opening in the receptacle.

3. A package or container comprising a receptacle for cigarettes having an opening at its lower end of a size to permit the passage of a cigarette, and a shiftable side portion formed of resilient material and normally in position to leave said opening unobstructed but shiftable inwardly under pressure to close said opening, a dispensing unit of a size to receive a cigarette secured to said receptacle and communicating with the outlet thereof and provided with a dispensing opening of a size to permit the passage of a cigarette, and means including a shiftable cigarette ejecting member and a shiftable closure for said dispensing opening cooperable

to cause the ejection of a cigarette from said dispensing unit when the side portion is shifted to close the opening in the receptacle.

4. A package comprising a receptacle for cigarettes, and a dispensing unit secured to said receptacle and operable to dispense the cigarettes in said receptacle, said receptacle having side members tapering inwardly towards said dispensing unit, one of said side members being shiftable inwardly from a normal position to a compressed position and having connection with said dispensing device so as to cause it to operate when the side member is compressed.

5. A package comprising a receptacle for cigarettes, and a dispensing unit secured to said receptacle and operable to dispense the cigarettes in said receptacle, said receptacle having side members tapering inwardly towards said dispensing unit, and one of said side members being shiftable inwardly from normal position under pressure and being formed of resilient material so as to return to normal position when released and having connection with said dispensing unit so as to cause it to operate when the side is compressed.

JOHN G. REA.